City of Flint, Michigan

# 1977 Comprehensive MASTER PLAN

PREPARED BY THE DEPARTMENT
OF COMMUNITY DEVELOPMENT,
CITY OF FLINT, MICHIGAN

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# I

# EXECUTIVE SUMMARY

PREPARED BY THE DEPARTMENT OF COMMUNITY DEVELOPMENT, CITY OF FLINT, MICHIGAN

THE PREPARATION OF THIS REPORT WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; CPA-MI-05-28-0386.

# THE COMPREHENSIVE MASTER PLAN
# EXECUTIVE SUMMARY
# FOR
# THE CITY OF FLINT - MICHIGAN

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# I. INTRODUCTION

Cities are as diversified as the people who reside and work in them. Each offers certain amenities, opportunities and conditions which create liveable environments enabling necessary activities to occur in a somewhat consistent manner. As with people, cities change with time. Some mellowing, offering even greater selections of urban amenities and viable environments, others exhibiting strong signs of major decay. All must compete to some degree not only with each other, but with newer concepts of suburban living.

Flint, like many cities of comparable size, exhibits a full spectrum of metropolitan living. It provides unique cultural and educational experience, diversified and mature neighborhoods and income levels which during periods of prosperity far exceed the national average. It unfortunately also displays many problems created by rapid growth, age and perhaps insensitive planning. Blight is very evident in certain portions of the city, as are problems of crime and social decay.

Economic fluctuation plays a key role in lives of Flint's residents. As with any city that is dominated by one major industry, cyclical periods of high unemployment take their toll in the city's viability.

## Master Plan

Flint, as with all cities, is undergoing constant change. As this occurs, some type of guide is required to assist in maintaining stability and orderly land use arrangement. One such device used to perform this function is a "Master Plan." This comprehensive plan becomes an official public document used as a policy implementation guide for the physical development of communities. It should encompass all the geographical parts of the communtiy, summarizing general policy and recommendations to occur over a certain period of time.

Other documents such as zoning ordinances, capital improvement programs, and building codes act as tools to carry out the intent of the Master Plan. Special short range plans may also be developed for specific areas within the general plan indicating detailed activity to occur over a period of perhaps 10 years or less.

## Why a Master Plan?

Local government and its legislative bodies deal almost daily with some aspect of the city's physical development - site plan reviews; the laying of streets, sewers and other capital improvements; zoning; environmental activities; transportation; etc. Some type of general guide is required to assist decision-makers in a positive manner. Short term studies based on "hot" issues cannot replace a general reference which provides a context for major policy decisions.

The intent of this Master Plan is to establish the basic parameters for the physical development of the City of Flint. The format is designed to present the general community goals, objectives, recommendations, and steps or processes for implementation. Additional detail is included as background information or as suggested studies. The Plan has intentionally presented only the basic framework and not specific areas of control. This allows for maximum flexibility and change as well as input from all necessary sources in making final decisions and in taking specific actions.

## Benefit of a Plan

A master plan can only become an effective instrument for positive physical change if it is used by those for whom it was designed. Basic community goals and objectives outlined can only be realized through consistent application in the daily decision-making processes relative to developmental issues.

- o Legislative Body

  The Master Plan assists City Council in the decision making process by providing a practical guide for actions on development matters. If followed, private and public interest group pressures can be balanced by general community goals specified in the Plan.

- o The Chief Executive

  The Plan will assist the Mayor in evaluating existing and proposed policies and effectiveness in achieving long range development goals and objectives.

  As the chief coordinator of all governmental activities, it also provides a general framework to assist in coordinating capital improvement activities and the recommendations required to implement necessary programs, priorities and budgets.

- o The Planning Commission

  The Plan serves as a vital tool in presenting recommendations to the City Council which are based on clearly defined policy. Proposals involving in-depth research may also be more easily directed with established basic parameters.

- o Other Agencies

  The identification of a basic physical development policy for the City of Flint should facilitate the coordination and implementation of programs by other agencies. Cooperation is emphasized as a vital link in promoting change in a unified and consistent manner.

o Public

The main asset for this varied group is the knowledge that general policy has been established to serve as a guide for future action. The plan should allow both private and public groups involved in developmental activities the ability to forecast basic attitudes towards future proposals and programs.

## Legal Ramification

The State Enabling Act 285 of 1931 provides the authority for cities to establish a planning commission and adopt a master plan for the physical development of the municipality. The intent of the plan is to serve as a guide to accomplish coordinated, adjusted and harmonious development in accord with present and future needs.

The City Charter, which became effective in 1975, futher emphasized the need for a master plan to be updated on an annual basis. The intent of this plan is to serve as a set of guidelines to assist the Mayor and others in evaluating and implementing specific proposals for the total development of the city and its residents.

## History of the Plan

The general Master Plan is the combined effort of citizens, Planning Commission and Department of Community Development staff. It was authorized by the new City Charter and funded through a comprehenisve planning grant from the Federal government.

The Plan represents a basic change from prior plans in that it began in 1976 with "grass roots" participation. Citizen involvement at the inception of the plan was accomplished through a series of workshops. The City was subdivided into 12 districts for ease of obtaining and disseminating information. During these workshop sessions the citizens identified problems, and causes associated with their specific districts. Problems were prioritized and goals and objectives were developed, as well as, potential remedies for these problems. This information, which was assembled and coordinated for the total community, provided the basic framework for developing the master plan.

The final document evolved from a series of reviews and revisions involving the Planning Commission and other pertinent agencies and departments. Further direction was provided by data from several major sources: the decennial U.S. Census, a 100% visual survey of all structure in Flint performed by Evidence for Community Health Organization (ECHO), a branch of the Genesee County Health Department, and selected data collected by the R.L. Polk Co.

When all reviews and adoptions have been completed by the legislative bodies this plan will become a valuable tool in directing the inevitable physical change in Flint in a positive manner.

## Format

The Master Plan is divided into nine (9) basic components, each essential in promoting a viable community environment: Land Use, Residential, Commercial, Industrial, Facilities, Historical Preservation, Open Space/Recreation, Environment and Transportation.

Each element has been designed to allow for maximum flexibility and separate use. Specific goals and objectives have been identified within each, as well as certain existing conditions, current data and recommendations or studies required for implementation. Combined they provide the basic framework for a unified policy guide.

An Historical Perspective has also been included in the main text to present a brief overview of demographic, economic and land use trends from the beginning of settlement in the Flint area up to the present. The perspective highlights key events in the development of the city and analyses conditions unique to the Flint area.

## II. PLAN SUMMARY

It is the intent of this summary to briefly recap the key points and recommendations which are presented in detail in the main body of the Master Plan. It is not intended to replace the Plan, but to allow the user to easily and quickly comprehend the main thrust of the community's desires and the actions required to implement necessary policy decisions regarding the physical development of Flint. The detail and background data provided in the main body will still be required to allow issues to be resolved in an effective and efficient manner.

# THE LAND USE ELEMENT

## Introduction

Uncontrolled growth can lead to a variety of urban problems. Land use planning is one method of dealing with these problems, and of providing for best use of land and other resources. Flint has been losing population and businesses to outlying areas in recent years, but it still is an important part of the metropolitan region. Land use in Flint is typical of a city it's size, but growth is restrained both by the scarcity of vacant land and by restrictive annexation policies.

## Goals and Objectives

Because Flint is no longer experiencing the rapid growth that characterized past decades, it is necessary to relate land use goals to these conditions, and to an overall policy of growth and revitalization.

The general goal of land use policy is to insure that all activities (residential, commercial, industrial, etc.) have an opportunity to thrive in a healthy and pleasing environment, but that no activity should impair the existence of another. It also means providing an efficient, safe and economical system of land use; one that will enhance the livability of the city, increase its population and property values, while redirecting future reuse potential.

Present conditions make it necessary to stress stabilization and planning in city land use policy. This does not mean stagnation, however, and appropriate growth should be encouraged.

In order to realize the general goals, certain actions must be initiated. These must occur in a timely and efficient manner in order to obtain optimum success. Certain prevailing attitudes and strategies regarding redevelopment and reuse must also change. New development and change at any cost will only perpetuate old problems, voiding the quality of environment needed for long range community viability.

- Residential - Areas must be protected from traffic and effects of other land uses, and provide potential for new development.
- Commercial - Promote commercial clustering where appropriate, rehabilitation of existing establishments, and encouragement of new commercial activity.
- Industry - Must be encouraged to grow and expand in carefully designated industrial areas.
- Public and Institutional - Services must be made available to the entire community.

- o Park and Recreation - Facilities must be provided where needs exists.

- o Transportation - Systems must be addressed as a part of land use policy.

## Historic and Existing Conditions

### 1960 Master Plan

The 1960 land use plan was based on the concept of dividing the city and surrounding area into communities, primarily residential areas defined by natural features and non-residential uses. This concept is still valid, but it's application was based on the assumption that growth within the city would continue. No provision was made for a decrease in the city's population, as has occurred. Anticipated growth did not take place in parts of the city, and it is now necessary to find means of stabilizing these areas.

### Land Use Changes

A comparison of existing land use with 1958 figures shows that the most significant changes took place in commercial, public and vacant land categories. Much of the increase in commercial and public uses was due to annexation; vacant land decreased as a result of development since 1958. Since little vacant land remains, most change within the city will likely be redevelopment of existing uses, which is now taking place in some parts of the city. Care must be taken to assure that redevelopment does not create new problems in the areas.

### Land Use Classification

Land use can be divided into residential and non-residential classifications, and subdivided within these by density (residential) and by type of use (non-residential).

1. Residential - About 40% of Flint's land is in residential use, mostly as single-family detached units. A large share of multi-family units in many parts of the city are the result of conversions of single-family dwellings, which can lead to land use problems. Stable residential areas are vital to the future of the city.

2. Non-Residential - This category is comprised of commercial, industrial and public/institutional uses, as well as parks, railroads and streets. The street system accounts for about 1/4 of developed land in the city, and has an important effect on land use patterns.

    - o Commercial - Flints major commercial concentration is within the Central Business District, which is dominated by businesses providing financial, professional, insurance and real estate services. Major problems of the CBD are parking, traffic circulation and competition from outlying shopping centers.

Lineal commercial districts comprise the second largest share of commercial activity in Flint. There are many problems associated with this type of development including parking, access and signs. Commercial developments of all types must be carefully blended with residential areas.

- Industrial - Flint's industry is centered around automobile production and the local economy fluctuates with this industry. In the interest of providing suitable sites for industrial activity and to diversify the economic base, the city is now developing two industrial parks. Past development has lead to land use conflicts between industrial and residential areas. Inadequate consideration is still given to proper buffering techniques between industrial and other uses.

- Community Facilities - Community facilities (education, fire, police, cultural and social services) are essential. The basic factors in community facilities planning are finance, coordination and planning. The Master Plan places emphasis on physical plants, land use and community relations involved in facilities planning. Constraints involve institutions that are exempt from site plan review, re-use of vacant structures and the lack of coordination among agencies.

- Open Space/Recreation - Recreational and open space facilities in Flint appear to be adequate, based on a national standard of acres/population. Open space should:

  (1) Provide for a wade spectrum of recreational activities and human needs.

  (2) Protect and conserve the natural environment.

  (3) Provide the basis for economic development and quality of the urban environment.

  Properly planned open space along with environmental and land use controls is needed to realize these goals. Techniques must be developed to educate both public and private concerns in the value of open space and good site design.

Urban Renewal

Urban renewal describes a variety of activities based on federal legislation over the past three decades. This legislation generally allowed cities to acquire, clear and sell private property for redevelopment, using federal subsidies.

- History - Urban Renewal in Flint began in the early 1960's, upon recommendation of the 1960 Master Plan. Flint eventually adopted 9 projects, but could not implement all of the plans. In recent years, activity has been limited mostly to completion of the Doyle Project and St. John Industrial Park.

- Overview - Accoording to a study done for HUD in 1974, urban renewal in Flint has had few positive effects beyond clearance of dilapidated structures, relocation of families and individuals into sound housing and rehabilitation of certain neighborhoods.

- Plan Highlights - Most of the urban renewal plans call for both rehabilitation and redevelopment activities, except for St. John which has been totally cleared of residential activity for industrial re-use.

- Problems - Although several of the plans are outdated, legal requirements make them extremely difficult to change.

The Pereira Study

The Pereira University Impact Study was commissioned after the decision to relocate the University of Michigan-Flint campus downtown. The study identifies an impact area that includes most of the central city, and provided a land use and transportation plan for this area.

- Goals and Objectives - Goals of the study relate to transportation, physical environment, economic development, education, housing and social development. Objectives include a basic modification of the transportation system, river beautification as a major theme downtown, new office, hotel and retail space, intown public schools, new downtown housing and increased space for social interaction.

- Land Use Plan - A basic consideration was to provide large land bays to promote development. The plan proposes several features designed to complement the university: An auto hall of fame, a central commercial area, Flint green (a combination of public buildings and open space) and various residential areas, including Doyle.

- Present Status - Although the plans basic concept is valid, parts of it are outdated. The transportation plan should be reviewed in the transportation element of the Master Plan. Adoption of the plan is not advised, although it may serve as a basis for a revised downtown plan.

Incompatible Land Use

A consistent theme throughout much of the analysis accomplished for the Master Plan is that of incompatible land use. Incompatible land use can be defined as uses that can not exist in a harmonious manner.

- Problems:

    1. Blighting effects, such as traffic, visual pollution, environmental pollution and crime.

2. Inefficient use of land, such as duplication of parking facilities.

3. Time conflicts, between residential areas and activities oeprating into late hours.

o Rationale: A large number of incompatible uses exist in Flint. Reasons for this include:

1. Unplanned land use in older areas of the city.

2. Zoning variances to allow incompatible uses.

3. Nonconforming uses in existence at the time of adoption of the present zoning ordinance.

4. Inadequate enforcement of codes and ordinances.

5. More zoning changes and variances granted in unstable neighborhoods.

Zoning

Zoning is the basic device for implementing a community's land use plan. Zoning separates land uses that are incompatible, helps provide for government services and insures adequate space, light and air for each development. Flint's present zoning ordinance was adopted in 1968, and is organized into residential, commercial and industrial categories. Enforcement of the ordinance is charged to the Building Inspector, amendments, supplements or district boundary changes are done by City Council after recommendation by the Planning Commission. The Zoning Board of Appeals is enpowered to grant conditional use permits, special exceptions and variances. The granting of variances, especially "use" variances, can be harmful to the ordinance if not controlled.

Rezoning - Frequent rezoning or rezoning inconsistent with community goals may indicate zoning requirements that are too restrictive or may indicate a failure to carry out the intent of the adopted ordinance. In recent years, a high percentage of rezoning requests have been approved. Some of these may be in conflict with the proposed land use plan. Prior to revising the zoning ordinance, a study must be done of rezoning practice over the past ten years.

Rezoning occurs by:

1. Comprehensive revision of the zoning text or map.

2. Text changes in zoning requirements.

3. A change in the zoning map.

Recommendations

1. Establish policy of granting zoning changes only when consistent with the Master Plan.

2. Reinforce ties between land use and transportation planning.

3. Support neighborhood preservation programs.

4. Establish a coordinating committee composed of the City and major public and institutional concerns.

5. Allocate capital improvements consistent with identified needs and priorities.

6. Revise urban renewal land use plans to meet Master Plan objectives.

7. Avoid large scale demolition projects without proper re-use planning.

8. Promote commercial cluster development.

9. Encourage industry to develop in industrial parks.

10. Allocate park and recreation resources consistent with needs identified in Master Plan.

11. Survey waterways and flood plans and devise ordinance to control development in these areas.

12. Control freeway related development.

13. Promote re-use of vacant non-residential structures.

14. Establish a process to monitor Master Plan implementation.

15. Encourage business, professional and merchant groups to participate in decisions concerning maintenance standards, signs, parking problems.

16. Improve administrative procedures involved in the development process; development manual.

17. Revise zoning ordinance.

18. Revise site plan review ordinance.

19. Revise zoning map.

20. Strengthen sign ordinance.

Proposed Studies:

1. Examine effects of zoning changes and variances.

2. Survey incompatible land uses.

3. Review measures of controlling industrial, commercial and institutional expansion.

4. Develop freeway corridor studies to determine proposed land use and zoning.

# THE RESIDENTIAL ELEMENT

## Introduction

The purpose of the residential element of the comprehensive master plan is to set the general housing policy of the City under which decisions about specific residential areas and development proposals can be made. In arriving at those policies, the existing composition of housing and the present and future needs of the City have been considered. These considerations are presented in the introductory sections. In developing the analysis and final policies, the following long-term goals and short-term objectives are recommended:

## Goals and Objectives

1. Preserve and enhance the stock of decent, safe, structurally sound housing within the City of Flint.

   Objectives:

   - o Establish a housing data base so that housing-related policy and program decisions can be based on the most complete and recent factural information available.
   - o Continue and expand support of housing rehabilitation programs as a primary means of fulfilling the requirements of the federally-mandated Housing Assistance Plan and enhancing the City's existing housing assets.
   - o Establish and fund a City-wide residential code enforcement schedule in which each dwelling unit is inspected for code violations at least once every five to seven years.
   - o Provide for efficient identification and removal of housing units that cannot be effectively rehabilitated and that represent a blighting influence on surrounding property.
   - o Encourage private group and individual efforts in the field of housing maintenance through educational efforts and the matching of private with public dollars.
   - o Prohibit by ordinance the destruction of any structure with official historic designation, as outlined in the historic preservation element.

2. Preserve the integrity and enhance the livability of residential neighborhoods within the City of Flint.

Objectives:

- o Encourage the formation of citizen action groups in order to increase individual involvement and especially homeowner involvement, in neighborhood problem resolution and constructive neighborhood-oriented activity.

- o Protect residential neighborhoods from non-residential encroachment through intensified enforcement of zoning, provisions for increased buffering between residential and other uses and encouragement of private investment elsewhere in the city.

- o Encourage homeownership and decrease the number of absentee owners wherever possible in low density neighborhoods.

3. Provide adequate City services to all residential neighborhoods and dwelling units.

Objective:

- o Adopt the Responsive Municipal Services Program to measure present City service levels by neighborhood or census tract.

- o Establish a procedure for allocating city resources on the basis of need. All residential areas of the city should be provided with adequate general services with remaining resources going to programs and areas with the greatest need, on a proportional basis.

- o Improve the City's capital budgeting and programming procedures to incorporate City-wide community development as well as expenditure measures, and input from individual citizens and neighborhood groups.

4. Alleviate racial/low income impaction and promote economic diversity in housing

Objective:

- o Encourage formulation and adoption of a regional "fair share" housing plan through cooperation with other units of government in Genesee, Lapeer and Shiawassee Counties.

- o Encourage the development of private housing to ensure a supply to all segments of the housing market, especially to those segments where housing supply is lacking.

- o Continue present and future housing subsidy programs, which provide assistance to low and moderate income households, to the extent of the need indicated in an annual Housing Assistance Plan.

- o Continue efforts to promote open access to housing opportunity through fair housing program and ordinance enforcement. Promote private efforts to alleviate discriminatory attitudes and/or practices.

5. Provide for increase in population and residential development in selected areas.

Objectives:

- o Promote the development of medium and high density apartments in suitable locations.

- o Allow conversions of larger single family structures on a very limited basis, in accordance with neighborhood standards and with strict code enforcement.

- o Promote high density housing in the downtown area through the provision of various investment incentives to private developers.

6. Promote energy efficiency and alternative energy source utilization in residential areas.

- o Provide requirements for energy efficient construction practices on all new construction including appropriate site utilization standards.

- o Promote utilization of solar energy wherever possible by providing for "sun rights" in City codes.

- o Encourage energy conservation in existing residential structures, through either assistance or incentive programs to homeowners.

## Current Conditions and Trends

### Housing Market

A brief housing market profile notes that Flint contains not only the majority of older, less desirable housing in the market area (Genesee County), but a disproportionate share of low income households. This combination leads to the perpetuation of Flint's housing problems, especially problems associated with households unable to afford the rental or purchase and maintenance of a suitable housing unit.

## Housing Characteristics

Of over 60,000 housing units in the City of Flint, 75% are single family homes with most owned or being purchased. Five percent of all dwelling units are publicly subsidized. About 50% of Flint's housing was built before the Second World War, with construction tapering off to a near standstill in the 1970's. Housing maintenance, with some exceptions on the periphery of the City, has been declining in recent years. Median assessed valuations for housing units in Flint are lower than those for the State of Michigan as a whole.

## Equal Opportunity in Housing

While the City of Flint has an Open Occupancy Ordinance, residential segregation, to the extent that it exists in Flint, seems to be due more to economic than to racial factors. Overall loss of population, combined with a shift in racial composition of the population since 1970, has effected patterns of racial concentration in different parts of the City. A regional "fair share" housing plan is suggested.

## Existing Housing Needs

While there is no housing shortage per se in the City of Flint, there is a need to alleviate housing problems caused by substandard structures, overcrowding, and dwellings priced beyond the means of low-income households. In general, housing problems are largely limited to low-income households and areas. Further, among low income households, housing problems are concentrated among those with female heads. Black households also make up a larger proportion of those with needs than their numbers among the general population would dictate.

Substandard housing and excessive cost appear to be the most frequent problems and are more frequent among renters than owners. Over-crowding is a much less serious problem, in terms of numbers, but occurs more frequently among owners than renters. Overall, about 25% of all Flint households have one or more housing problems.

## Future Housing Needs

Based on projections of pouulation and housing supply, housing need by household type is projected on a yearly basis through 1980. Based on migration patterns, the proportion of Black households is expected to increase from 45% to 54% of all households in need. Female-headed households will increase numerically through 1980, but decrease as a proportion of all households in need. Total need for low-income households will increase by 20-25%, despite a decline in the total City population.

## Existing and Future Housing Demand

If demand as a concept is limited to new construction, future housing demand within the City of Flint may be restricted to urban-type apartments units for upper- and middle-class households and "starter" homes for small households.

## Housing and Residential Policies

In the final section of the residential element, a number of policies regarding housing issues are presented. These policies, when adopted, will serve as the guide or framework for decisions on housing matters. In brief, they are:

1. It shall be the policy of the City to preserve and enhance the existing housing stock and to safeguard the neighborhoods from undesirable effects and conditions. The City will act to support and promote rehabilitation in viable residential areas and the formation of neighborhood organizations toward these ends. The City shall take no action which will result in physical impaction, social or racial segregation, or which will adversely affect the residential character of an existing viable neighborhood.

2. It shall be the policy of the City to annually assess the housing needs and problems of the residents and to allocate the resources of the City on a priority of need -- the largest proportion of available resources being committed to areas where need is greatest.

3. It shall be the policy of the City to provide for and promote an increased resident population by encouraging the private development of higher density housing structures whenever feasible and in line with neighborhood standards, with special emphasis on the downtown. Whenever possible, stress will be placed on increasing the number of housing units of types in shortest supply on the market.

4. It shall be the policy of the City to promote equality of access to housing opportunities to all residents regardless of race, sex, age, creed or national origin, and to ensure against discriminatory practices through strict enforcement of City ordinances and appropriate laws. The City will take no action, nor permit action to be taken by others, which conflicts with this policy or in any way interferes with a citizens right to safe, sound and decent housing of their choice.

5. It shall be the policy of the City to participate in programs of the Federal or State governments providing construction of subsidy of housing for the elderly, handicapped and low to moderate income families to the full extent that a need for such housing is substantiated, and limited only by the availability of financial and other resources for this purpose.

6. It shall be the policy of the City to require annual inspections of multi-unit residential structures and regular inspection of all residential structures. The City shall strictly enforce the codes and regulations in all residential areas and will act expeditiously to condemn and remove any obsolete and blighting structures from viable neighborhoods.

# THE COMMERCIAL ELEMENT

## o Introduction

Commercial activity (the sale of goods and services) can be differentiated on the basis of its function(s), service area and physical form. Commercial firms are located in:

- o Linear Commercial Districts
- o Neighborhood Shopping Centers
- o Community and Regional Shopping Centers
- o Scattered Sites
- o Downtown

## o Goal

The goal of the commercial element is to provide for an increase in the scale of commercial activity in Flint.

## o Policies

The five policies put forth in this element are:

1. Promote the under-developed sectors of the local economy.
2. Encourage the adaptive reuse of vacant commercial buildings and consolidate mutually supportive commercial uses.
3. Promote the downtown as the center of commercial activity.
4. Minimize land use conflicts involving commercial property.
5. Provide for efficient transportation to and from commercial areas.

## o Objectives

1. City government should, through its development strategies and resource allocation, lever private capital to strengthen the commercial sector.
2. Expand the Commercial Revitalization Program, now operating as a pilot project in the N. Saginaw Street area.
   - Coordinate the Commercial Revitalization Program with a capital improvement program in the area.
   - Use the tax abatement provisions of P.A. 255 of 1978 in conjunction with the Commercial Revitalization Program.

- Offer the maximum tax abatement period (twelve years) to firms that reuse commercial structures and a lesser period for new commercial buildings.

3. Improve the variety of functions in the downtown.

   - Increase housing opportunities in the downtown.

   - Support legislation to provide tax abatement for downtown apartment buildings.

   - Encourage and assist the Downtown Development Authority's projects, including Riverfront Center and Center City Plaza.

4. Limit the scale and nature of new businesses locating in linear commercial districts and neighborhood shopping centers.

   - When possible, relocate inappropriate businesses out of residential areas.

   - Where possible, cluster intensive commercial uses together.

   - Require screening, hedging and berming to minimize visual impacts where commercial uses abut neighborhoods.

5. Ease pedestrian/vehicular conflict within commercial centers.

   - Make commercial centers accessible to the handicapped, pursuant to P.A. 8 of 1973, by constructing sidewalk ramps.

   - When possible, the City should ease parking problems at commercial centers.

   - Continue to upgrade the Mass Transit Authority (MTA) service, retaining downtown as the central point of transfer.

o Trends and Conditions

A. Economic Overview

The number of commercial firms in the City of Flint has declined 12.7% from 1975 to 1978. Local employment in the commercial sector is about 7% below the statewide average due to the dominance of manufacturing industries in the area.

The vacancy rate for commercial and manufacturing units is 19.77%.

When local retail sales are divided by local disposable income (on a per capita basis), the Flint market "captures" only 52.69% of local disposable income. This capture rate is the lowest among comparable Michigan markets such as Lansing, Grand Rapids and Saginaw.

B. Linear Commercial Districts

Many commercial buildings in linear commercial districts are economically or structurally obsolete. These units have a detrimental influence on surrounding residential property. Rehabilitation and reuse of these structures is encouraged.

C. Neighborhood Commercial Centers

Property maintenance is a problem at some neighborhood commercial centers. Through city code enforcement and monitoring by neighborhood residents, this problem can be minimized.

Future land use conflicts involving neighborhood commercial centers can be reduced by ensuring that only firms of an appropriate scale and nature are allowed to abut residential property.

D. Community and Regional Shopping Centers

The principal problem facing shopping centers in Flint is the relative decline in business volume due to changing shopping habits and buying patterns. In-city shopping centers have not remained competitive with the outlying centers. Local centers must stress their advantages (such as close proximity to dense populations of city residents) and develop new marketing concepts.

E. Scattered Sites

An unknown amount of commercial activity is located on various scattered sites throughout the city. In some cases, these businesses are existing non-conforming uses, conditional uses or use variances granted under the zoning code. Scattered site commercial use can have a negative impact on adjoining land uses, especially residential areas.

F. Downtown

The Downtown Land Use Plan relates existing and proposed functions to a geographical area. Riverfront Center, Autoworld, Center City Plaza and expanded housing opportunities are four proposed land uses for the downtown.

Downtown development is emphasized in this element because a dynamic downtown can have many positive ramifications for the entire city and metropolitan region. A good example of this is the development strategy used in the Riverfront Center Project. The Mott Foundation's equity investment in the name of Flint Neighborhood Improvement and Preservation Project (NIPP) will enable NIPP to rehabilitate Flint neighborhoods for years to come.

# THE INDUSTRIAL ELEMENT

## Introduction

The industrial element has the purpose of describing the existing conditions surrounding industrial land uses and industrial activity in the City. Attention is given to the economic role of industry, and to real or likely problems impinging upon, or created by, industry. Appropriate objectives for industrial activity and development are presented along with recommendations for specific actions in support of those objectives. The element ends with a set of coordinated policies that will guide actions and decisions regarding industry and industrial development.

It is sometimes difficult, and especially so in land use matters, to defint "industry". It is difficult to decide where the line between heavy commercial and light industry is to fall. This document will include as industry any business that involves the manufacturing, processing, reprocessing, fabricating, or alteration through chemical or electrical treatment of a product, or products, intended for sale off the premises. A business producing goods or products primarily for sale on the premises will be considered a commercial, rather than industrial activity.

The role that industry plays in a local economy is a central one. In the Flint area that role is totally dominant. The concentration of employment in heavy industry means that most of the personal income of the area stems from this source. Commercial activity, via expenditures of personal income, is at least indirectly dependent on industry. Governmental functions are economically dependent upon both.

## General Goals and Objectives

Because industry is the backbone of the Flint economy, its welfare and development are vitally important to the area. A general goal of the City should be to increase the industrial base through the expansion of existing businesses and the encouragement of new industry. A full explanation of why, how, and how much industrial expansion should occur appears in the text. There are, of course, constraining factors that limit such expansion. These center on considerations of other land uses in the City, and competing demands and needs.

What follows below is a delineation of the major problems connected with the City's industries. These are stated briefly here and discussed more fully in the text of the element. Each is followed by a set of objectives or short term actions that might be appropriate for the City to undertake.

I. The dominance of the automobile industry in the local economy has created problems for both that industry and the area. These include cyclical umemployment inherent in the industry, high wage

rates that discourage smaller businesses, and an unhealthy dependence on automotive employment that is a burden to the industry and a potential threat to the economy.

Objectives:

A. Non-automotive industries should be encouraged to develop in the City. Positive steps that could be taken to promote this objective might include:

1. Making tax incentives available to businesses that develop or expand employment in non-automotive industry.

2. Providing capital as incentive to development.

a. through EDC and Act 62 revenue bonds.

b. through local revolving loan funds or loan leveraging.

c. through utilization of State and Federal loan programs such as the SBA and the MJDA.

d. through encouraging involvement of local lending institutions in economic development.

B. Wage rates for non-automotive industries must be kept competitive with other areas of the country. Action might include...

1. Labor force training plans through CETA and other programs coordinated to needs of specific employers.

2. Encouraging active participation of local unions in economic development programs.

C. Other business costs should be reduced. This is discussed separately, below.

II. There are frequent communication problems and a lack of coordination between private industry and government. In the past the conflicting objectives of government and business have caused delays, headaches and hard feelings on many development projects. This should not happen since the goals of government and business do not really conflict and can be easily coordinated with cooperative effort.

Objectives;

A. Communication between the City and private business must increase so that cooperation can develop.

1. Attempts should be made to involve private businessmen in the governmental planning process in an advisory role.

2. Annual meetings with industrial leaders and top level City officials could be instituted.

3. No decisions regarding industry, such as changes in regulations or land use opportunity for review and input by the industrial community.

B. Regulations and various governmental requirements should be reviewed regularly and simplified and streamlined wherever possible.

1. A staff position within City government should be designated to function as a business representative or contact person to assist industries in dealing with the City and vice versa.

2. Internal procedures on zoning, building inspections, site plan reviews, and other similar City functions could be simplified and a single entry point into the system should be established.

3. All regulations imposed by the City should be thoroughly reviewed at intervals of no more than five years and judged for need, effectiveness, and appropirateness. Unnecessary regulations should be removed. Ineffectual regulations should be promptly revised.

4. An annual report of problems encountered with existing regulations should be instituted together with procedures for revising standards.

C. Attempts at educating business community to value of certain kinds of regulations must occur. This may include publication of reports or the use of conferences on zoning, building codes, site plan review procedures, licensing, etc., aimed at explicating value of these regulations to business and industry.

III. The costs associated with doing business in the Flint area are very high and the general position of the State in this regard is 48th out of 50.

Objectives:

A. Reduce to the extent feasible the costs imposed by the City.

1. Utilize property tax abatements available through P.A. 198.

2. Explore possibilities of other cost reductions at local level.

B. Work with State government to reduce state imposed costs wherever possible.

IV. The amount of space available for industrial growth and expansion in the City is very limited. Many major industries are land locked.

Objectives:

A. The City should take steps to increase the amount of land that can be utilized for industrial purposes, where appropriate.

1. The City should practice land banking so that larger and more useful parcels of land can be assembled in industrial areas.

2. A complete reassessment of land bordering existing industrial areas should be done to determine if any parcels might be better utilized as industrial land.

B. The City should make maximum use of existing industrial park land, and other vacant industrial land.

1. Some industry currently land locked should be encouraged, however possible, to relocate to existing parks where growth and expansion would be possible.

2. Vacant scattered industrial sites should be developed and the City should cooperate with and assist private developers.

3. A program of "out reach" and marketing should be maintained by the City at least for the forseeable future.

V. Several of the larger industrial complexes of the City are aging and many smaller manufacturing enterprises have obsolescent plants and equipment. When equipment becomes obsolete, competition with more modern plants becomes difficult. When buildings become obsolete it affects production and impacts on surrounding property.

Objectives:

A. Industry should be encouraged to modernize their plants and equipment through capital investment.

1. Abatements for modernization shojld be utilized under State Act 198.

2. Financing for modernization should be made available through revenue bonds under P.A. 338 or P.A. 62.

3. Rehabilitation districts should be established.

B. Industry should be required to meet reasonable standards of plant maintenance to prevent unnecessary deterioration.

1. Standards for exterior maintenance should be formulated, with cooperation and input from industry, along with appropriate enforcement procedures.

2. Use of maintenance "districts" should be explored and feasibility assessed.

3. Basic code standards of City should be enforced with annual inspections of industrial property.

C. Plant maintenance should be promoted as an area of mutual concern between government and industry, and as a primary area of cooperative effort.

1. A cooperative "position report" on plant maintenance should be developed by City and industry working together.

2. Mutually agreeable goals should be set, preferably on an annual basis.

VI. Capital investment money is in short supply which makes it unavailable to most new or small businesses and very costly to all businesses. Recent anti-inflation measures will have the effect of driving interest costs even higher and further reduce investment in plants and equipment.

Objectives:

A. The City should provide access to revenue bond capacity to industry and promote its use.

B. Assistance should be provided to industry seeking SBA or other governmental assistance with financing.

C. City should develop new kinds of financing capacity to promote industrial development.

1. The feasibility of creating a revolving loan fund under the Economic Development Corporation should be explored.

2. Joint venture projects should not be ruled out and their feasibility explored carefully as a way for government and industry to join together in financing development.

3. The City should consider undertaking the construction of industrial facilities on a lease or turn-key arrangement.

4. City owned land could be used as equity to leverage private development funds through the EDC.

D. The City should work in close cooperation with local lending institutions to promote and coordinate the funding of industrial development through private investment whenever possible.

VII. Very high energy costs, possible energy shortages and ever stricter controls on the environmental impacts of industrial activity will act to curb industrial expansion in the future.

Objectives:

A. The City should undertake a serious study of energy alternatives and the possibility of energy regulation.

1. The City should act to promote the development of an energy production facility utilizing:

a. solid wasts as fuel.

b. solar energy.

c. wind conversion, or

d. some combination of the above.

2. The City should work cooperatively with utility companies to maximize energy supply.

3. The City should develop a comprehensive energy policy & energy management plan as specified in the environmental element of the master plan.

B. The City should work cooperatively with private industry, utilities and others to promote energy conservation by all users.

C. The City must act to create a regulatory mechanism to control and utilize air quality off-sets to be created by energy conservation, etc.

# THE OPEN SPACE/RECREATIONAL ELEMENT

## Introduction

A well balanced public recreation system should include the entire range of recreational activities for all ages. The recreational activities should be sponsored by either public, quasi-public, private, or commercial agencies and provided on public open space and park land, or in conjunction with school properties or by indoor facilities. They should be distributed throughout the community to be conveniently accessible to every resident of the city.

Recreation is not limited to outdoor activities only, so consideration should be given to indoor recreation, such as those requiring a gymnasium or a community center. The activities to take place may be either planned or unplanned, organized or unorganized, active or passive, and include individual or group participation. Because people of different ages require different modes of recreation, recreational areas are of many types which differ widely in function, size, and development.

## Definition of Open Space

Open Space, in its broadest sense, includes lands to serve important conservation and urban shaping functions in addition to providing recreation opportunities. There are three primary functions of open space.

1. The recreation function - the provision of recreation resources which meet the positive human needs - both physical and psychological - in providing park and recreation facilities.

2. The protective function - the conservation of valuable natural resources, to enhance and protect the resource base - air, water and plants.

3. The shaping function - the structuring of urban development to form character and quality and a key factor in the efficient use of land.

Open space is undeveloped or predominately underdeveloped land and/or water, which can be either publicly or privately owned and provide either active or passive recreation. The word 'open space' should never be synonymous with vacant or unused land, because open space does not lay idle, but is used and serves important urban functions.

## Overall Open Space Commitment

The City of Flint is indeed fortunate to have the amount of acreage set aside specifically for open space recreation. Most cities the size of Flint lack a large open space base to work from at this late a date of urban development. There are several valid open space/recreation

concepts that have been noted in past city plans that should be carried forth and pursued in the Master Plan.

The city has a great potential with the present creek and river system of developing a finger park approach. Just as the fingers on the human's body lead to the hand and make it functional, these creeks and the river, developed as parkways, would lead major recreation facilities and help make them more functional to a greater number of people in the city.

There are, however, several areas of the city that are inappropriate for this approach. These areas include densely populated urban areas without water facilities, or intensely developed areas with little or no recreation facilities in the area and little vacant land that can be developed. Innovative approaches towards urban recreation will have to be exercised to try and meet the needs of these areas. Innovative approaches would include anything other than the traditional ball diamond or playground type development to serve the specific needs of an area. These innovative approches could include, vest pocket parks, mobile parks, roof top utilization, plaza development, fitness trails, bike paths, free play areas or semi-permanent equipment that can be moved from site to site as the neighborhood needs to change, to name a few.

A questionnaire circulated among the participants of the 1976 Citizens Problem Identification Sessions, indicated many people are not content with maintenance of existing facilities and they feel the need for more new facilities. Unfortunately, poor maintenance was cited as the main reason for not using many of the city parks.

The need for bike trails and hiking trails brought up by the citizen's groups can be developed as part of the finger system approach along the waterways, mentioned earlier. The other facilities mentioned such as nature centers, horticultural gardens, swimming areas, etc., would be function of the major city parks at the ends of the fingers.

## Goals and Objectives

The main goal of our recreation system is to provide a wide range of recreational activities, conveniently accessible to every resident of the city. To meet this goal, several objectives need also be achieved. A well-balanced recreation system should:

- serve all age groups
- serve both sexes
- encourage family recreation
- provide passive as well as active forms of recreation
- provide activities for varying degrees of skills

- o provide a variety of activities from athletic to cultural
- o assure safe and healthful conditions
- o be available to all ethnic and economic groups
- o provide continued recreation activities throughout the entire year
- o place recreation opportunities within the financial capabilities of the people
- o be sensitive to the changing conditions and needs of the community.

## Existing Conditions

### Outdoor Recreation

A modern municipal open space recreation system is comprised of several types of areas or properties that differ in function, size, location, service area, and development. A well-balanced open space system is attained only when there is a proper relationship in the number, type, and location of the various recreation areas. After adjusting national outdoor recreation standards to fit local conditions, the principal types of open space categories were established. These categories include:

| | |
|---|---|
| Playlots | Limited size, limited service areas, located where needed, with playground equipment for pre-schoolers. |
| Neighborhood Parks | 6-15 acres, 1/2 mile service areas, active recreation for predominantly 5 to 15 age group. |
| Community Parks | 15 to 25 acres, 1 mile service radius, active recreation for predominantly 8 to mid 20's age group. |
| Major City Parks | 50 acre minimum, 2-3 mile service radius, active athletic areas with rustic area devoted to passive recreation. |
| Special Use Parks | Size varies with function, designed to provide and meet the requirements of a specific, specialized, or single purpose recreational activity. |

## ACTUAL ACREAGE OF FLINT'S OPEN SPACE

| | Number | Acreage |
|---|---|---|
| Playlots | 28 | 39.25 |
| Neighborhood Parks | 39 | 314.45 |
| Community Parks | 14 | 520.4 |
| Major City Parks | 1 | 57.0 |
| Special Use Facilities (Includes Golf Courses) | 15 | 692.0 |
| Total Open Space | 97 | 1623.1 acres |

The level of development of each individual park is another important aspect of overall city open space/recreation policy. For example, some playlots are nothing more than a monkey bar in the paved area of a parking lot while others have a wide variety of "playground" equipment in a fenced-in green area. Both are shown on the inventory as a playlot, when one is certainly of more use to the neighborhood than the other. It is important when looking at a park in a classification to look at the facilities available to gain some idea of how adequate a particular park is.

The problem of ownership arises in the area of park development because there is little that can be done to force a private park owner to further develop his park for the benefit of the entire city. This is why most future developments will have to take place on municipal or Board of Education property so the public will always have access to this land.

A study of existing parks has revealed that several parks have the potential (as far as land available) to be expanded. To develop and offer new facilities, therefore would upgrade the parks classification and increase the number of people served.

### Indoor Recreation

A recreation system is not limited to outdoor activities only. Indoor facilities are need to provide several types of recreation, especially in this particular part of the country, if people are to have the opportunity to engage in recreation activities throughout the entire year. In terms of function, they may range from a simple gymnasium to a complex community center offering a wide variety of facilities.

Many of these types of facilities are highly specialized and are designed to serve, not just the neighborhod residents, but are intended to service larger sections of the city (and sometimes the entire city). Often recreation buildings are established in conjunction with outdoor recreation areas, to provide either complementary or supportive types of facilities in connection with the outdoor recreation. Because of the degree of specialization and sometimes close proximity to other types of recreation facilities, no definite standards or requirements have been set. These facilities are scattered throughout the city and provided by public, school, and commercial agencies.

Recommendations

The specific recommendations contained in this Open/Space Recreation Element were arrived at by input from several sources. All through the summer of 1976 meetings were held with citizens from each of the planning district in the city, who identified goals and objectives for each particular district. The citizens also completed a questionnaire on recreation facilities within the city. The specific goals identified by the citizens and the results of the questionnaire were used to help compile the overall city recommendations. Meetings were held during 1976 and 1977 with the Recreation and Parks Department of the City of Flint, the Flint Board of Education, and the Flint Planning Commission to gain input on the recreation element and to help reach the overall recreation recommendations presented in this section.

1. Emphasis should be placed on the designation of water areas as public open space area.

2. A high priority of public recreation expenditures should be placed on park maintenance.

3. The feasibility of a differential rate schedule should be investigated, that is the charging of higher rates to non-city residents for the use of city facilities or programs where fees are charged.

4. The people who participate in recreational activities should be given a share in the planning and control of recreational activities and facilities (i.e., through user surveys).

5. Recreational programming by the city should be coordinated with the programming of other agencies.

6. Recreation areas should be pedestrian orientated, that is safe and easy access to parks should be provided.

7. Adequate open space should be provided to buffer non-compatible land uses.

8. An evaluation and monitoring system of facilities will be developed to rate parks within each classification to show

levels of development, to be used as an indication of where monies are spent.

Overall Recreation Policy

All city owned and maintained parks are protected by the City Charter. Under this charter provision, dedicated park land cannot divert from park use without a vote of approval by the people of the City of Flint in a general election. Other private or school parks do not have charter protection and can be eliminated or closed to the public at any time. The assured continuance of city parks is an important element when considering long term open space needs in the city.

The removal of any park from the park's inventory list could have a profound effect on the overall parks' needs of the city. On the other hand, the removal of a facility may have very little or no effect if it happens to be in area with a high level of duplication and overlap of park services.

With regards to long range planning, the assumption must be made that most of the privately owned and school parks will remain in existence and remain available to the public. From this assumption, the first priority for new park expenditure would be those areas which are not served by any park.

Of these areas not served, the first priority should be given to those areas that have the greatest need. The criteria for need should be based on: (1) current and projected population for the area, (2) the age composition in the area, (3) the future land use of the area, (4) the housing conditions of the area, (5) average residential lots size in the area, (6) median income of area residents, and (7) the stability of the neighborhood.

Many of these areas can be serviced through one of the following methods: A) major land acquisition for development of new facility; B) upgrading lesser level facilities; or C) innovative approaches to service the needs such as mobile parks, vest pocket mini parks. Attempts should be made to preserve existing housing stock, in other words, no major demolition is recommended to provide park land. Innovative approaches will have to be investigated to fulfill the needs when no land is available.

# THE PUBLIC/COMMUNITY FACILITIES ELEMENT

## Introduction

While there are many definitions for public or community facilities, this element addresses these: Education (community or K-12 schools, post-secondary or college-university, and vocational schools), child care centers, libraries and other cultural facilities, health care especially major facilities, or hospitals, welfare (social services), protection (fire), and cemetaries.

Such facilities are major consumers of land. In periods of economic depression, the development and expansion of public facilities, along with other public works, are often important economic generators. It is therefore useful to have staged development plans available. Such facilities can also represent the focii of redevelopment efforts, such as the relocation of the University of Michigan-Flint to its new downtown riverfront campus which was made possible by the investment of local public and private funds and other support. Careful planning and control is necessary to avoid wasting local resources. Foresight must be devoted to predicting future needs to optimize such investment.

## Goals and Objectives

The principal goal of this element is to assure the availability of adequate facilities to serve properly city populations, and to promote optimal locations according to land use plans, and minimize overlap or excessive separation. Serious deficiencies are generally cited as recommendations. This is typically a physical assessment of location, but other directly related factors will be discussed which relate to placement of facilities. A central theme in the element emphasizes stabilization, recentralization, preservation and re-use of existing facilities and structures in the city.

## Public Facility Components

### Education - Community K-12

Community K-12 schools, faced with declining enrollments, will not grow and are faced with a variety of problems, notably the re-use of under utilized or vacant plants (which will increase in number). Aside from the continuing decline in school-age population, demographics are uncertain but deserve more study, mainly to assist in planning. Physical plants, at least in terms of site size and location, appear to be adequate in general, and assuming fewer students would remain so. The federal (HEW) plan for school desegregation is unclear but could result in major changes that make comprehensive school physical assessment impractical.

Recommendations: (1) better demographic study, (2) the formulation of a comprehensive master plan for the community school system, possibly to include all facilities within the County Intermediate District, (3) better mechanisms of public participation, especially as to the re-use of closed schools and, (4) consideration of alternatives as to re-use. Non-public K-12 schools play a small and possibly declining role locally.

Post-Secondary Education

Post-secondary schools: Mott Community College and University of Michigan-Flint, continue to grow. This institutional growth creates some conflicts within the city, such as traffic and circulation patterns having adverse effects. Although their basic land needs have been met, these major schools still have some requirements. Schools are regulated by state and federal agencies, so little local control is possible.

Recommendations: (1) monitoring the major institutions, with the city playing an active role resolving or avoiding problems, (2) requiring site plan review of physical plant changes impacting the community, (3) a reappraisal of the city's role relative to these institutions, (4) city sensitivity to school construction without benefit of adequate planning and coordination, (5) establishment of a quasi-public coordinating board or commission, (6) maintenance of an on-going linkage to institutional physical planning and land use.

Vocational Education

Vocational schools: which appear to be growing, also have clear need in a city whose residents have marginal attainments both academically and vocationally.

Recommendations: (1) city encouragement of training to enhance employment prospects, (2) selective city support to focus on neighborhoods of special need, (3) consideration of education as a community development component and resource to re-use facilities.

Child Care

Child care facilities: often ignored in planning, deserve more attention. Recommendations: (1) consideration of these facilities especially to re-use school plants that become vacant, (2) consideration of local regulation tightening control of child care centers.

Cultural

Cultural facilities: extensively developed in the last quarter-century, now form a substantial base for aesthetic and educational growth of residents. The "Culture Center" or facilities complex on the city's near-east side has enjoyed substantial support from community leaders and appears to have no pressing need for city support. The public library system however, operated by the Board of Education, merits support and attention.

Recommendations: (1) better use of school-based libraries, possibly by relocating them to shopping centers, (2) active city participation in the relocation of the downtown branch serving the commercial-professional-government sector. The latter might best be located in the Riverfront Center complex when developed, but an interim site must be found.

Health Care

These facilities studied primarily represent local hospitals, with incidental reference to professional offices and services. Health care deliveries are almost totally controlled by state and federal agencies, but a local control agency has been added (GLS Health Systems, Inc.) which affords a little local control, and which has proposed some reduction in services. This appears to have had no great impact on hospital enlargement plans, and virtually all hospitals have entertained remodeling and new construction in recent years. Such institutional growth has created some problems, including some negative impacts to adjacent neighborhoods (since hospitals are generally located in residential areas). A more critical problem may be in meeting the needs of certain residents, especially those in low income and minority areas. The health of such residens might be improved by bringing primary health care closer to the consumers. This could be accomplished by establishing satellite clinics within neighborhoods.

Recommendations: (1) studying the need and feasibility of establishing satellite health care centers, (2) city encouragement of community health, assuming that such support would focus on physical development, (3) emphasis on the re-use of physical inventory (schools and other buildings that may otherwise be lost), (4) close consideration of the local health care agency (GLSHSI) proposals to meet community health care deliveries, (5) coordination and review of physical development in and about large institutions, including site plan review, (6) review of existing zoning to improve provisions for hospitals and related offices, (7) the city remaining alert to recentralization opportunities for long-term-care facilities (extended care-nursing), and (8) encouraging authorizations for extended care while using existing physical inventory.

Welfare

Social service agencies, were extensively studied, including a questionnaire sent to agencies. An early assumption, that the large number of agencies would have a significant impact physically on the community, proved to be incorrect. Agencies consistently indicated a need for more funding not more space. Analysis of operating structures indicated that such orgainizations are labor- and capital-intensive but in aggregate consume little space. Further study, particularly as to whether agencies might be consolidated and centralized, as in new developments, may be useful. But the final conclusion, that space needs were small and future needs no different, supported the fact that no recommendations were necessary.

## Protective Services

Police was found to have no need for space since operation is totally mobile in the field and centralized in a single structure for administration. Civil defense and emergency planning is a county responsibility. The Fire Department was studied for system dificiencies (station locations, hydrants and water supply) and program needs (fire prevention). Three stations were found to be in need of replacement, two because their locations had handicaps to response time (one having a physical barrier, a busy railway crossing) within their districts. Hydrants were found to be lacking at older mobile home or trailer parks which unregulated developments also had many other deficiencies handicapping fire control. Fire protection was fould to be similarly handicapped in other multi-unit residential developments, mainly some built before more comprehensive site plan review required the involvement of the Fire Marshal, as is now the case. Overall, all multi-unit and trailer park housing was found to be in need of more stringent controls. A proposal to require the installation of electronic smoke detectors in both types of housing was found to be of merit city-wide.

Recommendations: (1) city study of the location and adequacy of hydrants relative to both current and projected needs, (2) restudy of the central business district, contiguous developments and the center city in general to assure fire protection, (3) making certain of the involvement of the Fire Department in site plan review required and other features in trailer parks, possibly to take the form of a new ordinance more restrictive than the applicable State Act, and (5) study of the need for smoke detection equipment in all habitable structures city-wide, to include the enactment of a new ordinance requiring such equipment.

## Cemeteries

A significant amount of city land (139 acres) is consumed by relatively old cemeteries. Because burial needs are being met outside of the city, and because of the difficulties of re-use of such lands, the recommendation calls for the city not authorizing the development of any more cemeteries.

# THE ENVIRONMENTAL ELEMENT

## Introduction

The scope of environmental analysis is generally delimitated by state and federal authority, the former represented by the Michigan Department of Natural Resources (DNR). State regulation is comprehensive and consistent with federal authority. The few city ordinances applicable were enacted under state and federal enabling authority. This element addresses all required environmental issues, but also includes topics of environmental concern, which while not found in traditional planning documents, seem appropriate to truly comprehensive analysis and review. The element covers: Water quality (management, municipal supply, liquid wastes, surface features); air quality; soil and watercourse management (soil erosion and sedimentation, sensitive areas and watercourses, flood plain management and insurance, soil study needs); special environments (noise and lead paint hazard); environmental review and assessment system (a development review process); solid wastes and energy including solar.

## Goals and Objectives

The principal goal is to provide a reasonably clean, safe and healthful habitat for human and other desirable lifeforms. Specific goals and objectives are given in each section of the element. Important deficiencies are generally given as recommendations.

The maintenance of high environmental standards in the city generally has not been given priority. This is because of budgetary constraints, the recent recession, changing local government form, and other reasons. Less apparent is the tacit assumption that since the state DNR monitors basic environmental conditions, there is little need for the city to play an active role. One unstated objective of this analysis is to bring forth local roles as a necessary topic of consideration.

## Environmental Components

The rising concern for human survival over the long term had led to comprehensive study of environment and the application of suitable controls. There is today, in general, state and federal regulation of all important environmental factors: Air and water quality, plus certain other factors affect our well-being such as noise and flood hazard. This element gives priority to those regulated factors. As a recipient of Community Development Block Grant funds, the City is obliged to comply with the Federal Clean Air and Water Pollution Control Acts, and certain other federal controls such as those seeking noise abatement and compulsary flood insurance.

## Water Quality

Environmental water quality deals with (1) domestic municipal supply, (2) liquid wastes, (3) surface water features. Also considered is water quality management planning, applicable authority, state and federal especially the Water Pollution Control Act Amendments of 1972, and Sec. 208 Planning for the latter is being handled by Region V, a tri-county agency, one of 14 statewide. Their 208 report is not complete, so discussion broadly considers the relationship of water quality management to 701 land use plans. (Liaison with the Region is continuing with cooperative development of land use plans.)

Municipal water supply represents no problem for Flint, except possible rising costs (the Detroit system pipelies Lake Huron water to here). Out-county sales of water may be increasing. Liquid wastes, sewage and storm, represent Flint's greatest deficiency. The municipal treatment plant has been overloaded, and like others in the areas, did not meet 1972 standards. Current plant expansion and improvements nearing construction are estimated to cost $50 million with EPA contributing 75%. The drainage system can't handle storm flows (precipitation) and is being upgraded with State DNR assistance. Drain system completion is given as 1980. Both projects are expected to meet all applicable standards when completed. Surface waters, especially the Flint River, have been marginal in quality but with some recent improvement. Most pollution took place downstream because of municipal plant discharge of inadequately treated sewage, most acute after storms. Industrial pollutants have hurt most surface waters, but have been minimized by County Health Department efforts toward abatement. County efforts give some priority to preserving recreational waters from health hazards. Continuing County efforts seek to eliminate point-source pollution from unsewered suburbs. Comprehensive efforts are required.

Recommendations: (1) city continuation of its program to improve water quality while working with Region on 208, (2) top priority to sewer separation and other elimination of drain deficiencies, (3) restudy of water supply and wastewater treatment plans relative to growth projections and 208 plans.

## Air Quality

Environmental air has improved greatly in the city in recent years. This is primarily because of major improvements at the Buick plant, plus a city-wide abatement program. In 1974, the City Pollution Control Officer estimated that federal and state (DNR) air standards would be met in 1975. This was not achieved, although air quality may have approached baseline (best possible) conditions, assisted by the economic decline and reduced industrial acitvity. More recent (1976) data shows that in general city air is satisfactory, exceeding both primary and secondary standards. However, suspended particulates (e.g., dust) have increased in the north-east quadrant of the city or around Buick and St. John (being redeveloped as an industrial park and with

Interstate construction also taking place). The MDNR attributes elevated particulates to construction, which may indicate that improper work practices generate excessive dust. Other air monitoring shows that Ozone standards were exceeded in 1976, increasing the possible hazard of smog, and high oxidant levels that could lead to an air pollution "emergency" as the city had July, 1975. Sulphur dioxide and nitrogen dioxide, also monitored by the MDNR, have remained comfortably below prescribed standards. Part of the recent setback in qir quality is the result of increased economic, largely industrial activities. However, even while industrial pollution sources conform to standards and guidelines, other sources seem to have added sufficient pollution to create marginal air quality.

Illegal residential and commercial incineration of trash may require stronger abatement measures, along with effective enforcement of local ordinance requirements covering construction, to restore air quality.

Recommendations: (1) city formulation of a comprehensive contingency plan with the state DNR in conformance with EPA requirements, (2) reactivation of local pollution control programs to regulate both large point sources and numerous small sources of pollution.

Soil and Watercourse Management

This section covers soil erosion and sedimentation; sensitive areas and water courses; flood plain management and insurance; and soil data development. Erosion refers to the removal of soil when plant cover is disturbed, as by construction, and the deposit of such soil elsewhere, in surface waterways. Enabling legislation facilitated passage of a 1975 City Ordinance to control soil erosion and sedimentation, but enforcement has not been adequate. This is apparent from elevated suspended particulates (dust) in air monitoring data. "Sensitive areas" are tentatively defined as waterfronts, which may require buffering and other control. Flood plain management is required under federal, law, since the city established flood insurance eligibility in 1973, and will require the operation of an overall program of corrective and preventive measures for reducing flood damage, and adoption of an ordinance regulating flood plain development. The city currently has the interim "emergency program" which is leading to the establishment of a defined flood plain or Flood Insurance Rate Map in 1978. The program now under development incorporates HUD environmental policies and standards for flood plain management (24 CFR Part 1910) and will culminate in ordinance adoption. Developmental planning and control will be facilitated by study of local top and subsoils, data on which is currently limited and fragmentary. A proposed cooperative study with the USDA Soil Conservation Service seeks to formulate a city-wide soils map.

Recommendations: (1) additional staff to enforce the city's Soil Erosion and Sedimentation Ordinance, (2) studying the need for watercourse regulation as via ordinance controlling these sensitive areas, (3) formulation of a flood plain management program and adoption of appropriate ordinance, (4) development of a city-wide soils map.

## Special Environmental Noise and Lead Hazards

Noise and lead paint, represent unique problems that have received too little attention. Because of inadequate research, the significance of noise and its adverse effects on people, is not fully known. Most recent efforts to control noise have been transportation-related, just as most local efforts have been incidental to reviewing the impacts of highway construction, primary state and federal initiatives. Some review has taken place locally to assure state-and federally-assisted housing. Although limited city efforts have been begun to assess and control noise, little is known about local noise conditions. Regulatory guidelines that exist (e.g., HUD Circular 1390.2) have been considered in the drafting of a proposed City Ordinance dealing with noise abatement and control, which seeks to amend zoning by establishing controlled districts or areas within the city. Given current city budgets, enactment of such an ordinance would create a deficiency since no staff exists for enforcement and abatement.

Recommendations: (1) study of noise exposures and enactment of a suitable ordinance, (2) compatibility of controls with state and federal law.

"Plumbism" (lead poisoning) is a very old problem which is devastating and sometimes deadly to children living in older homes, those decorated with lead-based paint. The precise incidence of this public health problem is unknown, however the County Health Department has identified 25 cases of lead poisoning in the city alone and estimates that a larger number is probable. Since nerve and brain damage is often serious and permanent, this represents an important problem. Abatement and control practices are simple but not easy. Afflicted children must be identified along with high-risk households (possibly 30,000 units). Since federal (HUD) control is inadequate and no state control is directly applicable, a local ordinance is desirable.

Recommendations: (1) a cooperative education program focused on high-risk city areas, (2) development of hard data, (3) support of city inspections to identify and control lead-painted interiors, (3) encouragement of public health programs, and the enactment of a City Ordinance controlling lead paint.

The need for environmental policy seems obvious, to help define goals and objectives and to guide actions. It was found that no such statements exist, beyond those found in the 1974 City Charter. The recommendation calls for the formulation of environmental policy, possibly by a citizens task force, with support by City Council Resolution.

## Environmental Review and Assessment

The Environmental Review and Assessment System (ERAS) is a proposed project evaluation process. ERAS seeks to establish a systematic, comprehensive analysis of new construction to relate projects to environmental capacities. Beyond meeting important technical requirements, the

process would sensitize and educate developers, their clients and local government units to the needs of existing and projected environment. In an effort to be consistent with federal criteria and guidelines, ERAS is modeled after HUD Program Guide, Environmental Reviews at the Community Level (1975), effectively an extension and elaboration of that process. While physical relationships are featured, soci-economic and other factors are considered. Energy impacts must be discussed. As proposed, the reveiw process is consistent with federal (HUD-EPA) and Michigan State guidelines, requiring only minor augmentation to be usuable for reveiw and assessment including environmental impact statement. ERAS is to be applied to all housing having three or more units, government-assisted housing requiring assessment and any development within a "critical zone or area." The latter, addressed elsewhere, are typically flood plains, waterfronts, or land with unstable soil, or zones of high noise or other deficiencies.

Recommendations: (1) further refinement of ERAS (especially its unspecified ranking system for rating impacts), adoption by resolution and ordinance, and (2) consideration of a one-year trial operating period.

## Energy

### Solar

Energy supply deficiencies had a profound effect on the city, both directly and via sales of its principal industrial base: personal transportation. The crisis continues since no new permits have been granted for commercial or industrial customers of natural gas the last five years. This remains a handicap. Alternative energy sources are seen to be of no immediate value except possibly solar supplements. Both supply and demand must be addressed.

Recommendations: (1) adoption of energy conservation policies and practices, (2) adoption of a conservation code based on ASHRA 90-75, (3) city formulation of a comprehensive energy management plan covering all local needs, (4) support for alternative energy supplies, and (5) adoption of zoning assuring residents "sun rights" to solar energy.

### Solid Wastes Management

Solid wastes, or garbage the city must dispose of, is identified as a major problem. General discussion identifies the declining feasibility of continued landfilling of wastes, along with rising environmental standards. Resource recoveries are suggested, emphasizing energy value. The Resource Recovery and Conservation Act of 1976 (PL 94-580) is seen as a possible source for planning funds. Under this Act regional planning by state designation is required. This city and Genesee County may better align with Saginaw County (similarly industrialized) rather than the three-county structure Region V embraces.

Recommendations: (1) assigning high priority to solving the solid wastes disposal problem, (2) establishing local intergovernmental structures immediately whether or not assistance is forthcoming, (3) city action in seeking additional landfill sites, bought or leased, (4) the city to actively seek resource recoveries technology both to reduce landfill bulk and salvage valuable components from wastes, (5) continued involvement of the community as in "recycling" programs, (6) maximum involvement including private sector, (7) restudy of plastic bagged wastes collection for better technology.

# THE HISTORICAL PRESERVATION ELEMENT

## Introduction

The need for preservation of our American heritage is becoming a national concern, gaining momentum in many communities throughout the country. This awareness is part of a broader concern to better the quality of life and preserve our limited resources.

It is the intent of this effort to provide an instrument for further preservation and neighborhood conservation activities.

## Goals and Objectives

The goals of the Historic Preservation element is to provide further emphasis towards preservation and conservation by developing processes to identify historic sites and action to procure them. This can be accomplished by the development of objectives and mechanisms for implementation:

1. Develop preservation policies which express support of the historic concept and approaches to reinforce it.

    - o Authorize procedures which mandate closer cooperation between various city departments.
    - o Develop inventories to identify existing and potential historic elements.
    - o Incorporate identified elements as part of the Master Plan.
    - o Development cooperative approaches with preservation and conservation groups associations, and citizens.

2. Develop educational processes and techniques which will promote historic preservation and conservation efforts.

3. Develop a process which will establish a comprehensive program for historical preservation including surveys and inventories of historical resources, evaluation, program development and implementation.

4. Develop tools which will allow for the implementation of preservation program. Tools such as zoning modification, historic districts, special commissions, tax incentives and the utilization of federal and state programs are but a few of the examples which can be used to promote historical preservation activities.

## Current Preservation Activity

During the last few years a growing interest in preservation has occurred in the City of Flint as well as in the metropolitan area. The

following summarize these activities accomplished to date and proposed future goals.

Flint Historical Preservation Study Committee

This committee was formed in 1975 in response to State Enabling Act, Act 169. The goal of this committee is to produce a workable document which will recommend specific areas and sites for historical district designation and an ordinance which will assist in:

- o safeguarding the heritage of the local units, stabilizing improved property values
- o foster civic beauty, strengthen the local economy and promote the use of historic district for education, pleasure, and welfare for the citizens.

Historical District Concept

The Historic District Concept which is defined as a geographical area urban or rural possessing a significant concentration or linkage to the past, offers two major features:

- o The district concept benefits the community neighborhood individual by repainting tax producing property while allowing interior alterations, provides a physical link to our past, fosters community pride neighborhood stability, promote reuse and improvement, help stabilize property values, and provide personal satisfaction to property owners.
- o The second feature is the provision for a view mechanism through the establishment of an architectural review board or commission.

Proposed Districts

Four general areas have been surveyed for architectural significance and core district established within them. These districts have been documented and inventoried. Several individual noteworthy sites are also being included in the initial studies and evaluation process. These districts have been designated as:

Central Park
Water Street District
Civic Park
Grand Traverse South

Whaley House Historic Association

This association was organized as a result of availability of an existing structure. Their main goal was restoration and use of this particular structure for historic purposes. A phased restoration program

is currently being accomplished when completed this structure will not only represent an excellent example of period architecture and its historical association with the automobile industry but the successful results that can be accomplished with cooperative efforts between various organizations working towards the same goal.

County Historical Preservation

Genesee County is currently becoming involved with the preservation effort as a result of Crossroad Village located within a major recreational area north of Flint. When completed the Historic Village will encompass 37 historical structures and begin a living village. Unique to this village is a recent addition of the Huckleberry Railroad complete with historical train tracks and station. Although the idea of a historical village is not a new concept it is one of many ways to preserve a community's heritage. It is becomming a valuable educational tool as well as economic aspect.

Recommendations

If historic preservation effort is to become an effective tool in promoting historical renovation, conservation, economic rejuvenation as well as building community pride, effort must take the form of firm policy and commitment as follows:

Policy

1. Promote the process which allows for the review and approval of redevelopment project or plan within historic areas as allowed by the state enabling Act 169. This act calls for information of historic preservation committee. Intent of this commission is to review plans, buildings, applications in order to maintain the historical integrity of a designated district.

2. Designate the Department of Community Development as the official clearing house for all historical land use activity. This department would be responsible for compiling historical land use data, land use activities with other departments and agencies, working with private and public historically oriented groups.

3. Compile inventories of all potential historically significant elements by using existing inventories in the environmental block assessment (EBA). This assessment is a survey of structural conditions completed by Genesee County.

4. Support the historic distric concept as indicated in the master plan and incorporate specific historic districts as part of the official land use policy.

5. Develop monitoring processes which will assure compliance with historical preservation goal and adopted historical ordinances.

6. Coordinate historic districts with current rehabilitation programs to strengthen housing efforts and promote historical conservation and community pride.

Studies

1. Investigate current housing programs and modify where required for application to historic areas.

2. Analyze and evaluate existing land use review and building permit procedures for historical aspects.

3. Investigate and evaluate tax incentive programs dealing with reduced or temporary freeze on assessments of properties within the historically significant area when property improvement occurs.

Citizen Involvement

1. Develop a citizen participation process in areas designated as historic districts through existing block clubs or developing new mechanisms.

2. Coordinate historical preservation activities with existing citizen participation programs as a means of disseminating and receiving information.

Ordinance

Assist the Historical Preservation Study Committee in developing and implementing a historical district ordinance. This ordinance should establish basic framework for designating district standards for redevelopment, architectural guidelines, and administrative policy.

# TRANSPORTATION ELEMENT

## INTRODUCTION

A brief history of metropolitan transportation planning traces technical developments and legislation of the 1950's, 1960's and 1970's and offers principles for future transportation planning. Resource management in light of population shifts and stabilizing growth has become more significant. The transportation planning process must be sensitive to social, economic and environmental impacts and must be predicated on both user needs and effects of the system on land use. A broad description of a future transportation system is also needed. Various procedures have been developed to facilitate the decision process for transportation planning; these include cost-benefit analysis, cost effectiveness evaluation, capital improvements budgeting and capacity analysis. Various sources of data and information are used to measure and predict effects of the transportation system. Sources of funds include federal, state and local monies.

## GOALS AND OBJECTIVES

### General Goal

Develop a multi-modal transportation system that complements land use and affords mobility for the community; balance the need for accesibility with the need for a habitable urban environment.

1. GOAL: Provide a safe transportation system.

   OBJECTIVES: (To be quantified and evaluated on an annual basis through Transportation System Management (TSM) Program.

   A. Reduce accident rate.

   B. Reduce fatalities.

   C. Reduce conflicts between different modes of transportation.

2. GOAL: Provide an efficient, and economical transportation system.

   OBJECTIVES: (To be quantified and evaluated on an annual basis through the TSM)

   A. Reduce congestion.

   B. Minimize energy costs.

   C. Minimize travel time.

   D. Improve coordination of traffic signalization system citywide.

   E. Reduce travel distances.

F. Distribute peak period assignments of work trips.

G. Minimize costs for transportation improvements by implementing low cost TSM options.

H. Minimize operating costs.

3. GOAL: Assure environmental, ecological, and aesthetic values in the design, routing, landscaping, and buffering of transportation improvements.

OBJECTIVES:

A. Minimize air pollutions (emissions).

B. Minimize noise levels.

C. Reduce visual intrusions to existing land uses, such as residential.

D. Minimize loss of street trees.

E. Incorporate sufficient landscaping into street project budgets to include appropriate trees, shrubs, grass.

F. Preserve visual vistas.

G. Minimize disruption of recreational lands.

H. Improve buffering of parking lots. Adopt stronger buffering ordinance (see appendix).

4. GOAL: Preserve and stabilize neighborhoods.

OBJECTIVES:

A. Avoid disruption of housing.

B. Minimize disruption of businesses, hospitals, and schools.

C. Avoid displacement of people leading to loss of population and tax base.

D. Reduce physical barriers within elementary school boundaries.

E. Maintain effective citizen input.

F. Restrict through traffic on local streets by design and routing.

G. Avoid one-way streets which limit local circulation while increasing through traffic in residential areas.

H. Avoid disruption of historic sites (See historical chapter).

5. GOAL: Coordinate transportation with land use development.

OBJECTIVE:

A. Provide accessibility between major traffic generators.

B. Maintain effective communications with agencies and individuals affecting or affected by transportation improvements.

C. Avoid adverse impacts of street improvements which tend to promote land use changes, i.e. conversion of residential to commercial uses.

6. GOAL: Improve maintenance of street system.

OBJECTIVES:

A. Continue annual citywide identification system to set priorities. Develop a cyclic program that will schedule street resurfacing by greatest need on a periodic basis.

B. Identify more funding sources for street resurfacing, curb and gutter replacement.

C. Increase amount of street resurfacing to bring all streets below an acceptable deficiency rating.

D. Revise FAUS project evaluation system to place more weight on street maintenance projects to compete with street improvements countywide.

GOAL: Encourage the use of mass transit (i.e. bus services, carpooling and vanpooling).

OBJECTIVES:

A. Increase ridership.

B. Improve Mass Transit Authority (MTA) bus services.

C. Conserve energy.

D. Reduce congestion.

E. Afford opportunities for movement to economically and physically disadvantaged.

8. GOAL: Integrate transportation improvement planning with planning for other capital improvements through a capital budgeting and programming process.

OBJECTIVES:

A. Eliminate duplication or repetition of effort, minimize overall capital investment and replacement costs by adopting a single, six-year capital improvement program for all improvements.

B. Coordinate street improvements in neighborhoods with scheduled work in housing rehabilitation, sewer and water, parks.

C. Coordinate routine street maintenance and other scheduled work with major physical development projects (Urban Renewal, et.al).

D. Coordinate improvements necessary for the promotion of non-motorized transportation with other proposed capital projects.

GOAL: Assist in the improvement of railroad facilities to maintain a competitive position for rail services and reduce conflicts with other modes of travel.

OBJECTIVES:

A. Reduce number of railroad crossings at grade with major traffic arteries. Program construction of separations based on the Hazard Index Formula (see text).

B. Improve surfaces and signals at railroad crossings. Rubberized surfaces providing an average ten-year life should be used and constructed to time this replacement with grade separation projects.

C. Maintain communication with C&O, GTW, AMTRAC to identify problems and opporutnities on a continuing basis.

10. GOAL: Upgrade air transportation facilities to meet forecasts for increased demands in passenger and cargo movements.

OBJECTIVES:

A. Meet objectives of the Bishop Airport Master Plan.

B. Reduce effects of noise on suburban communities created by expanding facility.

11. GOAL: Encourage non-motorized movement between high-use areas and in neighborhoods.

OBJECTIVES:

A. Increase bicycle facilities (such as sidewalk ramps, exclusive lanes, designated routes and storage areas).

B. Increase barrier-free design for pedestrians.

C. Minimize conflicts between motorized vehicles, pedestrians, and bicycles.

RECOMMENDATIONS

A. Safety

1. Preference should be given to improvements at major roadway intersections in the form of turn-lanes and a modification of signals to reduce intersection accidents.

2. Study various vehicle preemptive techniques at intersections to reduce emergency and fire vehicle response times and reduce accidents between emergency vehicles and other traffic.

3. All posted speed limit restrictions should be studied to determine appropriate vehicle speed levels.

4. Analyze all major railroad crossings and appropriate measures taken to modify unsafe crossings through signal or roadbed projects.

5. Analyze horizontal and vertical alignments of major roadways to determine deficiencies and steps taken to alleviate them.

B. Efficiency and Economy

1. Begin analysis of collector and arterial roadway capacity to determine improvements needed such as parking prohibitions and/or pavement widenings.

2. Promote mass transit option in high-density areas to reduce traffic congestion and pollution. Investigate such options as vanpools, jitneys and MTA bus service.

3. Investigate feasibility of staggering manufacturing plant hours to relieve congestion on major roadway corridors serving these facilities during morning and afternoon peaks.

4. Investigate feasibility of reversing lanes to increase capacity of roadway during "rush-hours".

5. Implement computer-controlled signal network to increase traffic carrying ability and improve flow characteristics of major arterial roadways for both 24-hour and peak periods.

C. Environmental Concerns

1. Evaluate projected air and noise levels of major transportation system improvements to determine potential adverse impacts upon surrounding land uses prior to planned construction.

2. Include Environmental assessment in preliminary planning for major transportation systems improvements in project area(s).

3. Include appropriate, tasteful, organic or inorganic buffering techniques along major transportation system improvements such as the form of landscaping, terracing, berming, etc.

4. Avoid unnecessary removal of street trees in system improvements and replace with appropriate types and sizes if necessary.

5. Avoid unnecessary removal of ground cover and turf patches.

6. Provide for aesthetic buffering of all off-street parking areas to minimize visual intrusion on surrounding land uses.

D. Neighborhood Stability

1. Avoid acquisition and relocation of individuals, families and commercial establishments for major transportation system improvements or modifications.

2. Avoid impaction and/or physical segregation of viable neighborhood units, public and institutional functions.

3. Avoid establishment of one-way pair systems through residential neighborhoods.

4. Implement a program of citizen input and participation in the planning and conceptualization stages of transportation system improvements.

E. Street Maintenance

1. Actively seek alternate funding for major and local street maintenance to include federal Economic Development Administration and Public Works sources.

2. Engage private firms under contractual agreements for street maintenance projects when Department of Public Works manpower is insufficient.

3. Coordinate street maintenance efforts with Department of Community Development in Rehabilitation Target Areas.

4. Continue to set priorities for street resurfacing to provide maintenance in areas of greatest need.

F. Planning and Programming Functions

1. Establish modeling and alternative testing processes to evaluate impact of all proposed transportation system improvements on transportation and land use systems citywide.

2. Continue coordination with Genesee County Metropolitan Planning Commission and Flint-Genesee County 3c planning process to formulate short and long-range transportation goals and improvements.

3. Continue participation in the development of the Unified Work Program (UWP) for intermodal transportation planning.

4. Develop short, medium and long-range proposals for achieving improved circulation and land-use patterns in the Central Business District consistant with current downtown project proposals.

5. Encourage coordination and data proliferation among all the legislative and governmental agencies involved in transportation planning, i.e. federal, state, regional, county and municipal.

6. Adopt a single six-year capital improvements budgeting process through the office of the city administrator.

G. Non-Motorized Activities

1. Investigate potential of using FAUS and other federal sources for building "people mover" types of transit systems, especially near Riverfront Center and Central City Plaza development projects.

2. Promote implementation of bike-paths and other non-motorized projects through FAUS funding sources.

Street System

A successful street system maximizes service to the user while minimizing impacts of the system on surrounding areas. Flint's street system is affected by two major factors (a) the increasing amount of suburban-based traffic generation and (b) completion of I-475. Continued growth of out-county areas will further strain the capacity of the city's roadway network, provided the major employment centers remain in the city. Completion of I-475 should result in a decrease of through-trip volumes on some of the city's major north-south arterials.

Classification of streets by primary service function is used for funding and regulation purposes and can be used to identify where major street improvements will affect land use.

Problem identification and analysis begin in various ways, including citizen participation. Transportation problems generally fall into three categories (1) those that affect the user, (2) those that are affected by the transportation system and (3) those that affect the transportation system. User problems include congestion, capacity and safety issues. Problems affected by transportation are air pollution, noise, visual intrusion, right-of-way and relocation requirements and inappropriate or undesirable land development. Problems affecting transportation include increased population growth and dispersion, increased automobile ownership and peakedness in the amount and timing of travel. Transportation problems outside the Central Business District differ from those within the CBD and require different approaches.

## Downtown Parking

Adequate downtown parking is necessary to attract more people from the metropolitan area. Although the present supply is adequate, future developments will generate additional parking demands, requiring construction of additional spaces in the near future.

## Mass Transit

Mass transportation is an alternative to the private automobile. Local service, provided by the Mass Transportation Authority suffers from overloads at peak hours, lack of factory service, insufficient numbers of passenger shelters and uncertain funding of programs for the elderly, the handicapped and for students. Additional attention should be given to visibility of transit routes, extension of operating hours and the possibility of special systems for downtown and inter-campus movements.

## Non-Motorized

Flint bicycle routes are on existing streets. Many of these streets are designated truck routes, causing safety problems. A coordinated study by appropriate city departments is recommended to examine safety, security and enforcement problems related to bicycle use.

Planning for pedestrian movements has been limited to the downtown area and could be expanded on a citywide scope.

## Railroad Facilities

Railroads are an important part of Flint's economy, offering both freight and passenger service. The strong demand for freight service by the automobile industry should continue. Local problems with railroads include land use conflicts, environmental impacts and safety problems at grade crossings.

## Air Service and Airport Facilities

The growing need for air service will create a need for expanded facilities at Bishop Airport. Orderly development of the airport will be closely linked to compatible land development and the environmental impact of flight activity.

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# III. PROCEDURES

Before the City of Flint Master Plan can become an effective instrument in guiding physical change, it must go through a series of adoption procedures. This process involves all levels of government - local, state and federal. To date, valuable input has been received by citizens and the Planning Commission, as well other departments and agencies.

## Federal

Because the Master Plan was enabled through a federal comprehensive planning grant, a series of mandated reviews are required:

### Environmental

An environmental review of the master plan has to be conducted which assesses factors of the natural and man made environment, and the interrelations and major problems or assets they present for community development.

### Historical

Historical assessment involves those factors within the plan which may create adverse effects or impacts on any properties or districts, in or eligible for, the Register of Historical Places.

### General Review and Approval Process

The land use and housing elements, which are considered prime components, must comply with certain federal program regulations. These are intended as assurances that the final plan meets specific federal policy. Such requirements range from broad community goals and annual objectives to specific policy effecting physical development, patterns of land use and programs designed to accomplish objectives.

### A-95+ Review

The purpose of this process is to function as a clearinghouse for proposed federally-assisted projects for state, area-wide or local units of government. This review allows for appropriate evaluation on the effect and coordination of this plan with those of other units of government, avoiding potential duplication or adverse results. The Genesee County Metropolitan Planning Commission is the local A-95 agency. A-95 comments are forwarded to the federal and state levels for incorporation into their review processes.

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+A-95 refers to federal circular number A-95, which requires the review process.

State

The State reviews the Plan through the above A-95 review process. This allows the opportunity to evaluate proposed local policy within the context of adopted state regulations.

Local

The real impact, and final implementation of the plan falls on the local unit. A series of reviews must occur on several levels prior to its adoption. The Planning Commission reviews the final document and forwards recommendations to the Mayor. After the Mayor's review, the plan is then proposed to City Council for their review and final adoption. The final version of the plan could vary depending on the necessary revisions needed to make it acceptable to all parties involved. Certain policy however, as it relates to federal guidelines, must remain intact.

Once Council has adopted the Plan, it becomes official policy for all physical development within the city. Persons in both public and private enterprise participating in physical development activities should then use this document as a guide in their decision making process.

# II

# HISTORICAL PERSPECTIVE

PREPARED BY THE DEPARTMENT
OF COMMUNITY DEVELOPMENT,
CITY OF FLINT, MICHIGAN

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# ABSTRACT

TITLE: HISTORICAL PERSPECTIVE

PREPARED BY: CITY OF FLINT, DEPARTMENT OF COMMUNITY DEVELOPMENT, DIVISION OF PLANNING AND PROGRAM DEVELOPMENT

SUBJECT: INFORMATION AND STATISTICS RELEVANT TO LAND USE, ECONOMICS AND DEMOGRAPHICS OF FLINT

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ABSTRACT: THE HISTORICAL PERSPECTIVE SECTION PROVIDES BACKGROUND INFORMATION AND STATISTICS IN FIVE AREAS - REGIONAL INFLUENCES, METROPOLITAN CONDITIONS, LAND USE/DEVELOPMENT TRENDS, ECONOMICS AND DEMOGRAPHICS - AS AN INTRODUCTION TO ELEMENTS OF THE COMPREHENSIVE MASTER PLAN. THE REGIONAL COMPONENT PLACES FLINT IN THE GREAT LAKES MEGALOPOLIS WITH PAST AND FUTURE REGIONAL ECONOMIC AND POPULATION TRENDS. METROPOLITAN CONDITIONS ARE ANALYZED FOR DIFFERENCES IN CENTER CITY AND SUBURBAN DEVELOPMENT SINCE WORLD WAR II. THE LAND USE PROFILE EXAMINES THE DEVELOPMENT OF TRACTS OF LAND WITHIN THE CITY FROM 1900 TO THE PRESENT, WITH EMPHASIS ON GENERAL MOTORS IN ESTABLISHING INDUSTRIAL AND RESIDENTIAL PATTERNS. THE ECONOMICS PROFILE TRACES THE CITY'S ECONOMIC DEVELOPMENT FROM PIONEER DAYS TO THE PRESENT, EMPHASIZING RECENT (SINCE 1970) TRENDS IN MANUFACTURING, TRADE, AND LABOR FORCE. THE DEMOGRAPHIC PROFILE OFFERS POPULATION PROJECTIONS, PLUS ANALYSES OF GEOGRAPHIC SHIFTS AND SELECTED INDIVIDUAL AND HOUSEHOLD CHARACTERISTICS. MOST CURRENT POPULATION INFORMATION PRESENTED IN THE HISTORICAL PERSPECTIVE IS TAKEN FROM RECENT (1975) SAMPLE HOUSEHOLD SURVEYS.

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# HISTORICAL PERSPECTIVE

The preparation of a realistic, objective Master Plan for the City of Flint necessitates a critical look at historic precedents as reflected in present-day conditions. The formulation of this plan must consider past changes and trends as an introduction and conceptual framework for future planning. Land-use, demographic, and economic growth patterns have established the form and substance of our urban environment.

## I. REGIONAL INFLUENCES

The City of Flint is located in the southeastern portion of Michigan's lower peninsula, 65 miles northwest of Detroit and 50 miles northeast of the State Capital, Lansing. In addition, Flint's position places it within a six hour drive of two other major metropolitan areas, Chicago and Cleveland.

The State of Michigan is included in the East North-Central (ENC) region of the U.S., a region which includes Wisconsin, Illinois, Indiana and Ohio. All five states show similar economic and social characteristics and include what is generally termed the Great Lakes Megalopolis (GLM). The vast urban development of the GLM stretches from Cleveland on the east to the Chicago-Milwaukee area in Illinois and Wisconsin on the west.

The ENC region represents the industrial - manufacturing heartland of the mid-west, a region which is beginning to feel some significant changes. In the late 19th and early 20th centuries this region grew rapidly as a repository for immigrants from other areas of the U.S. and abroad. Rapid industrialization provided jobs and homes for millions of individuals. But in recent years the population and economic growth trends for the region have remained relatively stable for a variety of reasons. Families, individuals and business concerns have all found the attractiveness of the Sun Belt states to be an overwhelming incentive to migrate south. Also, the relative cheapness of transportation costs has aleviated the advantage the region once had in its proximity to raw materials. Rising wages and unemployment and workmen compensation costs have all contributed to the exodus of industrial and manufacturing firms to warmer climes.

Flint, in its central regional location, is experiencing problems similar to the rest of the states in the region. Both population and business activity are declining in the city for many of the same reasons these declines are being seen in the region.

Unlike many of the other manufacturing cities in the region, Flint was not blessed with a prime location or proximity to natural resources. That the city developed as a manufacturing center at all was more a testament to personal foresightedness and individual leadership than to geographic factors. Flint had no direct access to the Great Lakes trading routes, was not located on a body of navigable water, nor was it situated on a major railroad trade line or trading center as was Chicago.

Flint also could be considered to be located in a sub-region which would include Detroit and the Detroit metropolitan area, Lansing, Saginaw and Bay City. All these cities fall within a 75 mile radius of Flint and comprise the major wholesale and manufacturing market area.

## II. METROPOLITAN CONDITIONS

For many years the area surrounding Flint was rural in character and the land use was mainly for farms. By far, the largest proportion of population growth occurred in the city with only a small amount of "overflow" population going into the townships immediately contiguous to the corporation limits. Since 1930, however, there has been a clear pattern of growth in the out-county areas. Between 1950 and 1960 while the city increased 33,000 in population, the out-county increased by 70,000. Between 1960 and 1970 while the city decreased 3,000 in population, the out-county increased by another 75,000. That trend is continuing today as more and more of the former farm land surrounding the central city is reconverted to residential and commercial uses.

In the past the bulk of out-county population growth occurred as a result of new residents moving into the area from other locations in the state and nation. Recent years, however, have seen the bulk of out-county growth resulting from migration from the city. In the most recent 3 year period, for example, 23,000 individuals have relocated outside of the corporate limits.

Local Migration: 1970-1976

| | Flint | | Remainder of County |
|---|---|---|---|
| In migration | | | |
| from the out-county | 7,585 | from the city | 39,415 |
| from other places | 5,094 | from other places | 15,266 |
| Total | 12,679 | Total | 54,681 |
| Out migration | | | |
| to the out-county | 39,415 | to the city | 7,585 |
| to other places | 8,879 | to other places | 38,478 |
| Total | 48,294 | Total | 46,063 |

Source: ECHO/DCD

As the table above shows, over 80 percent of the population leaving the city during the past six years has moved to the suburban areas around the central city. At the same time, 75 percent of those new residents who entered the area from outside also settled in the urban fringe. The result has been continuing residential development in the fringe areas and a declining residential concentration in the city.

There are two basic causes for the heavy development of the residential fringe. One very real factor in the evolution of the suburban land was the lack of developable land within the city. Earlier periods of

not been evenly distributed, in some places one can drive three miles from the city limits and still be in an essentially urban setting. What was once a city located in the center of surrounding farm land has become a metropolitan area with a population approaching 450,000.

Conditions for the metropolitan area are not significantly different than those cited for the city alone in the profile sections that follow. There are, however, a few exceptions. In terms of land use the major difference between the city and the metropolitan area is that structures are considerably newer in the outlying areas and property values are commensurately higher. Crowding is less of a problem in the outlying areas, but provision of needed services is somewhat more of a problem because of spatial dispersion.

The moderate differences in land values between the city and the out-county has had the effect of producing some demographic differences. For example, the median income in the out-county is significantly higher than for the city, $14,000.00 and $11,000.00 respectively (ECHO figures for 1975). Moreover, the racial composition of the two populations is quite different. The city population is over 35 percent Black and the population of the out-county is only 3.5 percent Black (ECHO, 1975). These two demographic traits produce a number of other slight differences such as variant birth and death rates, unemployment rates, etc.

The economic profile which follows in this section of the city plan delineates the differences between the urban center and the outlying regions. Some variation does occur in that the bulk of heavy industry is within the city, as is the bulk of employment. Generally, however, it is not practical to separate the economy of the city from that of the rest of the area. They are one and the same.

## III. LAND USE PROFILE

The term "land use" as applied in this section of the Master Plan means the utilization or employment of land so as to derive revenue or benefit from it. The utilitzation can be commercial (retail establishments, offices, service-providing operations), industrial (manufacturing), residential (single-family dwellings, apartments, etc.), or recreational and open space (parks, playgrounds, golf courses, etc.).

Orderly development, analysis and planning for land use is a relatively new concept. In Flint, only two major studies have been undertaken in the land use area. The Nolen Plan of 1920 attempted to map land uses in the city, but proceeded no further in analysis. The 1960 Master Plan was a more detailed study which outlined land uses as percentages of the total city area and compared them to national figures.

Historic land use information for this profile was obtained from a variety of sources. City directories, dating back to 1866, proved very helpful in determining the extent of commercial uses, and general limits of residential expansion. Old maps provided insight into street alignments and utility services. Early published histories of Genesee County, City of Flint and General Motors Corporation contained much information for this section. A major portion of the background data was obtained from City and County Assessment office and from the Flint Department of Public Work files. Plat maps dating to 1833, provided by the City of Flint's Assessment Division, presented an accurate, documented picture of sub-division platting and growth. Early zoning maps from the zoning division proved especially helpful also. Flint's Department of Public Works through its Engineering and Building Inspection Divisions had recorded building permits and utility hook-ups for every structure in the city since 1920. These proved very valuable in tracing residential construction during Flint's "boom" period. This profile is designed to acquaint the reader with a general idea of the progress of the city's growth as an introduction to the land-use plan presented later.

### Residential Growth: 1900-1930

Of all the problems facing the maturing city, housing was the most pressing. The exponential growth of the auto industry in the non-automated era of the 20's and 30's demanded ever increasing supplies of workers. Many came from the southern states looking for work and a new life in the north. The first real influx of Blacks began to be seen then too, drawn to Flint for similar reasons. Local supply had been able to meet the demand in the central city area for a number of years. Now new areas needed to be developed, so the early builders looked to the north and east. Illustration 1 portrays the expansion of subdivisions to the outlying areas since the original Smith Reservation Plat in 1833.

The first true subdivision development occured in 1900, in Oak Park, the area adjacent to present-day Buick Motor Division. At the time this area, bounded by Stewart Street on the north, the Pere Marquette R.R. on the east, Hamilton Avenue on the South and Saginaw on the west, was vacant and undeveloped. The Durant-Dort Carriage Company working through the Flint Factory Improvement Association arranged for the opening of this plat. Of the 300 acres, 200 were to be set aside for residential use, and 100 for future industrial use. The receipts from the sale of residential lots were used to attract new businesses to the area. The relocation of the Weston-Mott Company from Utica, N.Y. to Flint was partially financed in this manner. The new Buick Factory on Hamilton quickly generated new housing in the area after 1910, when the city expanded its boundaries to encompass the area. Riverside Subdivision was platted in 1906 in the roughly triangular area bounded by Hamilton, Lewis Street (known as Richfield Road then) and the Flint River. In the next decade this area was quickly built over as were the three Motor Heights Additions in the southern portion of the present-day St. John Industrial Park Redevelopment District. Platting of the Homedale Subdivisions in 1909-10 completed the early industrially influenced residential development surrounding Buick Motor Division.

The Chevrolet Factory along the river also impacted the surrounding areas, but in a slightly different manner. Chevrolet's growth was slower than its predecessor, Buick, and it already had a housing market established in the area from pre-1900 carriage manufacturing days. Additionally, the residences available were mainly of the duplex variety, rather than single family types situated around Buick. Sub-division platting around the Chevrolet complex was begun before 1920 in the triangle formed by the intersection of Miller and Court Streets and along the eastern side of Stockdale Road (now Dupont Street). The Miller/Court triangle remained largely undeveloped until the late 20's when building activity began, although some housing in the Bradley-Corunna Road area was in place by 1917.

A major feature of these early plats was the lack of any overall development scheme. Unlike later developments, these plats were never the center of any building plan. Homes were constructed as demand dictated, on a piece-meal basis by whomever had the resources available at the time.

Residential platting continued in other areas of city through 1920. The two-square miles of land between Carpenter Road and Pierson Road from Dupont Street to Premier was laid-out during the period from 1910 to 1920. Similarly, Fenton Road and Dort Highway (then known as Western Road) received surveyors'attention. Construction was not extensively implemented in these areas until much later because these sub-divisions were outside the city limits. It was not until 1920 that these portions became incorporated as parts of Flint.

To compound the housing shortage, the city had gone heavily into debt by issuing bonds to raise capital for new schools, pavement, sewer and water mains. General Motors stepped in at this point to provide the

As early as 1905 some business leaders, notably Dallas Dort, presented the city with plans for an elaborate park system utilizing large farms and wooded areas scattered throughout the city. In 1910 Flint contained only 15 acres of city parks, most located near downtown. By 1920, park acreage had increased to over 120, principally due to the addition of Kearsley and Thread Lake parks. Through a process of gifts and outright purchases, the growing city added 13 new areas to the system, increasing the park acreage ten-fold. Most of the large neighborhood parks were established in the 20's as a result of population pressures and influence of the Nolen Plan. Mott, Dayton, Bassett, Forest, Windiate, Whaley and Burroughs were added during this period to serve new neighborhoods being established in the north, west and east sides of Flint. Acquisitions since the 40's have been largely playlots and special use parks serving the adjacent public elementary schools.

## The Nolen Plan

The impact of Flint's tremendous, and generally uncontrolled, growth in population, industry and land area during the early decades of the twentieth-century began to generate concern among civic leaders and local officials. As a result, John C. Nolen of Cambridge, Massachusetts, was commissioned in 1919 to develop a plan for the City of Flint. His study analyzed housing, population, street and utility systems, transportation, parks, industries and zoning. The last three items had the most influence on subsequent developments in the city. Nolen's park study recommendations were implemented in principle but not in form. The Plan called for a system of parkways paralleling the main water courses and scattered, integrated neighborhood park areas. Only the scattered park concept was ever actually implemented primarily due to the city's lack of bonding and financial capacity arising from overextension of city services.

The Nolen Plan addressed industrial development and expansion by recommending the establishment of an industrial zone on the city's east side. The expansion of industrial uses had reached its limit in the central area of Flint, so the East Side Industrial District was established along Dort Highway from the AC Plant south to the city limits. A railroad by-pass was also suggested, ultimately resulting in an extension of the Flint and Pere Marquette through this district in the mid 20's. The Belt line benefitted the AC Complex almost immediately, although further industrial development in the area proceeded slowly until after the Second World War.

The zoning scheme advocated in the plan was finally implemented by the city in 1927. It is significant that both the proposed scheme and final adopted zoning regulations were based on historical land use characteristics. The city government attempted to tailor the appropriate zoning to the existing conditions. Restrictions were placed on lot coverage, easements, heights of structures, etc., but use was guided by historical precedent.

Expansion on the east side of the city proceeded rapidly near Center Road and Richfield Road. Major subdividions were located here in an effort to squeeze out as much living space as possible from the narrow confines of the corporate area.

The growth of the peripheral areas further strained the city's educational system. Many new elementary schools and two additional high schools, Northwestern and Southwestern were constructed in the early sixties. Both were designed to serve the needs of the new developing neighborhoods and to reduce the enrollment of the two existing facilities. The addition of a new Northern High School in 1971 allowed the old structure to be utilized as a junior high and serve the western half of the city which was more densely populated.

Commercial Development

Commercial land-use development progressed roughly in four chronological stages, 1833 to 1910, 1910 to 1920, 1920 to World War II, World War II to present. Each was distinctly characteristic of a certain set of economic impacts, population influences and land usages. Illustration 2 portrays the growth of commercial strip development along the city's principal arteries.

The first stage of development (1833-1910) occurred naturally, by the river. The first cabins, trading posts and tavern were located on the Flint's banks. As the area grew, the Saginaw Trail became the locus for retailers and financial concerns, offering them the most exposure to customers. The lumbering and carriage industries changed the concentration of commercial interests little. By 1910 the commercial-retail hub of the city extended from 2nd Avenue to 5th Street along Saginaw and Detroit Streets.

The next decade (1910-1920) signaled an almost three-fold increase in population but proportionally much less commercial expansion in respect to land area. The number of businesses rose dramatically, but still tended to concentrate themselves downtown. The Central Business District now covered the entire area between Clifford and Beach Streets south to 5th Street. Commercial enterprises were heavily concentrated along Saginaw St. as far north as Page and as far south as 12th Street. Lewis Street began to develop north from Kearsley, housing many of the early plumbing and associated types of businesses. The areas near Leith and Industrial gained prominence as commercial developments, encouraged by their proximity to Buick.

Commercial activity between 1920 and World War II continued along Saginaw Street and started reaching heavy concentrations in some of the built-up areas on the east side. In 1920, Flint accounted for 73 percent of the population of the entire county, therefore a majority of the county retail business was located in Flint. The entire length of Saginaw expanded commercially, functioning as the regional shopping

district for the urban area. Davison Road and Franklin Avenue served the growing community area between Buick and Center Road. Dort Highway's extension across the river and subsequent classification as a business loop encouraged business expansion along its length. Two developments along Fenton Road between Cody School and Atherton Road served as community shopping areas for the residents of this locale. Corunna Road from Bradley west to the city limits also developed as a commercial area and drew shoppers from the Miller-Court triangle.

The near-north west section of the city never developed large commercial strip uses. Apparently, the residents carried out the majority of their shopping along the Saginaw strip. Small neighborhood shopping areas grew along Chevrolet, Welch and Dayton Avenues, but these developments seldom contained more than a dozen businesses each.

Commercial expansion after the Second World War was characterized by the growth of the peripheral business areas, closely following the population migrations. Commercial activity in the 30's tended to be concentrated on Saginaw Street because the majority of the population was concentrated there. After the war, large members of individuals migrated to the outer extremities of the municipal area, opening up new markets for commercial enterprises. Flint's share of the county population had dropped to 50% by 1960 further influencing development in the area between the city and out-county. Clio Road changed from a scattered, residential area to a full-fledged commercial strip development by the mid-fifties. Northwest Shopping Center was added in 1962 and pulled more businesses from the Saginaw Street area. A contemporary, South Flint Plaza drew shoppers from the Fenton-Atherton area as well as Flint and Burton Township.

Expansion of housing in the surrounding townships lowered Flint's share of the county population to 43 percent in 1970. The construction of Eastland Mall, Burton Township, and Genesee Valley Center, Flint Township, in the period around 1970 drew more business away from Flint's central city commercial area. Large portions of North Saginaw now contained vacant or transient businesses. Fenton, Clio and Dort Highway may soon suffer the same fate as the retail trading centers move out farther into the out-county.

Summary

Flint's present land-use characteristics are a direct result of the city's development as an industrial-manufacturing area. While some cities developed as residential communities or trading-commercial centers, Flint's growth was largely determined by the automobile manufacturing industry. The great dependence on one major industry in Flint precluded to some extent establishment of a diversified manufacturing base. As a result, Flint has shown a lower percentage of land area devoted to industrial activities than most other comparably-sized cities.

# IV. ECONOMIC PROFILE

## Historic Development of the Economy

Flint's economy has undergone a number of transitions since the City's founding by Jacob Smith in 1819. The original "Flint River Settlement" was begun on the strength of fur trade in the region. This period was short-lived since by 1830 fur trading had reached its peak and was beginning to decline. Fur, however, was not the only natural resource of the area for it was also blessed with seemingly inexhaustible stands of white pine. By the time the fur trade had peaked, other early settlers had begun to realize the value of this timber and several small saw mills were built along the Flint River. The transition from fur to lumber had already begun when "Flint" was only 10 years old.

The early mills produced lumber mostly for local consumption. In 1856 a much larger commercial mill was built by Henry Crapo on capital he had acquired from whaling. Soon, Michigan lumber was being shipped to markets all over the world. By 1862 Flint mills were producing lumber at the rate of nine million board feet a year. During these years, many new settlers arrived in the area and began other businesses catering to the needs of the lumbermen and the farm families that had begun to work the land around Flint. These businesses included many retail establishments and other enterprises such as flour mills and a quite prosperous woolen mill. Lumber, however, was far and away the chief product of the area and the mainstay of the local economy.

## The Second Transition

At first the vast stands of white pines seemed as though they would last forever, but by 1876 lumber production was declining due to the depletion of the forests. As the distances between the lumbering camps and the mills increased, profits began to fall. The City was headed for its second economic transition. Three factors were important in that conversion. First, a local industry had developed on a small scale to produce farm wagons and logging carts. Even before the Civil War there were several wagon making concerns operating in Flint. The second factor was the opening of the Western territories to agriculture. This produced an ever increasing demand for wagons. Finally, there was a ready supply of local capital, a benefit of the logging era, to finance the expansion of the wagon and carriage making activities.

By 1870 there were a half-dozen manufacturers in Flint supplying vehicles to an ever expanding market. By modern standards, they were relatively unpretentious enterprises requiring only a small number of workers and craftsmen, but they were phenomenally successful. The products of the Flint factories began to acquire a reputation for being both durable and innovative. In the year 1900 the City's factories produced over 150,000 carts, buggies, carriages and wagons. In the same year, a Federal census indicated that Flint's population had grown to 13,000, largely on the strength of the carriage trade. Flint had come to be known as "the Vehicle City."

primarily catered to local consumption demands. Certainly, General Motors did nothing to discourage, and in a few instances actively encouraged, other industries in the area. Yet, in some indirect ways the very strength of the auto industry proved inhibiting to the local development of other manufacturing not directly related to auto production. For example, firms that did not share a wage-price structure similar to the auto plants found it difficult to compete for laborers in the local market and maintain a competitive position for their products.

In the latter part of the 1950's the degree to which the local economy depended on its major industry was crystallized by a severe national recession. The automobile companies were one of the industries hardest hit by the effects of the recession. Between 1956 and 1958 employment in transportation equipment manufacturing in the area was reduced by over 15,000.* Many of those on lay-off had exhausted their employment benefits long before being recalled to work and spent months without any steady income. Sales fell drastically in the area, many small businesses closed, and mortgage and land defaults were so numerous that local lenders were forced to make special accommodations for the unemployed workers. Only the Great Depression of the thirties had a more harsh impact on the area and, occurring when it did, not even the Depression did as much to underscore the potential problems associated with a single-industry economy as did the recession of 1958.

By 1960 an economic recovery was underway and factory employment began to climb. This continued through 1969 when total General Motors employment reached a peak of over 80,000.+ Generally, throughout the nation, the 1960's were boom years. Development in the Flint area reflected this. Retail and wholesale trade were up and many new commercial enterprises were added to the area. Unemployment was lower than at any time except for the war years. Incomes, in terms of buying power, also peaked in this period and provided the stimulus for several economic surges including a sizeable increase in construction and new home sales. Certain trends remained unchanged during the sixties including the continuing dominance of, and dependence upon, the automotive industry in the area.

EMPLOYMENT COMPARISONS 1967

| SMSA | Percent Manufacturing Employment | Percent Employment In Transportation Equipment |
|---|---|---|
| Detroit | 46.35 | 15.26 |
| Bay City | 46.06 | -- |
| Saginaw | 50.19 | 16.01 |
| Flint | 56.54 | 47.12 |
| Lansing | 42.55 | 27.85 |
| Ann Arbor | 53.28 | 18.25 |

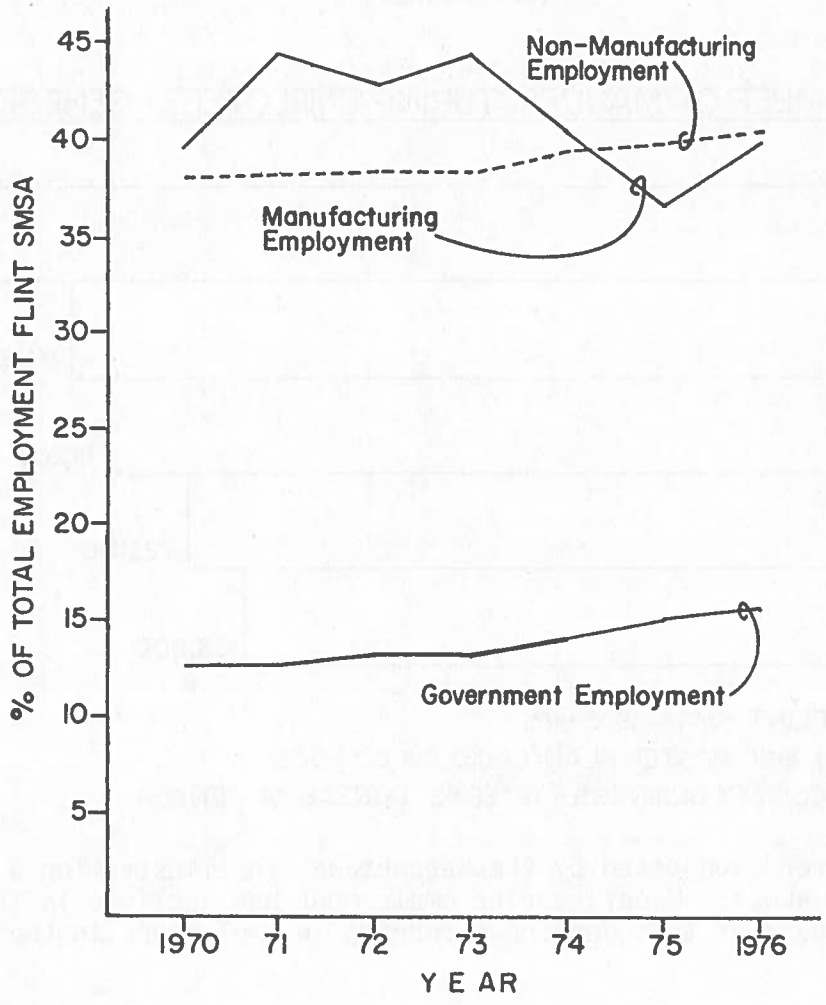
*MESC Monthly Reports

+GCMPC Report on the Best Industries for Genesee County

the average auto employee is earning $7.70 per hour with fringe benefits that push the cost to the employer to over $11.00+ per hour. At such levels, labor costs begin to make many investments in new machinery and processes an economically attractive proposition. Moreover, the cost of fringe benefits also makes the scheduling of overtime work more economically attractive. Since standard overtime rates are "time and one-half", as fringe costs exceed 50% of base pay rates, it becomes cheaper to run two shifts on overtime than to hire a third shift. This has meant longer hours and more pay for those working, but it has tended to reduce the overall work force.

ILLUSTRATION 3

## MANUFACTURING, NON-MANUFACTURING, AND GOVERNMENT EMPLOYMENT (FLINT SMSA)*



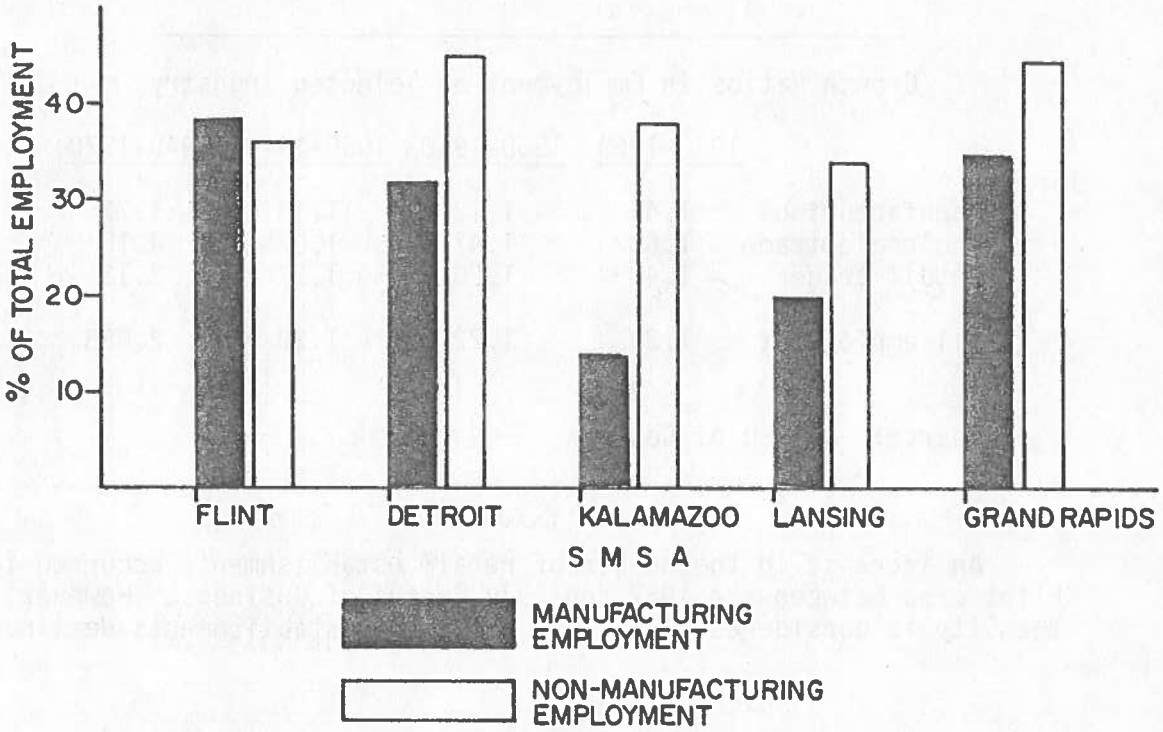

+Flint Marketing Journal, February, 1977

*Michigan Monthly Labor Reports:MESC

Still, the Flint area remains somewhat anomalous in its heavy dependence on manufacturing employment. When compared to other SMSAs across the state, Flint continues to show a much higher concentration of manufacturing employment, as seen in Illustration 5.

ILLUSTRATION 5

## MANUFACTURING AND NON-MANUFACTURING EMPLOYMENT: SMSA COMPARISONS




SOURCE: M.E.S.C; MICHIGAN MONTHLY LABOR REPORT, OCT. 1976.

These figures do not result from a lack of manufacturing enterprise in other areas of the State. Kent County (Grand Rapids) had over 800 manufacturers listed in the 1967 Census of Business compared to Genesee County's 286, and the two SMSAs were of roughly equal size. What has produced the disparity is the lack of a comparably strong non-manufacturing component in the Flint area economy, and the smaller scale of manufacturers in Kent County compared to the enormous employment capacity of Flint's General Motors plants.

ILLUSTRATION 6

## RATIO OF WHOLESALE & RETAIL BUSINESS IN THE CITY TO COUNTY TOTALS

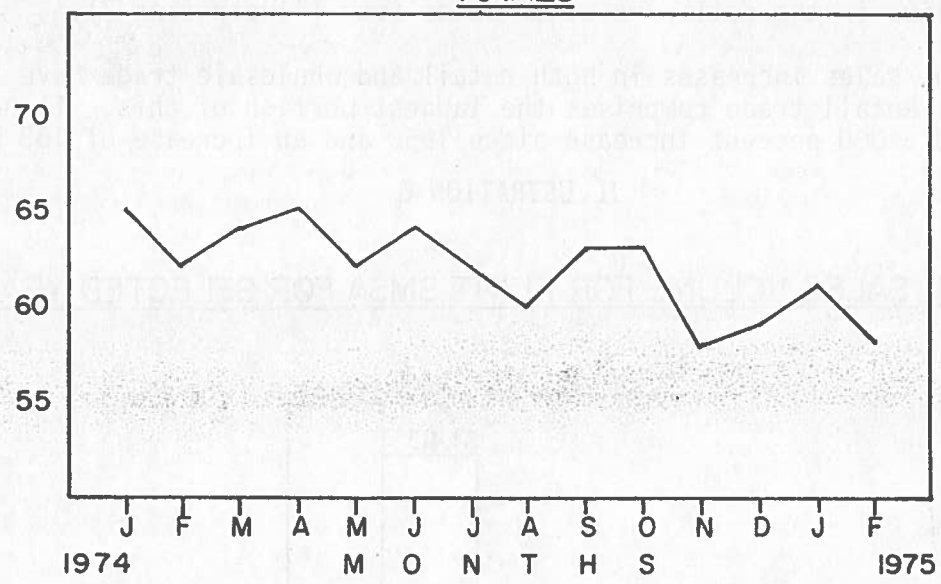
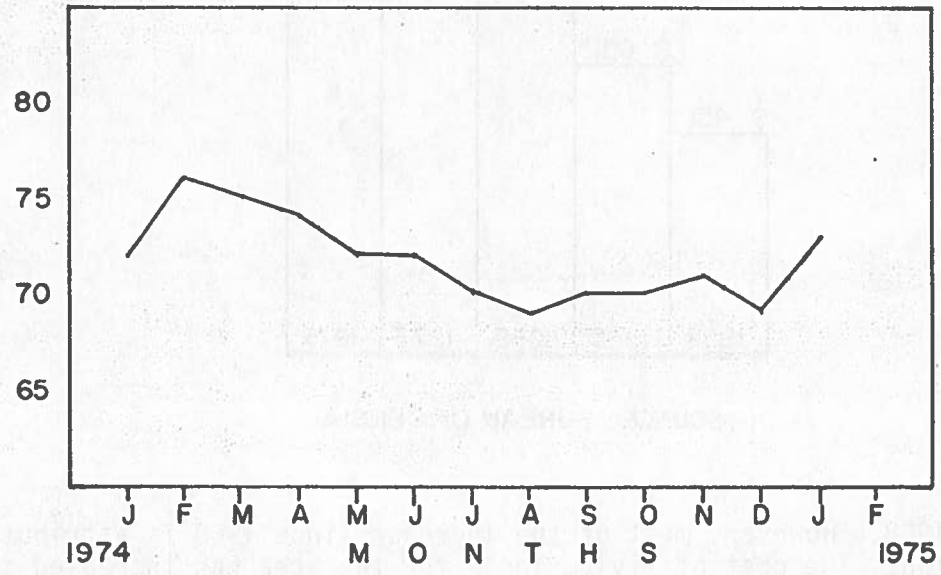



ILLUSTRATION 7

## DOLLAR VALUE OF SALES IN THE CITY AS A PROPORTION OF TOTAL COUNTY SALES




MICHIGAN DEPARTMENT OF TREASURY: MONTHLY RESEARCH AND STATISTICAL BULLETIN.

All Sales by Category: Flint and the State

| Item | Flint: Percent of Total Retail Sales | State of Michigan |
|---|---|---|
| Building materials | 6.23 | 7.09 |
| General merchandise | 13.23 | 13.80 |
| Food | 35.11 | 35.58 |
| Automotive | 23.46 | 22.16 |
| Apparel | 5.98 | 5.84 |
| Furniture | 4.62 | 4.54 |
| Miscellaneous retail | 11.16 | 11.75 |
| Non-retail | 14.25 | 16.70 |

Source: Michigan Department of Treasury, Monthly Research and Statistical Bulletin, January 31, 1975

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Slightly over 50 percent of all sales in the area are for food or automotive products. For comparison, the figures for the State as a whole are also presented above. They indicate that overall in the State, people spend slightly less on cars, apparel and funiture than in the Flint area, and slightly more on food, general merchandise, building materials and other miscellaneous items. The differences, however, are slight in the retail categories.

Sales in the Flint area do appear to be lower than in other areas. The following table displays per capita retail sales for selected counties in Michigan.

---

Per Capita Retail Sales for Selected Counties

| | |
|---|---|
| Oakland | $327 |
| Kent | $314 |
| Saginaw | $291 |
| Kalamazoo | $290 |
| Washtenaw | $276 |
| Ingham | $268 |
| Macomb | $258 |
| Genesee | $255 |
| Jackson | $251 |

Source: MESC/Michigan Labor Market Review/October 1976

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When considering the median income of Genesee County is the second highest in the State, its position in retail sales seems quite low.

Illustration 9 indicates the same relationship described in the previous table. The income levels in the Flint SMSA suggest that retail sales in the area could be expected to be considerably higher. By way of comparison, the distance between buying income and sales is much less in the Grand Rapids SMSA than in the Flint area. This suggests that a potential retail market remains untapped in the Flint Area.

Wholesale trades in the area have also shown increases as reflected in the 5 year Census of Business:

Wholesale Trade in Genesee County

| Year | Establishments | Sales (x $1,000) |
|---|---|---|
| 1958 | 336 | $324,556 |
| 1963 | 374 | 362,871 |
| 1967 | 365 | 536,137 |
| 1972 | 386 | 635,080 |

When compared to the inflation factor for these same years, wholesale trade has not increased and, like retail sales, has not kept pace with inflation-produced rises in the cost of living. Moreover, as a proportion of total sales for the area, wholesale trade in Genesee County is well below the State average.

Wholesale Trade as a Percentage of All Sales

| Genesee County | Michigan | Kent County | Wayne County |
|---|---|---|---|
| 14.25% | 16.70% | 18.21% | 20.72% |

Source: Michigan Department of Treasury / Monthly Research and Statistical Bulletin / Jan. 31, 1975

Non Manufacturing Relocations

| Type of Business | Total in 1975 | Businesses Relocating | Net Change '74 to '75 |
|---|---|---|---|
| wholesale | 130 | 30 | - 8 |
| retail | 1,191 | 368 | -84 |
| finance, insurance, etc. | 529 | 135 | -33 |
| service & professional firms | 1,854 | 514 | -96 |
| other businesses | 274 | 89 | -21 |

Source: R.L. Polk, Profiles of Change

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Differences in definitions and data gathering methodology prevent any direct comparison with census counts. The figures do reveal some internal patterns of interest, however. First, manufacturing is much more stable than non-manufacturing enterprise. This is hardly suprising considering the nature of relocation costs for most manufacturing operations. Secondly, considerably more business relocations take place within the City than between the City and the out-county area. Still, the recent trend is for businesses to move out to the suburbs and this is of concern since it reduces the economic base of the the City even though the business may remain in the area.

A recent survey of 115 businesses that have relocated from the City to the out-county area was conducted by the Genesee County Metropolitan Planning Commission in an agreement with the Flint Department of Community Development. It indicates that businesses that have relocated tend to be relatively small, over two-thirds employing less than 10 people either full or part-time. The survey also shows that very few of the businesses relied on anything other than the personal judgment of the manager or proprietor in making the decision to relocate. Eighty-eight percent of the respondents indicated their own judgment was the single important consideration. The types of businesses covered by the survey relfect the same general breakdown as the Polk figures.

Three reasons cited by the respondents for choosing to relocate are worth noting. The three most frequent responses when asked "why did you leave your previous site" were:

1. no room for expansion
2. inadequate parking
3. concern for safety/security

ILLUSTRATION 10

## Employment in the Flint SMSA (x 1000)

| | 1976[tt] | 1975 | 1974 | 1973 | 1972 | 1971 | 1970 |
|---|---|---|---|---|---|---|---|
| Civilian Labor Force | 206.8 | 211.0 | 209.8 | 204.0 | 197.4 | 193.9 | 196.8 |
| Employment | 186.0 | 182.1 | 185.5 | 192.8 | 184.3 | 181.0 | 181.9 |
| Unemployment | 20.8 | 28.9 | 24.3 | 11.2 | 13.1 | 12.9 | 14.9 |
| Wage and Salary Employment: | | | | | | | |
| In Manufacturing | 74.1 | 66.8 | 73.1 | 85.2 | 78.6 | 79.7 | 72.3 |
| (Transportation Equipment) | 53.5 | 47.9 | 52.0 | 62.0 | 56.9 | 57.6 | 50.5[t] |
| In Non-manufacturing | 75.5 | 72.4 | 72.8 | 74.0 | 71.5 | 69.2 | 69.3 |
| (Construction) | 4.1 | 4.1 | 4.5 | 5.5 | 5.5 | 5.3 | 6.0 |
| (Wholesale) | 8.1 | 8.1 | 8.3 | 8.3 | 8.6 | 9.4 | 10.4 |
| (Retail) | 28.0 | 26.2 | 26.7 | 26.5 | 26.1 | 25.5 | 24.7 |
| (Finance, Insurance, Real Estate) | 5.1 | 4.9 | 5.0 | 5.1 | 4.7 | 4.6 | 4.5 |
| (Services) | 23.8 | 23.8 | 22.9 | 22.2 | 20.3 | 18.1 | 17.4 |
| In Government | 28.9 | 27.9 | 24.9 | 24.8 | 24.0 | 22.5 | 22.7 |

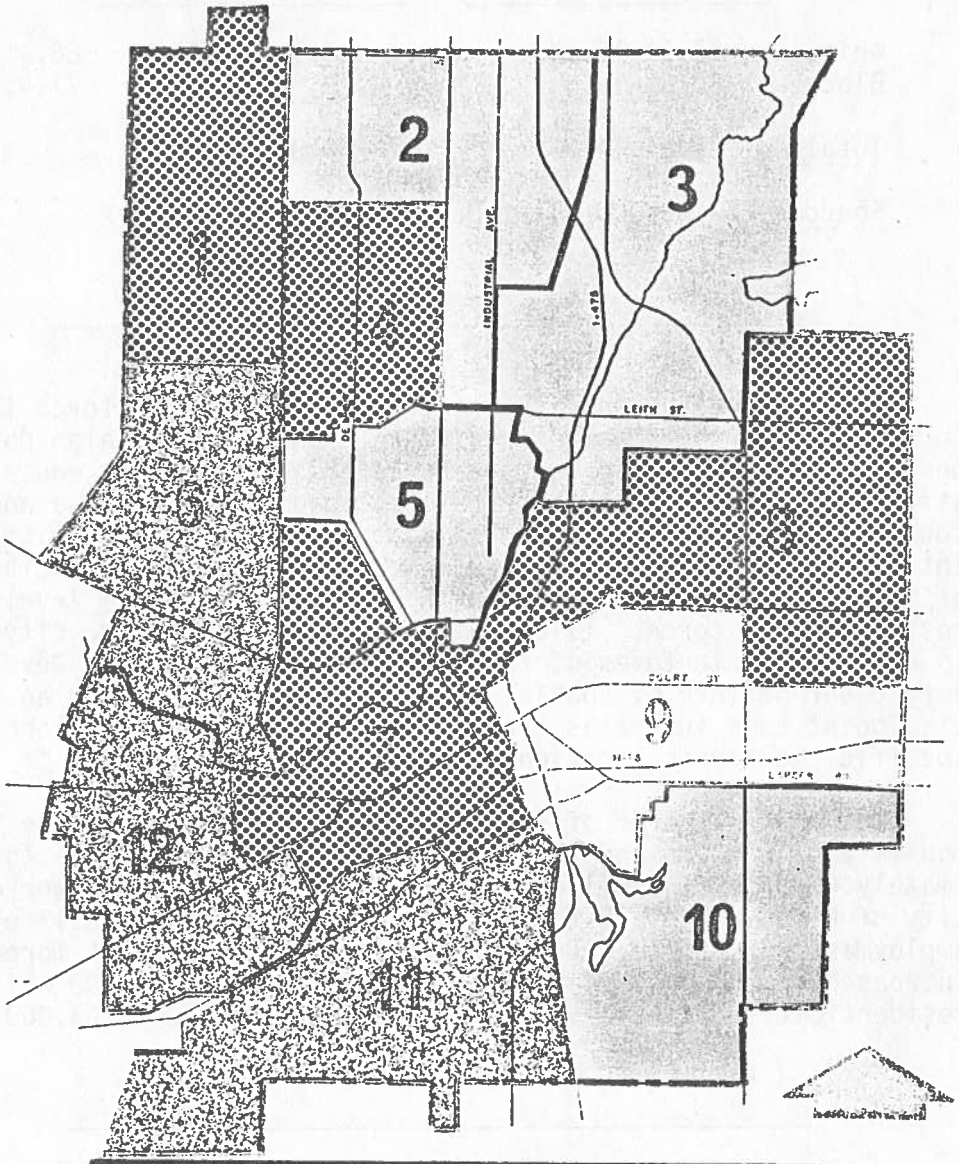
[t] labor strike reduced figure in this year

[tt] 1976 averaged for first 11 months only

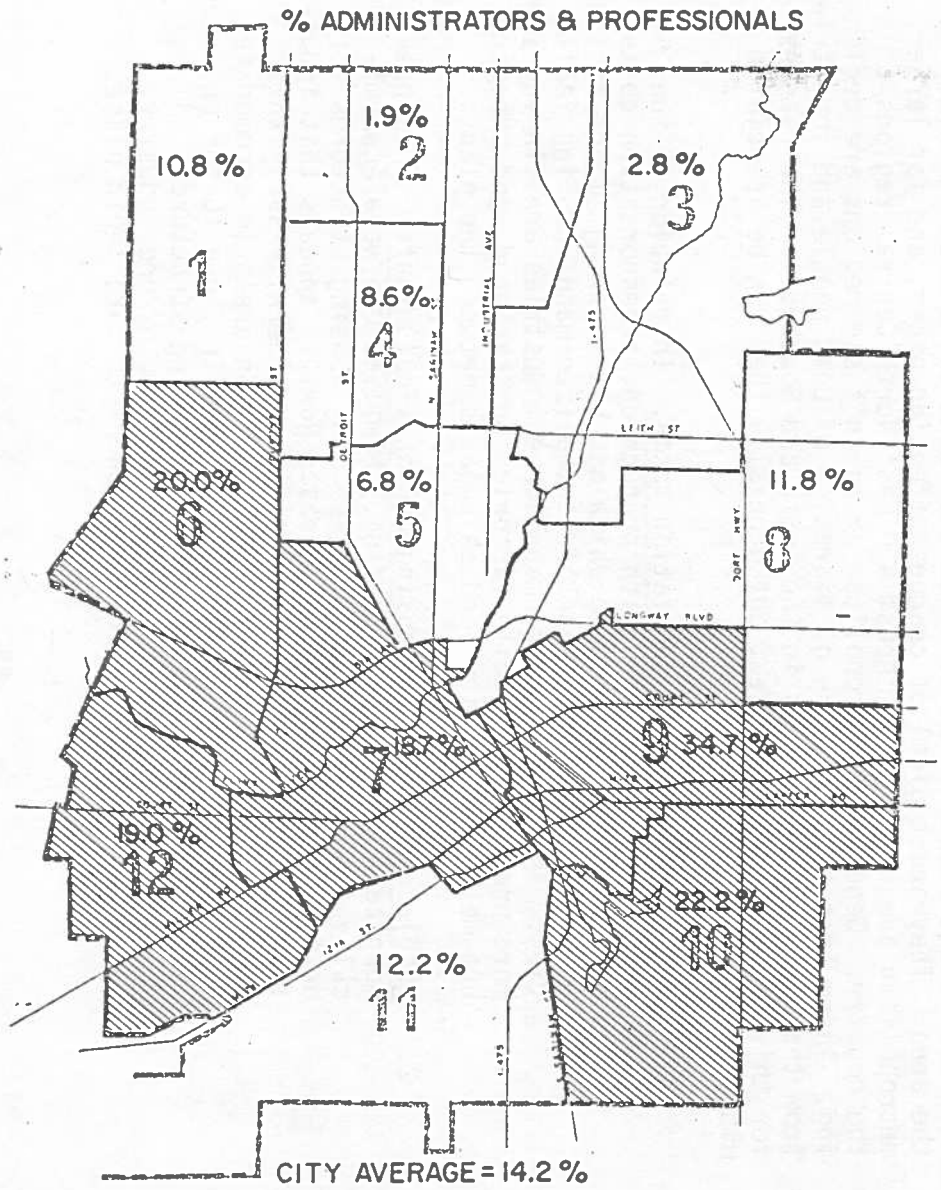
( ) sub-categories in parentheses

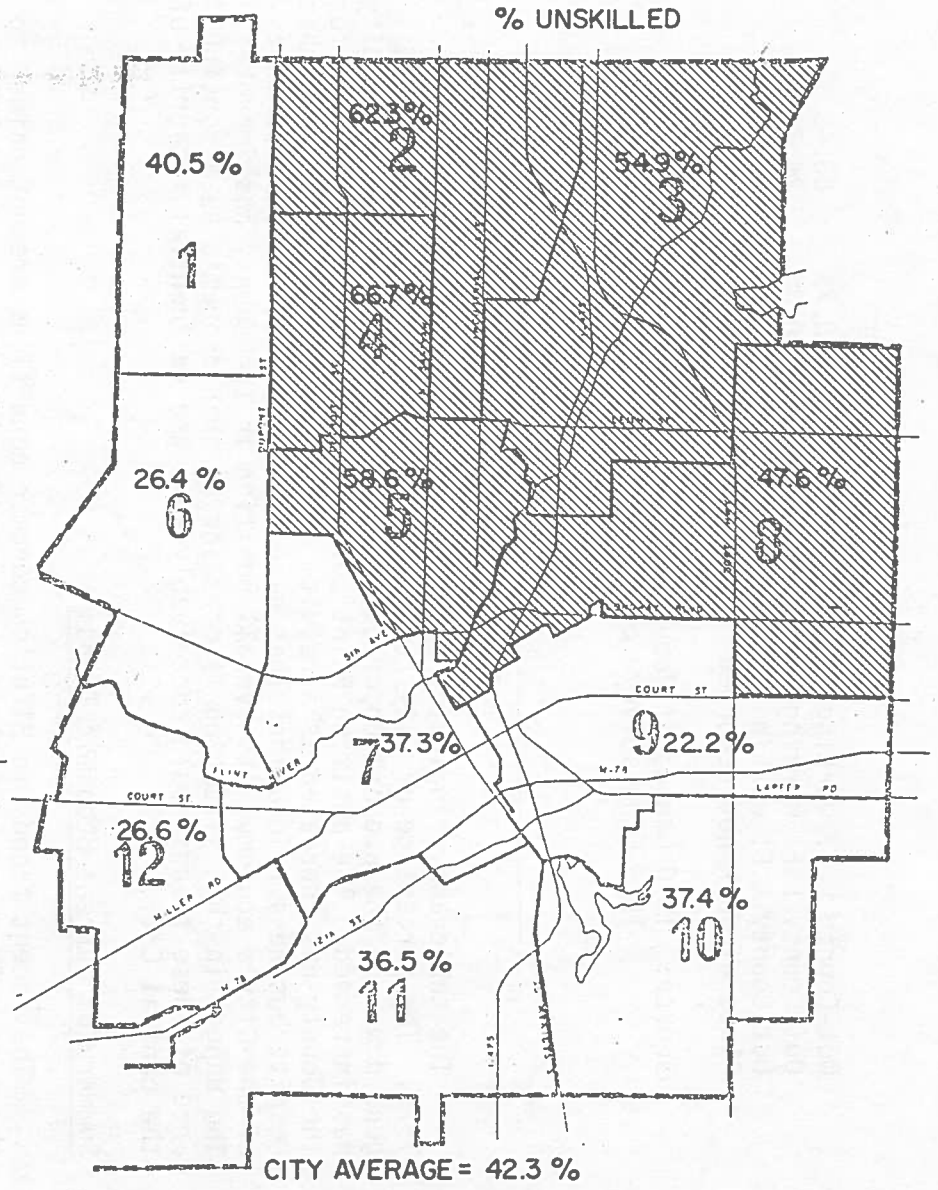
Source: Michigan Labor Market Reviews

# PERCENT UNEMPLOYMENT BY PLANNING DISTRICTS



# SPATIAL DISTRIBUTION OF CITY WORK FORCE BY SELECTED SKILL-LEVEL CATEGORIES




OVER CITY AVERAGE

UNDER CITY AVERAGE

SOURCE: FLINT DCD; FLINT DATA BOOK, 1976

ILLUSTRATION 12

This appears to be no longer the case. The economic incentives for re-use of aging structures are largely gone, as are the successive waves of immigrants.

3. Automation and rationalization of production processes.+ Many formerly labor intensive industries have reduced their payrolls through automation and the introduction of new materials and processes requiring less manpower. This has contributed to a loss of population in metropolitan areas where dependence on manufacturing employment is heavy.

These regional trends have impact in the Flint area in a number of ways. Certainly, there is a proportion of housing stock that is, frankly, obsolete and a like proportion of commercial property that has outlived its principal economic value.

Occupants of these structures have left, and will continue to leave, when they are economically able to do so. Also, there has been an apparent reduction of the work force in the major industry of the area, due to automation and new production processes, of about 10,000 jobs. This has stimulated out-migration and has decreased the total revenues of the area. Finally, many plants and facilities that might have been built in the area (if the old economies of scale of the 1930's had not changed) were ultimately built in far scattered locations across the country. Most recently several G.M. parts-manufacturing facilities have been built in the South where land, energy and labor costs are far less than in the Flint area, or anywhere else in the Northeast regions.

The regional economic shifts which have led to stagnation and decline in the older metropolitan areas are relatively new, but already their impact has been great. How long these trends will continue is an open question, but there is nothing in the immediate future to indicate that they will be short-lived. Rather, these metropolitan areas face a period of economic stagnation or even decline that shows every indication of being the pattern for some time to come. The metropolitan area of Flint is already in a "no-growth" condition. The change in County population, an increase of only 2000 since 1970 when births alone should have produced an increase of 28,000, offers strong evidence of just such a "no-growth" condition. The effects are already being felt in a decline in construction, the loss of younger and better educated workers who tend to be highly mobile, increases in housing and business vacancies, a decline in the fiscal capacity of local units of government and an increase in the per capita costs of government services.

Moreover, Flint is in the unenviable position of seeing somewhere on the horizon an eventual end to automotive production at least as it now exists. Supplies of oil and gasoline, once thought inexhaustible, have proven to be very finite at current rates of consumption. Rogers Morton, then Secretary of Commerce, in a speech in 1975 indicated that if consumption continued at its presently ever increasing levels, crude

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+Sternlieb, G. & Huges, J. in Post Industrial America: Metropolitan Decline and Inter-Regional Job Shifts - pg. 3

## V. DEMOGRAPHIC PROFILE

In order to prepare a sound plan for the future development of the community, it is necessary to establish the present characteristics of the population. Then, based on past changes and trends, a thorough appraisal of the future characteristics of the community can be made.

### Population - Trends and Projections

Historically, the economy of Flint, and consequently its potential for growth, has been based almost entirely upon the manufacturing of durable goods, mainly transportation equipment. As can be seen in the table below, the population growth trends in Flint have fluctuated greatly over the years. From the time of the lumber trade in the mid-19th century until the beginning of the 20th century, the city experienced steady growth, reaching a population of 13,103 in 1900, when Flint's carriage factories were flourishing. During this period, the city's population growth rate was about two and one-half times that of the nation as a whole.

Population Growth Trends In Flint*
1860-1975

| Year | Population | % Change |
|---|---|---|
| 1976 | 170,650 | (-) 2.5 |
| 1975 | 175,003 | (-) 9.5 |
| 1970 | 193,317 | (-) 1.8 |
| 1960 | 196,940 | 20.7 |
| 1950 | 163,143 | 7.7 |
| 1940 | 151,543 | (-) 3.2 |
| 1930 | 156,492 | 70.8 |
| 1920 | 91,599 | 137.6 |
| 1910 | 38,550 | 194.2 |
| 1900 | 13,103 | 33.7 |
| 1890 | 9,803 | 16.6 |
| 1880 | 8,409 | 56.1 |
| 1870 | 5,386 | 82.6 |
| 1860 | 2,950 | -- |

*Sources: 1860-1970 U.S. Census of Population
1975 and 1976 Genesee County Evidence for Community Health Organization (ECHO) Estimates as of February, 1977

(73.9%) of the people resided in Flint, whereas by 1975, Flint's percentage of the county population had dropped to 38.2 percent.

This loss in the city's share of the total county population is not a problem peculiar to Flint. Comparisons with other major cities throughout the State of Michigan show that they, too, have suffered a decline in the percentage of people residing within their respective city limits. While the proportion of residents living in the urbanized areas outside the central cities has increased, the number of individuals within Michigan cities has remained around 2.5 million since 1950. Nationwide, however, the actual number of city residents has shown a moderate increase during the last 25 years.

Because population growth trends in Flint have fluctuated greatly over the years, projecting its probable future growth or decline is not a simple task. All projections made prior to the early 1970's have indicated consistent growth. However, none of these anticipated the recession during 1974 and 1975, which had a devastating affect on Flint.

Population projections adopted in May, 1977, by the Genesee-Lapeer-Shiawassee Region V Planning and Development Commission show a slow decline in the City of Flint's population over the next twenty years:

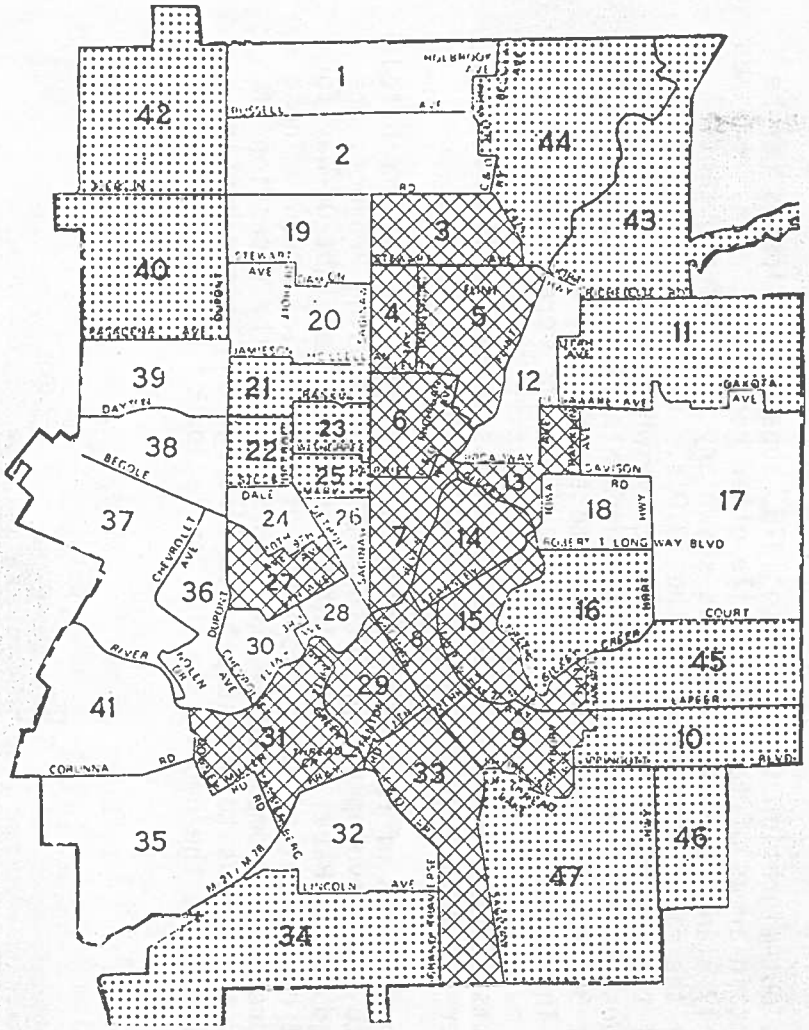
| | 1970 Census | 1980 | 1985 | 1990 | 1995 | 2000 |
|---|---|---|---|---|---|---|
| Genesee County | 445,589 | 472,975 | 480,103 | 488,302 | 496,109 | 499,055 |
| City of Flint | 193,317 | 166,739 | 164,872 | 163,263 | 163,076 | 162,521 |

The City's population is projected to drop from 35.3% of the County total in 1980 to 32.6% of the County total in the year 2000.

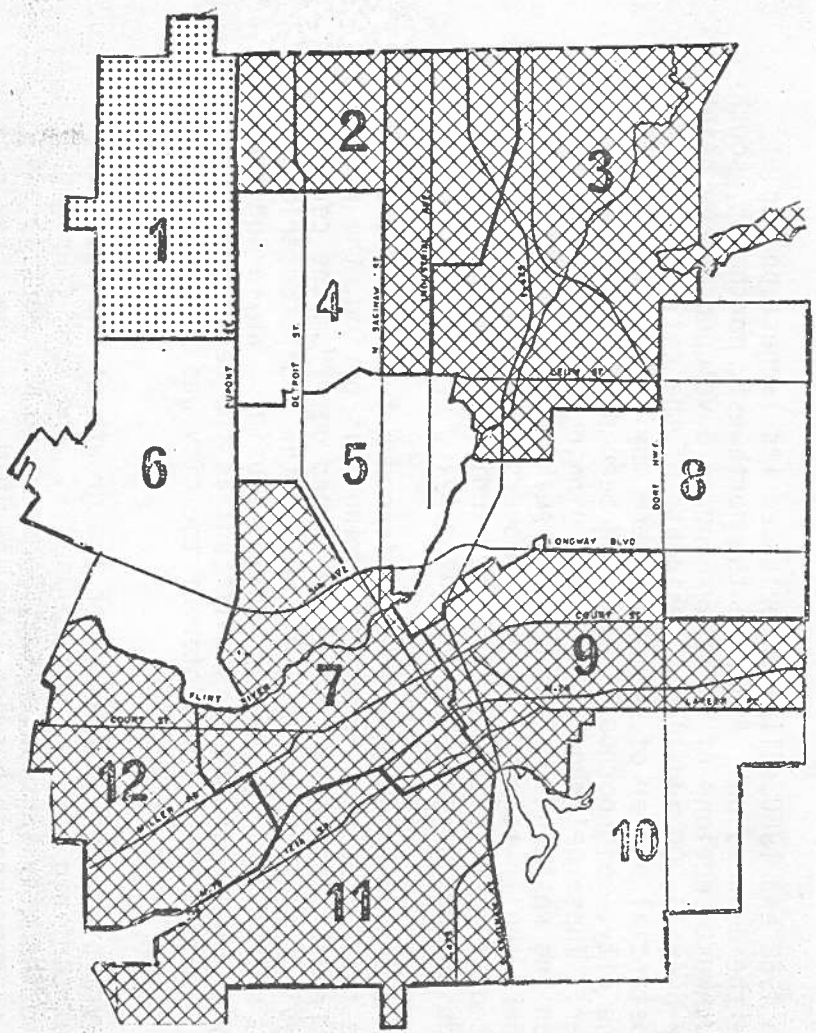
Geographic Changes in the Population

The distribution of Flint's population is much different today than it was some 35 years ago. As can be seen in Illustrations 13, 14, 15 and 16, the concentration of residents within the city has shifted outward. Between 1940 and 1975, Flint's population fluctuated up and down. However, regardless of the overall growth or decline, the areas on the periphery of the city have shown moderate to substantial increases in population. At the same time the center of the city was losing residents.

From 1940 to 1950, the city recorded a moderate growth of 12,000 individuals. Nearly all of these additional residents can be accounted for by growth in the census tracts in the outskirts of the city. During this decade, no area was affected by substantial out-migration. Consequently this growth outward can best be explained by the housing needs of the population. Once the center of the city was built up, to increase the housing stock meant expanding outward.




POPULATION CHANGE 1960-1970




POPULATION CHANGE 1970-1975

10% OR MORE DECREASE

LESS THAN 10% CHANGE

10-49% INCREASE

50% OR MORE INCREASE



ILLUSTRATION 15 & 16

## Current Population Characteristics

With a marked loss in population between 1970 and 1975, the city saw the characteristics of its residents change dramatically. The remainder of this section will give a brief overview of the existing characteristics of Flint's population, along with the changes it has undergone in the past four decades.

Despite the fact that the population decreased from 1960 to 1970, the number of households residing in Flint increased by about 2,000.* At the same time, however, the average household size declined. Nearly 4,500 households were lost from 1970 to 1975, while the average household size shrank from 3.13 to 3.07. Household size has been declining due to factors such as an increased percentage of women in the work force, an increase in the number of unmarried children establishing separate residences, and a reduction in the number of elderly parents residing in the homes of their children.

Along with changes in number of households over the years, the entire composition of households has changed. Changes have taken place over the past four decades which alter the characteristics (age, sex and race) of the household heads.

The number of elderly household heads (65 and older) has shown a gradual increase from about nine percent in 1940 to 17.4 percent by 1970. However, a larger increase was witnessed over the next six years when the proportion of elderly households heads had reached over 25 percent of all households. Concurrently, the number of single-person households had shown a moderate increase from 15.5 percent in 1950 to over 20 percent by 1975. Statistics show that a large porportion of these single-person households are in the 65 and older category.

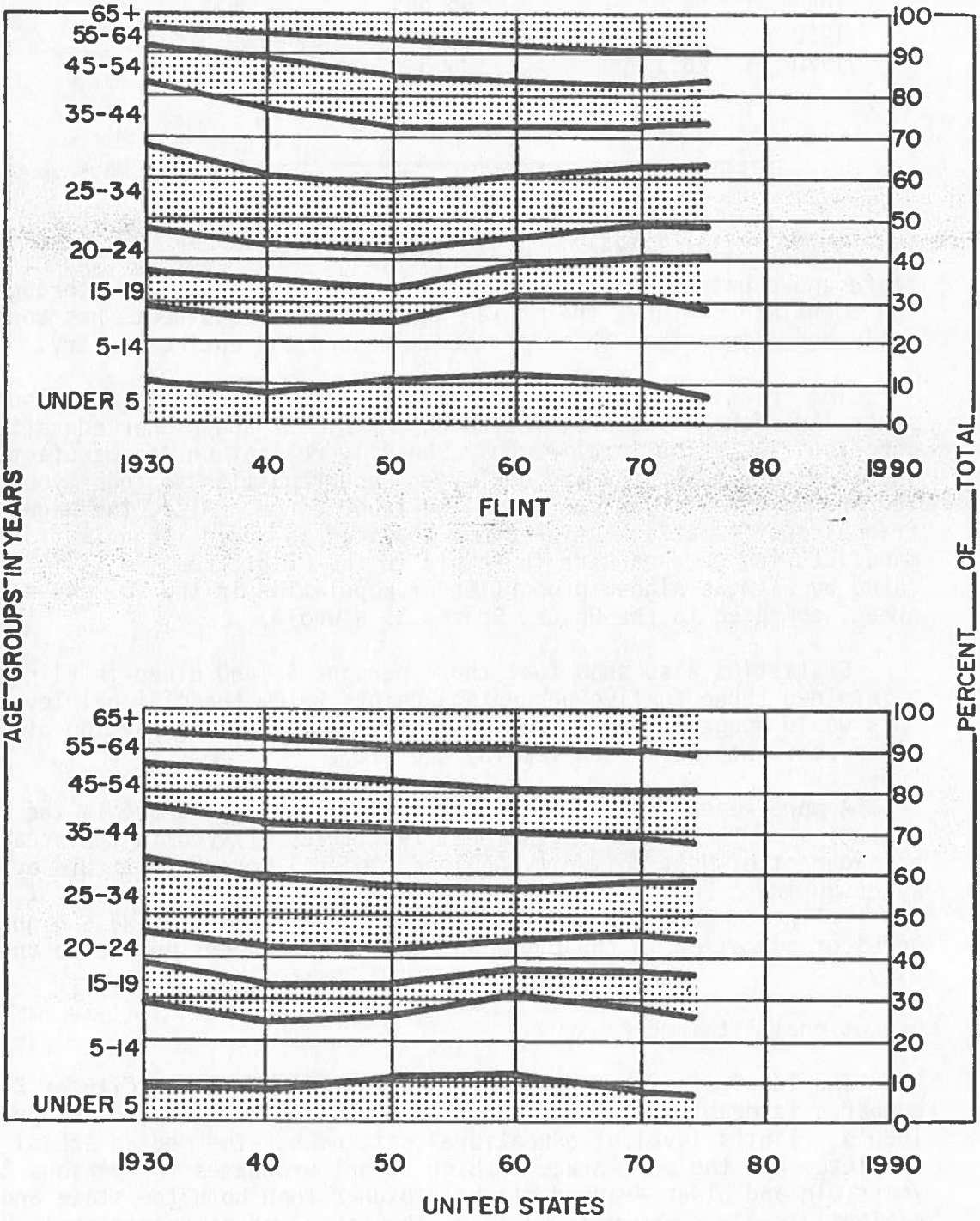
The male/female breakdown of household heads remained relatively stable between 1940 and 1970. However, by 1975 a sizeable shift in household responsibilities had taken place. During this six year period the number of female household heads increased nearly threefold, from 11.3 percent in 1970 to over 30 percent by 1975.

Over the past four decades racial composition of household heads has also undergone some changes. The number of black household heads has shown a consistent increase since 1940. The most substantial increase occurred between 1960 and 1975 when the percentage of black household heads went from 14.4 percent of the total to over 30 percent.

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*A household consists of a single person living alone, or a group of related or unrelated persons living together as a single housekeeping unit. (The average household size is obtained by dividing the population living in households by the number of households.)

# AGE COMPOSITION 1930-1975 (Flint & U.S.)



Median School Years Completed

| | Flint | Michigan | United States |
|---|---|---|---|
| 1940 | 9.1 | 8.6 | 8.6 |
| 1950 | 10.4 | 9.9 | 9.3 |
| 1960 | 10.9 | 10.7 | 10.6 |
| 1970 | 11.8 | 12.1 | 12.1 |

---

Percent High School Graduates

| | Flint | Michigan | United States |
|---|---|---|---|
| 1940 | 27.2% | 24.7% | 24.5% |
| 1950 | 37.1% | 34.9% | 34.3% |
| 1960 | 41.0% | 40.8% | 41.1% |
| 1970 | 48.6% | 52.8% | 52.3% |

Source: U.S. Census

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Composition of the Labor Force

Flint is recognized as a leading manufacturing center because of its production of automobiles and automobile parts. Since the turn of the century, the Flint area has been very dependent on the manufacturing industry, and differs from most cities because of this high degree of specialization. Flint's economy is comprised of a variety of other important income-producing activities. However, since the founding of the motor car industry, Flint's non-manufacturing employment has never reached its potential in scale with its manufacturing employment.

Flint's ties to the automobile industry have had mixed consequences for the local economy. On the one hand, area production workers have prospered due to the high wage rates and fringe packages they receive. Production workers in the Flint labor market are among the highest paid in the country. When compared to other cities throughout the state, the City of Flint has maintained one of the highest median incomes since 1950.

Illustration 18

CHANGES IN TRANSPORTATION EMPLOYMENT
AND TOTAL WAGE AND SALARY EMPLOYMENT
FOR FLINT SMSA, AND CHANGE IN
GROSS NATIONAL PRODUCT

| | Percentage Change in Transportation Equipment Employment in Flint SMSA | Percentage Change in Total Wage and Salary Employment in Flint SMSA | Percentage Change in Constant Dollar Gross National Product |
|---|---|---|---|
| 1961-1962 | +14% | + 8% | + 2% |
| 1962-1963 | + 4 | + 3 | + 7 |
| 1963-1964 | - 3 | + 2 | + 4 |
| 1964-1965 | + 5 | +11 | + 5 |
| 1965-1966 | + 5 | + 5 | + 6 |
| 1966-1967 | - 6 | - 2 | + 7 |
| 1967-1968 | + 3 | + 4 | + 3 |
| 1968-1969 | + 5 | + 7 | + 5 |
| 1969-1970* | -22 | - 5 | - 3 |
| 1970-1971 | +14 | + 4 | - 1 |
| 1971-1972 | - 1 | + 2 | + 3 |
| 1972-1973 | + 9 | + 6 | + 5 |
| 1973-1974 | -16 | - 7 | - 2 |
| 1974-1975 | - 8 | - 2 | - 2 |

* Prior to 1970, the Flint SMSA consisted of Genesee and Lapeer Counties; since 1970 the SMSA consists of Genesee and Shiawasee Counties.

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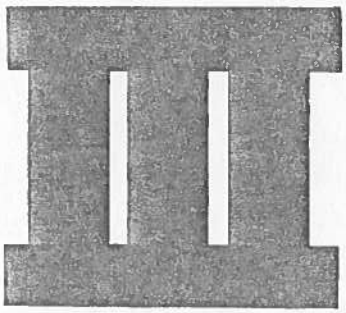
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# MASTER PLAN ELEMENTS

PREPARED BY THE DEPARTMENT
OF COMMUNITY DEVELOPMENT,
CITY OF FLINT, MICHIGAN

THE PREPARATION OF THIS REPORT WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; CPA-MI-05-28-0386.

# 1

# LAND USE

PREPARED BY THE DEPARTMENT OF COMMUNITY DEVELOPMENT, CITY OF FLINT, MICHIGAN

THE PREPARATION OF THIS REPORT WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; CPA-MI-05-28-0386.

# ABSTRACT

| | |
|---|---|
| TITLE: | LAND USE ELEMENT |
| PREPARED BY: | CITY OF FLINT, DEPARTMENT OF COMMUNITY DEVELOPMENT, DIVISION OF PLANNING AND PROGRAM DEVELOPMENT |
| SUBJECT: | LAND USE IN FLINT |
| DATE: | NOVEMBER, 1978 (revised) |
| NUMBER OF PAGES: | 75 |
| ABSTRACT: | THIS REPORT DESCRIBES USE OF LAND WITHIN THE CITY OF FLINT AND EXAMINES CURRENT CONDITIONS AFFECTING LAND USE. PROBLEMS INHERENT TO VARIOUS TYPES OF LAND USES ARE IDENTIFIED, AND INCOMPATIBLE LAND USE RELATIONSHIPS DEFINED; AN ANALYSIS OF EXISTING PLANS IS DONE TO PROVIDE A BACKGROUND TO EXISTING CONDITIONS: EFFECTS OF THE 1960 MASTER PLAN ARE DISCUSSED; CURRENT POLICIES AND IMPLEMENTATION DEVICES SUCH AS ZONING ARE ASSESSED; GOALS AND OBJECTIVES FOR EFFECTIVE LAND USE POLICY ARE DEFINED; AND RECOMMENDATIONS MADE FOR ACHIEVING THESE. |

THE PREPARATION OF THIS REPORT
WAS FINANCED IN PART THROUGH
A COMPREHENSIVE PLANNING GRANT
FROM THE
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

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# I. INTRODUCTION

"Growth is Progress" was once a familiar phrase associated with most urban areas across the nation. Since the 1960's, however, many of our cities have been experiencing a reversal in population trends while the suburban and rural areas are now feeling the impact of the rapid growth that the cities once realized. One of the major factors of decline, although certainly not the only one, was the inability to provide adeqiate planning. When cities do not plan ahead for their future needs, rapid growth can create major and often irreversible problems. Transportation problems, declining air and water quality, housing decay, inadequate storm and sanitary sewers, high unemployment, business decline, high vacancy rates and high taxes are often the results of this rapid and uncontrolled growth. Once these problems have set in, the task of revitalizing a community becomes monumental, extremely costly in terms of dollars, and often painful in terms of human sacrifice.

Land use planning, then, is one way of preparing for the optimum use of land, water, air, and human resources and assisting in providing a healthy, aesthetically and economically stable community environment.

The term "Land Use" is used to describe the nature and physical distribution of the activities in a city--housing, business, schools, parks, industry, transportation--and the interaction of these activities. An orderly and well balanced use and reuse of this land is recognized as being a key to a vital, livable community.

Flint is the center of a metropolitan area that includes much of Genesee County. Like many other cities, it has been declining in importance in relation to its outlying areas, holding a smaller portion of the area's population and commercial activity. The city is no longer playing the dominant role in the housing market, as people move out into the county to seek suburban amenities seemingly not available in the city.

Flint remains, however, an important part of the metropolitan area, it contains the major share of the area's industrial activity, as well as most of the health care and higher educational facilities. The Central Business District remains a major center for offices, banking, retail trade and government, despite developments in the county.

Land use patterns in Flint reflect certain economic and transportation determinants which have had a marked effect on the city's development (see Historical Land Use Section). These factors continue to be important, along with newer concerns such as freeway construction and urban renewal, and Flint's declining population.

Compared to outlying areas, the city's housing stock and non-residential structures are relatively old, leading to problems of maintenance and obsolescence.

The population loss experienced in the city has not been the only historical trend that has made an impact on Flint's quality of life. In the last ten years many commercial, professional and industrial firms have left the city as markets and populations shift to the out-county areas. These out-county regions have shown a steady increase in population since 1970 reflecting further suburbanization in Genesee County.

Meanwhile, the county's major employer, the General Motors Corporation, has been shifting emphasis to non-human, automated types of operations to combat increasing labor and compensation costs. In a similar manner, GM finds it cheaper to schedule overtime for the existing work force than to add new employees. While auto-related employment in Flint and Genesee County has fluctuated widely in the last seven to eight years, the general trend seems to be a stabilization of employment in this category. Indeed, many national economists are predicting a leveling-off or peaking of automobile production into the next decade. For Flint, this means that the prime manufacturing employment in the county will not show significant gains and that increases in manufacturing jobs will have to come from other areas.

The increasing age of the city's housing stock has and will continue to be an area of concern. In some portions of Flint, 90 percent of the residential dwelling units were constructed before the Second World War. These units are approaching obsolescence every year, depending on degree of maintenance. Rehabilitation efforts can do much to extend the life of these structures but eventually a point is reached where rehab no longer is cost-effective. This has already occurred in some areas of the City. At this point, clearance and new construction may need to be addressed.

As was pointed out earlier, some vacant land is still available in the city's urban environment. Unfortunately, the vacant land is composed of many small, disaggregated parcels unfit for large-scale development. A typical development needs a large land area to facilitate the project and to this end the master plan is oriented.

In line with population shifts, a change is occurring in household incomes in the City of Flint. It appears that higher income individuals and households are leaving Flint to be replaced by those of lower income. As a consequence, the median household income in the City of Flint has not kept pace with the out-county, state or nation.

Population and disposable income decreases also have an effect on the city's tax base. As more residential and commercial units become vacant and/or demolished the available tax revenues also decrease. Tax abatement schemes popular now in various states could also have a deleterious effect on these tax revenues.

The land use policy described in the next section is designed to halt population loss, increase employment and maintain the City of Flint as a viable, livable community.

b. In order to maximize land use and increase resident population, efforts should be directed to develop higher density residential areas through conversion or reuse.

- o Allow conversions from 1 to 2 family units in carefully designated areas.
- o Non-viable residential structures should be demolished and the vacant parcels aggregated to form larger, developable land bays wherever practical.
- o Allow for converting residential property to other types of uses in areas where physical deterioration and proximity to competing land uses has seriously eroded the residential value of the property and recovery is unlikely.
- o Institute a policy of land banking for future reuse.
- o Develop policies and mechanisms to alleviate or minimize residential/non-residential land use conflicts.
- o Develop coordination between responsible city departments to insure preservation of residential neighborhoods in matters of land acquisition, provision of public services, traffic planning, and public works construction.
- o Preserve existing viable residential neighborhoods, housing stock and neighborhood oriented commercial land uses, through emphasis on structural rehabilitation programs, citizen involvement in neighborhood problem resolution, and private-sector involvement and investment in Flint's neighborhoods.

c. Commercial: As trends and services change, promote commercial clustering where appropriate, rehabilitation of existing establishments and encouragement of new commercial activity.

- o Promote more efficient use of existing commercial space by increasing commercial density where feasible.
- o Analyze and identify potential areas of land use conflict between commercial and other uses.
- o Identify potential areas for future development or redevelopment, emphasizing utilization of existing vacant structures.
- o Analyze and identify areas within current policy as well as mechanisms which must be strengthened, revised or eliminated to promote objectives.

- Assure adequate level of services as population changes by developing mechanisms and policies which will minimize and alleviate existing land use conflicts and assure coordination between agencies.

e. Open Space and Recreation; Adequate open space and recreational opportunities must be provided to all residents of Flint.

- Emphasis should be given to providing adequate municipal park and recreation areas of sufficient size and quality and in proximity to population concentrations.

- In areas of heavy physical impaction (over building) lots created by spot demolitions should be left vacant to improve supply of passive green space, where feasible.

2. Reduce existing land use problems

- Most land use problems and conflicts occur where different types of uses abut one another, or are itermixed in an area.

- Stress should be placed on consolidating land uses within specific areas and on the orderly transition of areas from mixed to compatible types of uses.

- Renewed emphasis should be placed on screening and other site related techniques of separation where unlike uses abut one another.

- Incentive should be provided to private land owners to solve or reduce impacts of differing land uses, through site improvements, etc.

## III. LAND USE POLICIES

In the final section of the land use element, a number of policies regarding land use issues are presented. These policies, when adopted, will serve as a guide or framework for decisions on land use matters. In brief, they are:

- It shall be the policy of the City of Flint to establish land use control ordinances to provide for the preservation and insure the quality of all areas of land use in the city.

- It shall be policy of the City of Flint to make maximum utilization of the available land area for whatever use is economically, socially and environmentally feasible and a benefit to the city and its residents.

- It shall be the policy of the City of Flint to promote land banking in order to provide land area and flexibility for future land use development.

- It shall be the policy of the City of Flint to encourage higher density residential, commercial and industrial uses in appropriate areas to provide increased population, commercial activity and employment opportunities.

- It shall be the policy of the City of Flint to promote and encourage the segregation of major types of land uses and discourage the intrusion of incompatible uses especially in areas where no prior incursion has taken place.

- It shall be the policy of the City of Flint that areas where mixed uses occur be designated for conversion to the predominate use where appropriate.

- It shall be the policy of the City of Flint that conversion and reuse be encouraged in areas where existing uses are obsolete and/or not economically rehabilitatable.

- It shall be the policy of the City of Flint that screening, landscaping, provision of green space and aesthetic considerations be promoted through ordinance and incentives for all new and existing uses and for the purpose of separating and insulating incompatible land uses.

- It shall be the polciy of the City of Flint to provide public services in a timely and efficient manner, and that such resources that are necessary be allocated in those areas where greatest need is demonstrated.



JR:mw 3/1
11/8/78

B. "Sense of Community"
   a. community organization
   b. homogeneity and diversity
   c. community stability and physical characteristics

C. Physiological well-being
   a. noise
   b. vibration
   c. odor

D. Psychological well-being
   a. physical threat
   b. crowding
   c. nuisance

3. ECONOMIC

A. Employment opportunities
B. Changes in land values
C. Changes in housing values
D. Changes in rental rates
E. Monetary costs
F. Retail/Wholesale Trade
G. Household Incomes
H. Economic Diversification
I. Tax Base

## SOILS/GEOLOGY (ENVIRONMENTAL)

| ISSUE | GOAL/OBJECTIVE | IMPACTS | DATA NEEDS |
|---|---|---|---|
| PERMEABILITY | Public health | Will the permeability of soils associated with the project or policy present adverse conditions relative to well or septic tank development? | 1. Coefficient of permeability<br>2. Soil percolation rate<br>3. Ground water level<br>4. Nearness to streams or other bodies |
| FOUNDATION SUPPORT | Property damage | Will there be risk to property or life because of excessive deformation of materials? | 1. Soil samples |

## WATER (ENVIRONMENTAL)

| ISSUE | GOAL/OBJECTIVE | IMPACTS | DATA NEEDS |
|---|---|---|---|
| GROUND WATER | Ground water supply for public needs. | Will the project or policy affect the quality or quantity of ground water supplies? | 1. Location of recharge area<br>2. Area development patterns<br>3. Project water demands<br>4. Aquifer characteristics |
| HYDROLOGIC BALANCE | Vegetation and animal life, public water supply needs. | Will construction or policy decisions alter the hydrologic balance? | 1. Inflow of ground water<br>2. Outflow of ground water<br>3. Construction and paving |
| DRAINAGE | Protection of property and life. | Will construction alter or impede the natural drainage pattern? | 1. Construction activities<br>2. Soil erosion<br>3. Map of drainage ways |
| SEDIMENTATION | Public health and safety. | Will construction in the area result in major sediment influx into adjacent water bodies? | 1. Soil erosion potential<br>2. Slope gradient<br>3. Rainfall intensity<br>4. Construction intensity and duration. |

## AIR (ENVIRONMENTAL)

| ISSUE | GOAL/OBJECTIVE | IMPACTS | DATA NEEDS |
|---|---|---|---|
| GENERATION AND DISPERSION OF CONTAMINANTS | Protect public health and welfare. | Will there be generation and dispersion of contaminants<br>- by project or policy related activities<br>- in proximity to the project<br>which will exceed national, state, or local air quality standards? | Energy<br>1. Requirements<br>2. Source<br>3. Type of fuel<br>4. Air pollution control equipment<br>Vehicles<br>1. Traffic generation<br>2. Traffic mix<br>3. Model year mix<br>4. Travel - speed and distance<br>Refuse Incineration<br>1. Amount of solid waste<br>2. Incinerator type<br>3. Air pollution control equipment |
| SHADOW EFFECTS | Comfort, public health energy conservation. | Will project structures cause perpetual shadows over large areas? | 1. Geographic latitude<br>2. Dimensions of project<br>3. Dimensions of surrounding structures |

## PUBLIC SERVICES (SOCIAL)

| ISSUE | GOAL/OBJECTIVE | IMPACTS | DATA NEEDS |
|---|---|---|---|
| EDUCATION<br><br>HEALTH CARE/ SOCIAL SERVICES<br><br>WASTE DISPOSAL (SOLID AND LIQUID)<br><br>WATER SUPPLY<br><br>STORM DRAINAGE<br><br>RECREATION<br><br>POLICE<br><br>FIRE<br><br>SNOW REMOVAL | Health, education and welfare | Will there be an adequate supply of and access to these services for the project?<br><br>Will the policy level action preclude the development of any of these services?<br><br>Will the project adversely affect the delivery of any of these services? | 1. Location, type and size of of existing facility.<br><br>2. Socio-economic characteristics of existing and future population<br><br>3. Traffic access, existing and proposed<br><br>4. Transit availability<br><br>5. Service area of existing facilities |

## "SENSE OF COMMUNITY" (SOCIAL)

| ISSUE | GOAL/OBJECTIVE | IMPACTS | DATA NEEDS |
|---|---|---|---|
| COMMUNITY STABILITY AND PHYSICAL CHARACTERISTICS | Preserve neighborhood quality and structural soundness; adequate provision for housing need. | 1. Will the project be in an unstable area?<br>2. Will the policy produce an unstable area? | 1. Census blocks and tracts surrounding the area.<br>2. Sale and rental turnover rates.<br>3. External appearance of existing housing stock. |

## PSYCHOLOGICAL WELL-BEING (SOCIAL)

| ISSUE | GOAL/OBJECTIVE | IMPACTS | DATA NEEDS |
|---|---|---|---|
| PHYSICAL THREAT | Fear of physical harm. | Will the project or policy decision create a feeling of insecurity among the residents and users of the facility? | 1. Building types and sizes<br>2. Locations of doorways, windows, etc.<br>3. Crime statistics<br>4. General perception of crime in area<br>5. Incidence of drug or alcoholic addiction in area |
| CROWDING | Physical and mental health, lack of privacy. | Will the residents and users be exposed to stressful situations in their living environment? | 1. Number of persons in area<br>2. Number of housing units in area<br>3. Number of rooms, excluding bath and kitchen |
| NUISANCE | Physical and mental health | Will the project or policy decision be exposed to or generate factors that may be considered nuisances? | 1. Information on proposed site<br>2. Examination of proposed land use plan for possible conflicting uses |

## ECONOMIC

| ISSUE | GOAL/OBJECTIVE | IMPACTS | DATA NEEDS |
|---|---|---|---|
| EMPLOYMENT | Income source | Will the project have an adequate supply of and access to various types of jobs?<br><br>Will the project or policy action destroy or relocate any existing jobs?<br><br>Will the project or policy action create a demand for more area jobs? | 1. Number and type of jobs by the project<br>2. Distance to employment<br>3. Existing jobs on project site<br>4. Transportation availability |
| RETAIL/WHOLE-SALE/MANUFAC-TURING SALES | Jobs/Income/Tax revenues | Will the project or policy action contribute to the area economy in terms of increasing activity?<br><br>Will the project or policy reduce commercial activity? | 1. Number, type and location of existing establishments<br>2. Area trade statistics<br>3. Sale projections<br>4. Employment projections |

## ECONOMIC

| ISSUE | GOAL/OBJECTIVE | IMPACTS | DATA NEEDS |
|---|---|---|---|
| LAND VALUES | Maintenance of values. | Will the project or policy action decrease the value of adjacent land, housing and commercial establishments?<br><br>Will the project or policy action encourage speculative market practices? | 1. Real estate sales history<br>2. Projected real estate transactions<br>3. Existing market values |



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## V. HISTORICAL AND EXISTING CONDITIONS

The land use plan is intended to serve as an effective guide to orderly and efficient redevelopment and reuse of the land within the confines of established goals and policies. In order to achieve this, a review and comparison of existing conditions as they relate to prior expectations is necessary. This section will be devoted to looking at established plans and policies already being implemented, their effectiveness over the last fifteen years, their potential and inherent problems, and the means to update them as they apply to current trends and forecasts.

### A. 1960 Master Plan

The land use section of the 1960 Adopted Master Plan is primarily based on the concept of the organization of activities and land use areas into separate communities and neighborhoods.

The communities (approximately 17) are composed of residential areas generally bounded by four basic non-residential corridors Illustration 2): (1) Business and industrial, (2) Transportation, (3) Large open areas - parks, public land, etc., (4) Natural features such as lakes, rivers, etc.

Each community, several of which extend beyond the city limits, range in population from 20,000 to 40,000 and is composed of smaller neighborhood units from 2,000 to 9,000 residents. Ideally, the smaller units contain an education facility, park, and neighborhood shopping.

Although still a valid concept, its application was based on a sustained or a continuing growth rate. No consideration was given to the possibility of population decline or its implications. The population projection ranged from 195,000 to a maximum of 225,000.

Another element which reinforced this concept was the "filling up" of vacant city land. This occurred partly as a result of the continued unavailability of public sewer and water, which forced development within the city; if utilities did become available, the "filling up" still tended to occur, though at a slower rate, as a result of population increase. A comparison of the 1960 projections with 1970 conditions is indicated in Illustration 2.

During the last 15 years conditions which favored a growth situation within Flint's urbanized area changed, causing a reverse in projected trends.

Utilities needed for development in outlying areas became available, income rose approximately 65% during the 60's, allowing the middle income group a greater purchasing power; renewal and

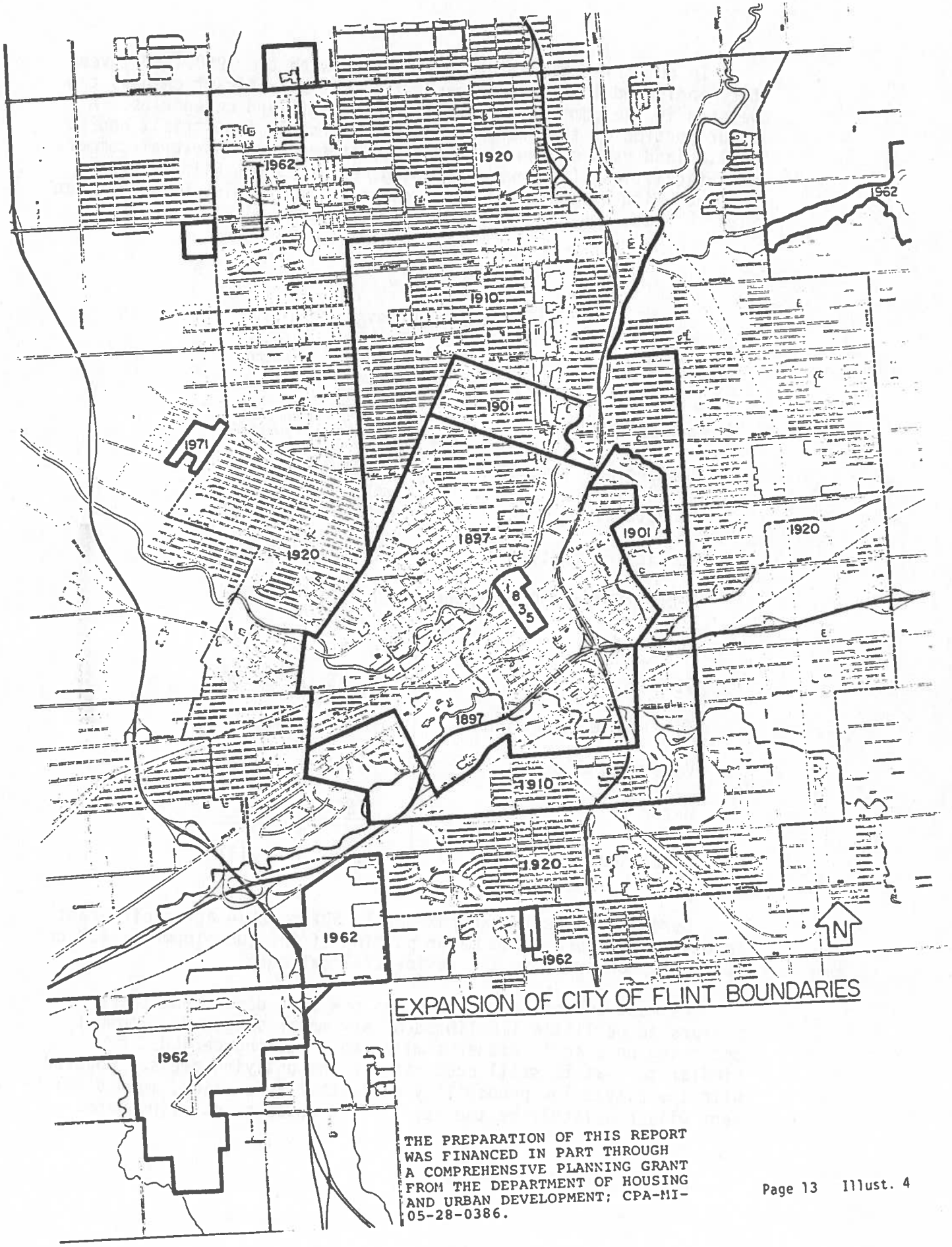
major construction, such as I-69 and I-75, displaced many residents and allowed access and egress from the city to other areas, new shopping facilities were constructed near or at the city limits. Homes constructed in the 40's and 50's no longer fitted the needs of the 1960's and 70's, because of lower birth rates. Concurrently, many of the problems of an older urban environment climaxed, adding to the urban flight.

Many of the population projections used as a basis for application of the concept did not materialize. The change which was expected to occur as the result of growth did not take place in many of the areas of the city. Other means must now be found to assure services and amenities necessary for community stabilization and neighborhood vitality. The availability of energy will also play an important role in supplying future needs.

B. Land Use

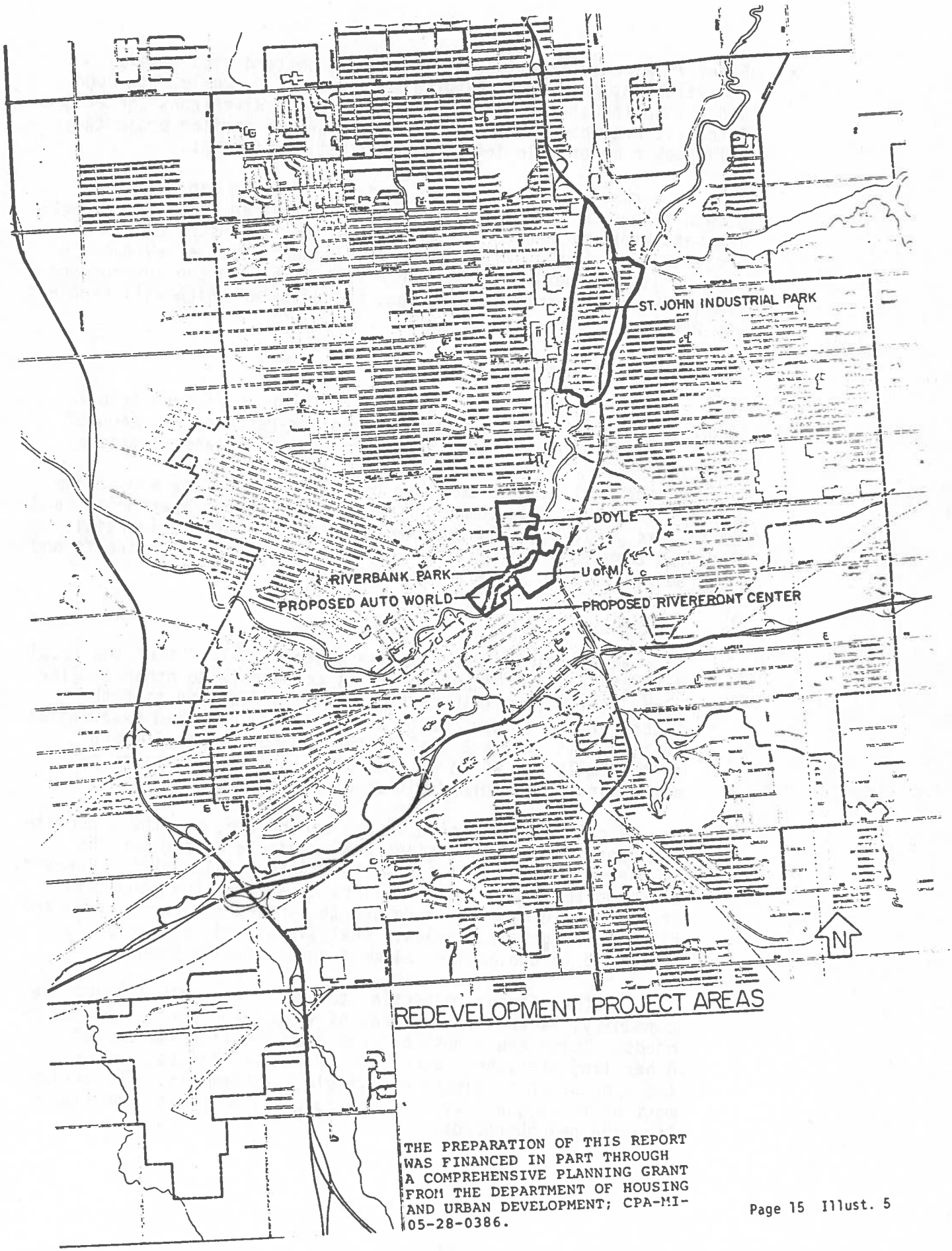
The City of Flint is comprised of approxmately 21,137 acres or 33.03 square miles of land. This land is broken down into the following uses:

| Use | Acres | % Total Land | % Total Devel. Land |
|---|---|---|---|
| Residential | 7215 ac. | 34.2% | 38.8% |
| Commercial | 1106 | 5.2 | 5.9 |
| Industrial | 1296 | 6.1 | 7.0 |
| Pub/Inst/Utl | 3003 | 14.2 | 16.1 |
| Rec/Open Sp. | 1503 | 7.1 | 8.1 |
| Railroad | 292 | 1.4 | 1.5 |
| Streets | 4200 | 19.9 | 22.6 |
| Total Dev. Land | 18,615 | 88.1 | 100.0 |
| Vacant Land | 2,097 | 9.9 | |
| Water | 425 | 2.0 | |
| Total Land Area | 21,137 | 100.0 | |




EXPANSION OF CITY OF FLINT BOUNDARIES

THE PREPARATION OF THIS REPORT WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; CPA-MI-05-28-0386.




REDEVELOPMENT PROJECT AREAS

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including wholesale and retail operations. Approximately 1106 ac. or 5.2% of the total land area is devoted to this use.

The major commercial concentration is within the Central Business District (CBD) (see Illustration 7). This area is dominated by service businesses with the majority providing professional, financial, insurance and real estate services. During the last decade this district has shifted from a balance of goods and services to one primarily of service.

The major problems that the CBD faces are inconvenient parking, poor traffic circulation and competition with newer developments in the outlying areas. Projects such as Riverfront Center, Center City Plaza, and U of M, coupled with easier access from I-475, should assist in solving many of these problems.

Lineal (strip) commercial district comprise the next largest portion of this land use. Although this type of development provides the necessary services to large segments of the population, there are many problems inherent in this concept. As these districts are often designed as individual and separate facilities access and egress are a major concern; added to this is the problem of duplication of effort, as well as the confusion to the user created by poor site plan design and signage. These problems may be alleviated by further investigation and development of proper signage, combined or limited ingress and egress, improved site aesthetics, and clustering of future commercial development and expansion.

Interfacing of commercial land use with other uses, particularly residential must be avoided, unless a positive result can be assured. The erosion of viable areas and loss of the very clientele which supports the commercial use is too often the end result of an improper relationship between the various uses. Proper site plan design, including adequate parking, access and egress, and buffering, will provide greater capabilities and long range vitality to the entire community.

(b) Industrial

The industrial element plays a dominant role in the economic growth of Flint's metropolitan area providing a major tax base for the City.

Flint's present industrial base is uniquely tied to automotive production and is subject to cyclical fluxuations typical of this industry. One of the major problems

is the negative impact of sagging automotive sales coupled with future energy shortages. A stable and balanced economic base must be provided in conjunction with compatible industrial land use. A diversity of industry coupled with an adequate supply of suitable and properly located industrial sites, is required in order to convince existing industry to continue to operate and expand and new industry to locate within the city.

There are presently 1296 acres of land devoted to an industrial use with an additional 410 acres zoned industrial and available for development. This includes about 225 acres within two newly developed industrial parks, St. John and Bishop Airpark (Illustration 8).

The current location of Flint's industrial corridors is basically that indicated in the 1960 Master Plan, including the addition of St. John area as recommended in the plan. Significant industrial expansion has not occurred since adoption of the plan however, partly because of the problems of the automotive industry, lack of market potential and high labor-related costs. Providing economic incentives and attractively packaged sites for industrial development may help offset this problem. The St. John Industrial Park and Bishop Airpark are good examples of Class A parks[2] being provided as incentives for industrial developments.

A review of many of the prime industrial facilities indicates many potential or existing conflicts with surrounding uses. The most serious problems occur with residential incompatibility, either through industrial encroachment or lack of proper controls regulating both industrial and residential development. Many of these problems were created earlier in Flint's history, as a result of tremendous growth over a short period of time (i.e. poor residential and industrial site plans, residential development too close and without proper buffering from other existing land uses, lack of pollution and general environmental controls, inadequate circulation, parking, aesthetics, etc.). There is still, however, inadequate consideration given to these facilities. Only through the development and encouragement of uniform design criteria and site plan controls, both with reuse, new development and expansion, will these problems be reduced.

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[2]Certified by the Director of the Michigan Department of Commerce as meeting site and service requirements for industrial parks. Class A denotes highest certification.

(c) Community Facilities

Community facilities, such as private and public educational institutions, fire and police protection agencies, and social and cultural facilities are essential to the viability of all communities. They provide those needed services which add immeasurably to the quality of urban life.

[3]As cities expand and change, the demand for certain types of services increase and change, as living standards and expectations do. Traditional methods may become outmoded and demand updated technological systems. Service demands, such as education and health, increase as the clientele become more educated and expect more sophisticated approaches. With the increasing demands for more advanced techniques and systems, greater demand is also placed on the public planning service agency.

Three basic factors are essential in the planning of community facilities: (1) finance, (2) coordination, and (3) planning. Each is essential in order to construct new facilities or systems that will provide the best service within specified budgets, and to create an environment that is suitable to the user and compatible with the surrounding land.

The major emphasis on community facilities in the Master Plan is placed on assessments of physical plants and surrounding uses, as well as consideration of community needs.

The developed land devoted to this use comprises approximately 943 acres or 5% of total developed land and is divided into several basic classifications: (1) Education - primary, secondary and post-secondary; (2) Child Care Facilities; (3) Cultural Facilities; (4) Health; (5) Welfare (fire and police).

All of these provide specialized services to the community at various levels of activity and by a variety of public and quasi-public agencies. Due to the variation and complexity of these service oriented agencies, the need for involvement and coordination in the development of their plans within the context of overall community goals becomes a vital concern.

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[3]International City Manager's Association Principles and Practice of of Urban Planning.

- o A balanced recreational system that provides for a wide spcectrum of recreational activities.
- o Protect and conserve the existing natural environment and resources.
- o Provide the basis for effective economic development and quality of the urban environment.

1. Human Needs

[4]The need for open space has been justified over the years on the basis of health. Allowing enough sun, fresh air and open space is a necessity for the physical and psychological well being of every individual. Only recently has research been initiated on the important role open space plays in providing a complete viable environment. Properly planned open space can not only provide the physical amenities such as clean air, sun, water, etc., but can bring people of diversified background together in pleasant surroundings. It will also provide the necessary buffer device between indifferent land uses. More research into this area will create a more effective tool for predicting "human space" needs.

Although Flint fares quite well in the quality and quantity of recreation it provides, and the amount of available land devoted to this use, it is only beginning to use open space as an effective tool for creating a better overall environment.

2. Protection & Conservation

During the last decade we have slowly begun to realize the value of our natural resources such as air, water, trees, and wildlife. Once these are abused, the resulting damage is often irreversible. This abuse has cost us enormously in terms of dollars, and although difficult to measure the cost in terms of social discord is probably even greater.

With man's needs and technology constantly expanding the drain on these resources is becoming tremendous. We must learn through the use of proper controlling mechanisms (i.e. land use controls (zoning) environmental assessments, water management,

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[4]International City Manager's Association Principals and Practice of Urban Planning.

## D. Urban Renewal

### 1. Intent

Urban renewal is a term used to described a variety of activities that are based on federal legislation enacted over the past three decades. The first of these acts, the 1949 Housing Act, provides for the clearance of slum areas and for their redevelopment as housing, a process then known as "urban redevelopment". This act expanded the principle of eminent domain[5] to allow cities to acquire blighted areas, for sale or lease to private developers, for residential redevelopment. Federal subsidies were provided for property acqusition, and cities were allowed to write down the cost of land to attract private developers.

The 1954 Housing Act broadened the concept into what became known as "urban renewal", to include emphasis on conservation and rehabilitation of neighborhoods. The act encouraged communities to undertake long range programs for prevention of urban blight, and expanded the renewal concept to include non-residential projects. Later legislation in the 1950's and 1960's added innovations to the basic program, such as General Neighborhood Renewal Plans and the Neighborhood Development Program; this additional legislation further tended to broaden the approach from clearance and redevelopment of blighted areas to community wide concepts.

Under the Housing and Community Development Act of 1974, funding for most of the programs was replaced by the "block grant" approach, whereby communities apply for funds for a total program instead of assistance for specific projects. This approach allows local determination of spending of federal grant funds, with the requirement that local governments adhere to national goals.

### 2. History

Urban renewal began in Flint in the early 1960's. One of the items recommended by the 1960 Master Plan was that priority attention be given to developing a community renewal program and specific renewal plans. In 1963, the city received funds to plan the General Neighborhod Renewal Project, which included downtown and the surrounding area (Illustration 9). Out of this general area, the first project, Central Park, was planned and had federal funding approved in 1965. Central Park is primarily a rehabilitation project and was chosen because of the large amount of public improvements in the area

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[5]The right of government to acquire private property for public use.

that could be used to cover the city's share of the total project cost. Other parts of the city were recognized as needing renewal action, particularly the St. John area, which was identified in the 1960 Master Plan as the first priority for clearance and redevelopment. However, difficulties with providing the necessary local share of the cost of these projects delayed action.

By 1972 the city had adopted plans for 7 projects, and had begun activity in each of the areas (Illustration 10). An eighth plan, Martin-Jefferson, was never approved for federal funding although declared a blighted area under the States statute. Doyle, once a part of Oak Park, received federal approval in 1973. This project was funded under conventional urban renewal legislation, which meant that its source of funds was separate from that of other renewal areas. Activity in all areas except St. John virtually stopped in 1973 when a decision was made to concentrate funds toward completion of the St. John project.

With completion of clearance in St. John in 1974, the city has shifted emphasis in spending federal funds away from clearance activities toward neighborhood preservation programs. Some clearance has continued in Oak Park and projects funded by sources separate from block grant money have proceeded in the various renewal areas, such as the River Beautification and Flood Control projects.

3. Overview

The program is generally concentrated on the oldest sections of the city. Most of the area comprising the General Neighborhood Renewal Plan, which includes 5 renewal projects, was platted and developed before 1900.

The entire program including Martin-Jefferson which was never funded, covers nearly 3000 acres, or 14%, of total city area. The 1970 population of these areas was nearly 35,000. Plans for the projects, excluding Martin-Jefferson, identified over 1300 substandard structures, about 700 of which have been cleared, mostly in the St. John area. Rehabilitation of commercial and residential structures has occurred to some extent in all funded areas except St. John; the most visible results of residential rehabilitation can be seen in the Central Park and Interchange projects.

According to a 1974 study,[6] urban renewal has had the following impact on Flint:

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[6]Real Estate Research Corp. Urban Renewal Land Disposition Study Flint, Michigan Prepared for U.S. Department of Housing & Urban Development.

- The most widespread positive impact of urban renewal in Flint has been the clearance of dilapidated structures and the relocation of families and individuals to sound structures.

- The high relocation benefits paid to homeowners have tended to accelerate the trend to suburbanization in Flint and thus have contributed to overall central-city decline.

- Urban renewal has failed to generate any major new developments in Flint. In the major developments that are proposed, renewal plays a secondary role, but has been one of the incentives available to encourage the projects.

- Rehabilitation and other renewal activities have reversed the trend toward decline in several neighborhoods.

The study also stated:

> The renewal process has been to include as many neighborhoods showing a need and having orgainzed support and to disregard any strategy focusing on a much smaller scale program that would be manageable. The philosophy of giving a little something to everyone prevails in Flint, and the result is that the expectations of many persons are raised. However, accomplishments have been few due to the scale of the program and the necessary dispersal of resources.

4. Plan Highlights

Central Park: The general objective of this plan is to conserve Central Park as a residential area. Major clearance that has occurred has been for the freeway and in the area south of Court St. Considerable residential rehabilitation and project improvements have been accomplished, and the Central Park is the project closest to completion in terms of meeting plan objectives.

Central Business District: Among the original objectives of the CBD plan were the creation of a Saginaw St. Mall, River Beautification, removal of railroad tracks downtown and the removal of blighted structures. Although parts of the plan have been implemented, changing conditions caused primarily by the relocation of the University of Michigan to the downtown area have made the plan obsolete.

Interchange: This project is physically dominated by the I-69/I-475 Interchange. A major objective in planning this area was to minimize the effects of freeway construction.

unrealistic. Confusion as to when plan changes are required, and the lengthy process of notification, public hearings and official action has made plan changes difficult, even when they are obviously in order. The plans are written to be in effect from 20 to 30 years after adoption; keeping an area under such restrictions when there has been little or no action taken on the project, is more likely to promote blight than to prevent it.

## E. Pereira University Impact Study

A major planning document, "The University Impact Study" was commissioned after the decision was reached to relocate the University of Michigan-Flint Campus downtown. The purpose of the study was to determine the impact of the Unversity on the central city: the impact area defined by the study covers the central business district and surrounding areas (Illustration 11).

This impact study identified the University as a means of promoting renewal of the downtown, in conjunction with other projects planned for the area, such as Doyle, River Beautification and I-475. In line with this, the study's basic proposal is a total approach to downtown redevelopment known as Michigan Center: this concept links the University with surrounding plans and proposes additional features to create a continuous development area from the Doyle Project north of the river south to the city-county complex (Illustration 12).

Included in the study are land use and transportation plans for the impact area, which are discussed in the following sections along with the goals and objectives of the study.

### 1. Goals and Objectives

Goals of the impact study relate to transportation, physical environment, economic development, education and social development. The goals are of a general nature and are reflected in the objectives as discussed below.

#### Transportation

In addition to a basic modification of the downtown circulation system, transportation objectives call for locating a comprehensive transportation center near the central city (a proposal defeated by MTA's move to Dort Highway) and improved parking facilities, including remote parking areas served by a downtown transit system.

#### Physical Environment

Objectives recommend using River Beautification as a major theme for downtown. Also, various types of small




MICHIGAN CENTER

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# PEREIRA LAND USE PLAN

- Commercial Core
- Service Commercial
- Neighborhood Commercial
- Parking
- Public / Semi-public
- Residential
- Industrial

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## F. Incompatible Land Uses

A consistent problem throughout much of the analysis accomplished to date is that of incompatible land uses.

The term "incompatible" is defined by Webster as "incapable of existing side by side[7]." Incompatible land uses may therefore be defined as uses which, due to their nature or function, are incapable of existing side by side, in a harmonious manner.

### Effects

There are several problems that occur as a result of incompatible land uses arrangements: Each in itself can be serious, and when combined can be disastrous by causing neighborhood decay.

1. Blighting Effects -

No piece of land exists as an island sufficient into itself; the use of any particular parcel of land will affect the surrounding parcels. Therefore, incompatible uses will result in neighborhood blight.

- Traffic Impact - certain uses, such as commercial or industrial, generate more concentrated traffic patterns. This problem is compounded if adequate ingress and egress is not provided for each site, or if provision is not made to improve streets to handle increased traffic.

- Traffic Spill Over - if the site or major street is not able to accomodate automobile traffic, vehicles are forced into the adjacent local streets and residential areas. Examples of this problem are evident in almost all neighborhoods.

- Visual Pollution - poorly planned uses often generate debris, litter, dissonant flashing signs and bright lights. They display a general disregard for site aesthetics, such as landscpaing, harmony with neighboring sites, etc.

- Environmental Pollution - There are some controls on pollution, but not enough. Unplanned and uncontrolled uses of land are still causing the pollution of air and water, increased noise levels, soil erosion, and the destruction of vegetation and wildlife.

- Crime - incompatible land uses cannot be considered to be the cause of crime, however areas containing congested traffic, blighted residences, and visual and environmental

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[7]Webster's Dictionary

1. Unplanned Land Uses

Land use planning and controls have a fairly recent history in Flint, and much of the city was developed without benefit of a comprehensive plan. This has led to a number of incompatible land use arrangements, especially in older areas of the city. The problem of arrangement is compounded in many cases by inadequate streets, lot sizes and utilities.

2. Zoning Variances

Incompatible land use arrangements can also be caused by granting of variances to the zoning ordinance (especially use variances), which allow uses otherwise prohibited by the ordinance. This practice has led to land use problems by legitimizing uses in districts where they would normally be considered inappropriate. Variances of all kinds are now the responsibility of the Zoning Board of Appeals; State Enabling Legislation now under consideration would redefine procedures and restrict the granting of use variances at the local level.

3. Nonconforming Uses

Certain land uses which do not conform to the terms of present zoning ordinances, but which were in existence at the time of adoption of the ordinance, have a legal right to remain. These are often incompatible with the surrounding area. The present zoning ordinance makes no provision for removal of nonconforming uses. State Enabling Legislation now allows cities to eliminate these through condemnation procedures, and consideration is being given to allow for amortization (elimination after a period of time) of these uses as well.

4. Enforcement

Inadequate enforcement of city codes and ordinances can promote incompatible land use by allowing code violations or illegal uses to continue. An effective enforcement program depends on support of the public and the courts, and an adequate and efficient city staff.

5. Neighborhood Instability

Zoning changes and variances are more likely to be granted in parts of the city that are blighted, since almost any change in these areas is considered positive. This has the effect of introducing incompatible uses, which may eventually result in further deterioration of the surrounding area.

Enforcement of Flint's zoning ordinance is charged to the building inspector. Amendments, supplements or district boundary changes are effectuated by action of the City Council, after recommendation by the Planning Commission. The Zoning Board of Appeals is empowered to grant conditional use permits and special exceptions and variances, subject to restrictions of the ordinance.

Variances are exceptions to the ordinance which are granted when its literal enforcement would cause practical difficulty or unnecessary hardship. The Zoning Board of Appeals is empowered to grant relief in such cases: This is a necessary administrative practice that covers special situations that cannot be written into the ordinance without making it unduly complicated. However, the Board must exercise sound judgement in its actions, since any exception weakens the ordinance. This is especially true in the granting of "use" variances, that is, variances authorizing property to be used for purposes prohibited by the zoning ordinance. The granting of a large number of "use" variances seriously impairs the integrity of the zoning ordinance by introducing activities into areas where they are prohibited by the ordinance.

Enforcement practices and official policy toward adopting amendments to the zoning map are also important in maintaining public confidence in zoning. These practices and policies must be fair and consistent, reflecting the public interest.

Rezoning

Rezoning is a change or amendment in the existing zoning ordinance. It may occur for one of three reasons: 1. A comprehensive revision or modification of the zoning text and maps. (i.e. changes as a result of a new or revised master plan.) 2. A text change in zoning requirements. (i.e. changing the definition of a duplex allowing them under multi-family or single family use.) 3. A change in maps (i.e. changing a parcel of land from one zoning classification to another).

Rezoning is the legal mechanism for change. Reasons for change must be carefully considered however, since frequency or inconsistency might not be consonant with over-all community goals. Original zoning requirements may not contain the flexibility needed to adapt to physical, political or economic change. In a case like this the intent of the adopted ordinance is not being carried out to the benefit of the entire community. Changes should be made with the intention of implementing the original intent of the zoning ordinance - rather than subverting it.

As indicated in Illustration 14 and 15, 83 zoning requests were intiated between 1972 and 1977. 56 were granted and 27 denied. Many of these requests merely reflect a change from existing zoning to a new zoning classification, in compliance with the proposed master plan. Others, however may be in conflict with the intent of the proposed land use plan.

## ZONING CHANGES

| | Approved | Denied | Total |
|---|---|---|---|
| 1972 | 16 | 7 | 23 |
| 1973 | 12 | 8 | 20 |
| 1974 | 8 | 6 | 14 |
| 1975 | 12 | 5 | 17 |
| 1976 | 8 | 1 | 9 |
| Total | 56 | 27 | 83 |

## CONDITIONAL USE PERMITS

| | Approved | Denied | Total |
|---|---|---|---|
| 1972 | 9 | 3 | 12 |
| 1973 | 9 | 1 | 10 |
| 1974 | 14 | 2 | 16 |
| 1975 | 8 | 0 | 8 |
| 1976 | 11 | 2 | 13 |
| Total | 51 | 8 | 59 |

## USE VARIANCES

| | Approved | Denied | Total |
|---|---|---|---|
| 1972 | 34 | 6 | 40 |
| 1973 | 24 | 8 | 32 |
| 1974 | 27 | 10 | 37 |
| 1975 | 20 | 4 | 24 |
| 1976 | 23 | 9 | 32 |
| Total | 128 | 37 | 165 |

## Review of Zoning Ordinance

The zoning ordinance of the City of Flint was adopted in 1968. There have been amendments to the ordinance, however, none have been of a major or sweeping nature. There are five residential categories, six commercial categories and three industrial categories. The zoning ordinance is basically a pyramidal ordinance, that being that the uses allowed in any more restrictive zone are allowed in the following less restrictive zone. As an example, single family residences, first allowed in the most restrictive district "A-1", would be allowed in all the other less restrictive districts up to "D-6". A "D-6" use, such as truck sales, conversely would not be allowed in any zoning category from "A-1" to "D-5", which are more restrictive. The ordinance is presently worded in such a way that it says all of the uses in the previous district plus the following. It might be easier and make the ordinance more workable if all of the uses were listed in each section.

## The Residential Zoning Categories

The residential section is blanketed throughout the city. It does not take into account neighborhood differences. There are a large number of dwelling units in the city that do not meet the minimum standards of the present zoning ordinance. It is also impossible to meet the density potential of the ordinance with the minimum lot size requirements as they are presently outlined in the ordinance. The number of dwelling units for a given amount of area should be retained in the zoning ordinance. The minimum lot size provision should be subjected to some review. The ordinance may want to consider, in the residential district, a doubling of density with each change in residential district. Simply in the "A-1" Single Family Residential District, a 10,000 sq.ft. of lot area for each dwelling unit would be required. In the "A-2" district, 5,000 sq.ft. of lot per each dwelling unit; in the "B" district, 2,500 lot area per dwelling unit; in the "C-1", 1,250 for each dwelling unit and in the "C-2", 600 sq.ft. of lot area for each dwelling unit.

Moblie homes are only allowed in the "D-6" General and Highway Commercial District. This is our least restrictive commercial district. Other types of commercial activities allowed in the "D-6" district often have an adverse effect on mobile home parks and the esthetic appeal of mobile home parks. Since mobile homes are a legitimate type of dwelling unit, the ordinance should review the mobile home provisions and perhaps put them in a district where the other land uses will not have an adverse affect on them. Buffering requirements between all types of residential land uses and all other land uses should be strengthened. Institutional uses in the residential district need to be reevaluated, if additional conditions need to be attached. All conditional uses need to be reviewed, especially the minimum requirements to approve a conditional use permit.

## The Commercial Zoning Categories

One of the main problems with the commercial zones in the present zoning ordinance, is where they adjoin a residential district and want to

## VI. RECOMMENDATIONS

A. Exercise conservative policy toward zoning changes and variances. Establish official policy of granting zoning changes only when consistent with the goals and objectives of the adopted Master Plan. Develop a manual which interprets zoning and Master Plan policy, to serve as working guidelines to assist public officials in decision making.

B. Reinforce ties between land use and transportation planning. City Planning should stay in contact with the Traffic Engineering Division, the Michigan Department of State Highways and Transportation and County and Regional Planning in order to represent city land use concerns in transportation issues. Upon completion of the transportation element, the Master Plan should be revised to incorporate its policies and recommendations.

C. Support of neighborhood preservation, including activities of Neighborhood Improvement and Preservation Project Incorporation. Encourage this body to coordinate its program with the Master Plan. Identify measures to provide land use support of the program, including strict control of zoning changes and variances and possible rezoning.

D. Establish a land use coordinating committee composed of the City of Flint, University of Michigan-Flint, Mott Community College, Flint Board of Education and other major public and institutional concerns. This should be done to promote cooperation between these bodies, and should be initiated by the Chief Planning Officer upon approval of the Mayor.

E. Allocate capital improvement funds consistent with needs and priorities, and establish a program to monitor the effects of capital improvement spending (see Appendix for proposed systems). A complete description of the systems as they relate to neighborhood preservation can be found in the section of the Housing Element.

F. Revise land use plans for urban renewal areas to meet objectives of the Master Plan. Assess progress toward objectives of these plans and feasibility of continued activity in these areas. Coordinate revised plans with city-wide plans and related programs.

G. Large scale demolition should not be considered unless coordinated with a practical reuse plan including at a minimum: financial feasibility, funding source, and short and long range implications on the Master Plan.

H. Adopt policy of promoting cluster development of commercial activity and control of strip developments. This should include appropriate revisions to ordinances controlling signs, buffering, parking and landscaping, as well as adequate code enforcement and possible rezoning.

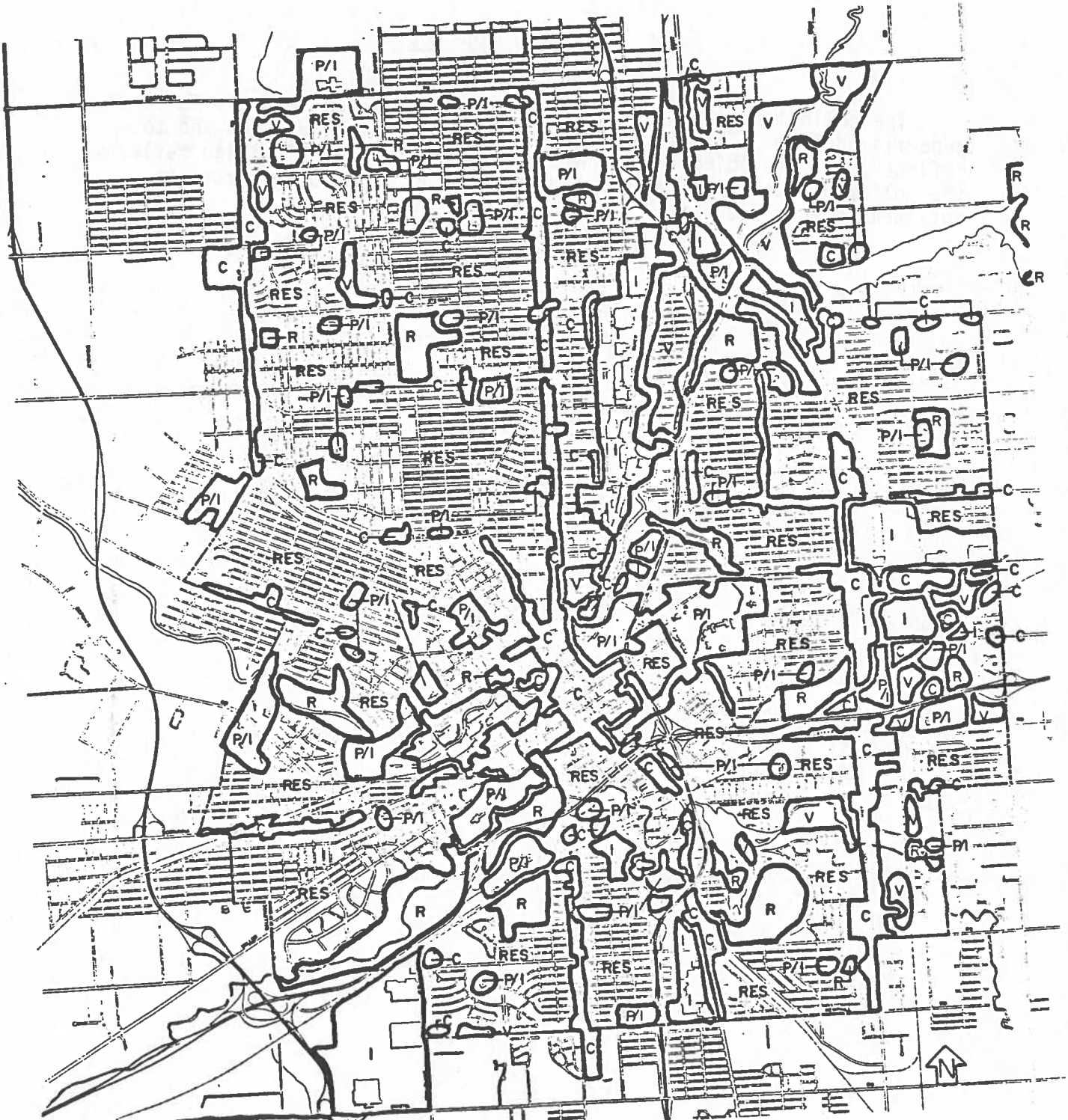
## Proposed Studies

1. Examine the extent of erosion of the zoning ordinance by rezoning and variances. Identify specific problems and their effects on surrounding land use.

2. Survey incompatible land use relationships to determine which can be controlled and alleviated by land use regulations.

3. Review existing measures for controlling industrial, commercial and institutional expansion to determine if improved or additional controls can be implemented.

4. Develop freeway corridor studies to determine appropriate land use and zoning for these areas. Studies should include sign and environmental controls, as well as means of preventing overzoning for commercial purposes.




## EXISTING LAND USE

RES-RESIDENTIAL
V-VACANT
P/I-PUBLIC-INSTITUTIONAL
I-INDUSTRIAL
C-COMMERCIAL
R-RECREATIONAL

THE PREPARATION OF THIS REPORT WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; CPA-MI-05-28-0386.

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# 2

# RESIDENTIAL

PREPARED BY THE DEPARTMENT OF COMMUNITY DEVELOPMENT, CITY OF FLINT, MICHIGAN

THE PREPARATION OF THIS REPORT WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; CPA-MI-05-28-0386.

# ABSTRACT

| | |
|---|---|
| TITLE: | RESIDENTIAL ELEMENT |
| PREPARED BY: | CITY OF FLINT, DEPARTMENT OF COMMUNITY DEVELOPMENT, DIVISION OF PLANNING AND PROGRAM DEVELOPMENT |
| SUBJECT: | HOUSING IN FLINT, MICHIGAN |
| DATE: | NOVEMBER, 1978 |
| NUMBER OF PAGES: | 100 |
| ABSTRACT: | THE PURPOSE OF THE RESIDENTIAL ELEMENT OF THE CITY OF FLINT'S COMPREHENSIVE MASTER PLAN IS TO DETERMINE THE COMPOSITION OF HOUSING STOCK AND RESIDENTIAL NEIGHBORHOODS WITHIN THE CITY OF FLINT, TO ANALYZE PRESENT AND FUTURE HOUSING NEEDS AND DEMANDS, AND THEN TO SET FORTH GOALS AND OBJECTIVES TO BE CARRIED OUT THROUGH A SERIES OF POLICIES AND RECOMMENDATIONS FOR CITY ACTION. EMPHASIS IS PLACED ON FINDING SOLUTIONS TO HOUSING PROBLEMS THROUGH MORE EFFICIENT AND EFFECTIVE PROVISION OF URBAN SERVICES, THROUGH THE CITY'S ROLE AS A COMMUNITY DEVELOPMENT AGENCY, AND THROUGH REFINING PUBLIC-PRIVATE STRATEGIES. |

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# SUMMARY

The purpose of the residential element of the comprehensive master plan is to set the general housing policy of the City under which decisions about specific residential areas and development proposals can be made. In arriving at those policies, the existing composition of housing and the present and future needs of the City have been considered. These considerations are presented in the introductory sections. In developing the analysis and final policies, the following long-term goals and short-term objectives are recommended:

## Goals and Objectives

I. Preserve and enhance the stock of decent, safe, structurally sound housing within the City of Flint.

Objectives:

A. Establish a housing data base so that housing-related policy and program decisions can be based on the most complete and recent factual information available.

B. Continue and expand support of housing rehabilitation programs as a primary means of fulfilling the requirements of the federally-mandated Housing Assistance Plan and enhancing the City's existing housing assets.

C. Establish and fund a City-wide residential code enforcement schedule in which each dwelling unit is inspected for code violations at least once every five to seven years.

D. Provide for efficient identification and removal of housing units that cannot be effectively rehabilitated and that represent a blighting influence on surrounding property.

E. Encourage private group and individual efforts in the field of housing maintenance through educational efforts and the matching of private with public dollars.

F. Prohibit by ordinance the destruction of any structure with official historical designation, as outlined in the historical preservation element.

II. Preserve the integrity and enhance the livability of residential neighborhoods within the City of Flint.

Objectives:

A. Encourage the formation of citizen action groups in order to increase individual involvement and especially homeowner involvement, in neighborhood problem resolution and constructive neighborhood-oriented activity.

B. Protect residential neighborhoods from non-residential encroachment through increased enforcement of zoning, provisions for increased buffering between residential and other uses and encouragement of private investment elsewhere in the City.

C. Encourage homeownership and decrease the number of units held by absentee owners wherever possible in existing low density neighborhoods.

III. Provide adequate City services to all residential neighborhoods and dwelling units.

Objectives:

A. Adopt the Responsive Municipal Services Program to measure present City service levels by neighborhood or census tracts.

B. Establish a procedure of allocating City resources on the basis of need. All residential areas of the City should be provided with adequate general services with remaining resources going to programs and areas with the greatest need, on a proportional basis.

C. Improve the City's capital budgeting and programming procedures to incorporate City-wide community development as well as expenditure measures, and input from individual citizens and neighborhood groups.

IV. Provide for increase in population and residential development in selected areas.

Objectives:

A. Promote the development of medium and high density apartments in suitable locations.

B. Allow conversions of larger single family structures on a very limited basis, in accordance with neighborhood standards and with strict code enforcement.

C. Promote high density housing in the downtown area through the provision of various investment incentives to private developers.

V. Alleviate racial/low income impaction and promote economic diversity in housing.

Objective;

A. Encourage formulation and adoption of a regional "fair share" housing plan through cooperation with other units of government in Genesee, Lapeer and Shiawassee Counties.

B. Encourage the development of private housing to ensure a supply to all segments of the housing market, especially to those segments where housing supply is lacking.

C. Continue present and future housing subsidy programs, which provide assistance to low and moderate income households, to the extent of the need indicated in an annual Housing Assistance Plan.

D. Continue efforts to promote open access to housing opportunity through fair housing program and ordinance enforcement. Promote private efforts to alleviate discriminatory attitudes and/or practices.

XI. Promote energy efficiency and alternative energy source utilization in residential areas.

Objectives:

A. Provide requirements for energy efficient construction practices on all new construction including appropriate site utilization standards.

B. Promote utilization of solar energy wherever possible by providing for "sun rights" in City codes.

C. Encourage energy conservation in existing residential structures, through either assistance or incentive programs to homeowners.

## Housing Market

A brief housing market profile notes that Flint contains not only the majority of older, less desirable housing in the market area (Genesee County), but a disproportionate share of low income households. This combination leads to the perpetuation of Flint's housing problems, especially problems associated with households unable to afford the rental or purchase and maintenance of a suitable housing unit.

## Housing Characteristics

Of over 60,000 housing units in the City of Flint, 75% are single family homes with most owned or being purchased. Five percent of all dwelling units are publicly subsidized. About 50% of Flint's housing was built before the Second World War, with construction tapering off to a near standstill in the 1970's. Housing maintenance, with some exceptions on the periphery of the City has been declining in recent years, and more rapidly among rental than among owner-occupied units. Median assessed valuations for housing units in Flint are lower than those for the State of Michigan as a whole.

## Equal Opportunity in Housing

While the City of Flint has an Open Occupancy Ordinance, residential segretation, to the extent that it exists in Flint, seems to be due more to economic than to racial factors. Housing for some segments of market, notably upper income, is in extremely short supply forcing those buyers to other areas. Overall loss of population, combined with a shift in racial composition of the population since 1970, has effected patterns of racial concentration in different parts of the City. A regional "fair share" housing plan is suggested.

## Existing Housing Needs

Although some types of housing are in short supply, there is no "general" need for substantial new construction. There is, however, a need to alleviate housing problems caused by substandard structures, overcrowding, and dwellings priced beyond the means of low-income households. In general, housing problems are largely limited to low-income households and areas. Further, among low income households, housing problems are concentrated among those with female heads. Black households also make up a larger proportion of those with needs than their numbers among the general population would dictate.

Substandard housing and excessive cost appear to be the most frequent problems and are more frequent among renters than owners. Overcrowding is a much less serious problem, in terms of numbers, but occurs more frequently among owners than renters. Overall, about 25% of all Flint households have one or more housing problems.

## Future Housing Needs

Based on projections of population and housing supply, housing need by household type is projected on a yearly basis through 1980. Based on

migration patterns, the proportion of Black households is expected to increase from 45% to 54% of all households in need. Female-headed households will increase numerically through 1980, but decrease as a proportion of all households in need. Total need for low-income households will increase by 20-25%, despite a decline in the total City population.

Existing and Future Housing Demand

If demand as a concept is limited to new construction, future housing demand within the City of Flint may be restricted to urban-type apartment units for upper- and middle-class households and "starter" homes for small households.

Housing and Residential Policies

In the final section of the residential element, a number of policies regarding housing issues are presented. These policies, when adopted, will serve as the guide or framework for decisions on housing matters. In brief, they are:

1. It shall be the policy of the City to preserve and enhance the existing housing stock and to safeguard the neighborhoods from undesirable effects and conditions. The City will act to support and promote rehabilitation in viable residential areas and the formation of neighborhood organizations toward these ends. The City shall take no action which will result in physical impaction, social or racial segregation, or which will adversely affect the residential character of an existing viable neighborhood.

2. It shall be the policy of the City to annually assess the housing needs and problems of the residents and to allocate the resources of the City on a priority of need -- the largest proportion of available resources being committed to areas where need is greatest.

3. It shall be the policy of the City to provide for and promote an increased resident population by encouraging the private development of higher density housing structures whenever feasible and in line with neighborhood standards, with special emphasis on the downtown. Whenever possible, stress will be placed on increasing the number of housing units of types in shortest supply on the market.

4. It shall be the policy of the City to promote equality of access to housing opportunities to all residents regardless of race, sex, age, creed or national origin, and to ensure against discriminatory practices through strict enforcement of City ordinances and appropriate laws. The City will take no action, nor permit action to be taken by others, which conflicts with this policy or in any way interferes with a citizens right to safe, sound and decent housing of their choice.

5. It shall be the policy of the City to participate in programs of the Federal or State governments providing construction of subsidy of housing for the elderly, handicapped and low to moderate income families to the full extent that a need for such housing is substantiated, and limited only by the availability of financial and other resources for this purpose.

6. It shall be the policy of the City to require annual inspections of multi-unit residential structures and regular inspection of all residential structures. The City shall strictly enforce the codes and regulations in all residential areas and will act expeditiously to condemn and remove any obsolete and blighting structures from viable neighborhoods.

# I. INTRODUCTION

## Housing in Flint

In the past, residential areas in Flint have been constructed in response to a variety of needs and demands. Before the automobile became commonplace, before massive Federal and State highway expenditure was initiated, the most important need in residential location was proximity to work. From the farmer living on the land he worked, to the shopkeeper living above or behind his store, to the factory worker living in a house a few blocks away from his job, all except the very well-off lived within walking or public transit distance of work. Most residents were not in an economic position to demand much more than a small amount of living space. Amenities such as a back yard, or an extra bedroom were economically infeasible for nearly all households.

Another type of demand, the demand for profit maximization on the part of land investors and home builders, was and still is an important factor in construction of housing. In less complicated times, this meant a minimal initial investment in land, public improvements (if any) and structures. Supply of most residential structures was geared solely to meet demand based on affordability for home owners and a second layer of profit maximization for investor-owners who rented or leased their properties. Market studies and advanced planning were limited to individual entreprenuers' guesses as to who might buy and at what price. There were few reasons to think about the future disposition of land and structures. Abundant resources and vacant land for new beginnings rendered unused potential and previous mistakes as negligible losses.

But conditions changed. Supply and demand of housing became more complex as various levels of government took on responsibility for safeguarding the public "health, safety and welfare" through initiation of building and sanitation codes, and residential area public works projects such as street paving, sidewalk placement, and street lighting. Housing construction required more money "up front" to accommodate these new demands. Methods and materials changed. Trade unions formed.

Consumer demands changed with rising incomes, rising expectations, and especially following World War II, increased mobility. Combined with greater awareness of possible living environments, these changing demands led to the development of suburban areas, the promotion of a wide variety of housing types, and new approaches to housing finance.

Today, conditions are changing again. Demands for consumer protection in housing construction, tenant rights, and protection or enhancement of overall environmental quality, reflect a recognition of the value of quality materials and workmanship, the right of individuals to decent shelter and, most of all, a limit on the use of natural resources.

The "energy crisis" and related environmental concerns have had an impact on at least two important housing variables. The costs of non-

renewable, resource-based fuels, costs which are reflected both in building materials and in fuel used in heating and cooling homes, are forcing some basic changes in the way housing units are built, priced, sold, and maintained. The increasing costs of fossil fuels also must be balanced by the benefits of commuting back and forth from work in or near a city to a house in the suburbs. At this point it is impossible to foresee exactly what future impacts energy availability, pricing, and regulation will have on housing in the Flint market area. Because the economic base of the area is so closely related to automobile production, energy issues effect both supply and economic demand for housing.

Perhaps even more important nationally and locally than environmental-energy concerns is the political question of whether older urbanized areas can remain viable living environments. The City of Flint believes that one of the keys to the revitalization of the City is the provision of ample decent and safe housing in pleasant neighborhoods with adequate levels of public services. While the comparative nature of housing needs has changed due to changing economic conditions and technology, the basic requirement of a decent home and living environment for each household has not. The purpose of this residential element of the comprehensive master plan is to examine housing problems and priorities in light of what the City of Flint can do to ensure the meeting of basic housing requirements for all residents.

Role of the Federal Government

Federal government interest in housing concerns is not new. Federal mortgage programs and investment in the Federal interstate highway system, which opened many new areas to home development, are outstanding examples of Federal influence upon who may buy a home and where they may buy it. However, these two programs were intended, respectively, to directly benefit individual home buyers (especially veterans), and to facilitate interstate travel. Neither was specifically designed to institute a comprehensive national housing policy.

In the activist 1960's, the recognition of serious urban, and especially urban housing, problems led to the formulation of the Department of Housing and Urban Development (HUD) in the Executive branch and introduction of housing problem-oriented legislation in Congress.

One of the latest major pieces of legislation dealing with housing is the Housing and Community Development Act of 1974, PL 93-383, which reiterates a long-standing Federal goal: "...to provide a decent home and a suitable living environment for all persons," and adds to that phrase "but principally those of low and moderate income." The Act states that this may be done through the development of a comprehensive plan, of which this residential element is a part. There is presently recognition on the Federal level that alleviation of housing problems created by years of neglect and by unrestrained, and sometimes imprudent, development will take more years of concentrated effort. Comprehensive planning is the first step.

## Physical Shelter v. Home and Living Environment

In Flint, there are few persons who have no shelter at all or who are only sheltered insofar as basic protection from the elements. There are, however, many more persons who are inadequately housed due to substandard housing, e.g., dangerous structural defects or overcrowding, and even more whose housing needs at least one major repair, such as repair of a leaking roof or replacement of plumbing fixtures.

Many persons, while not living in a home in need of major repairs, would rather live in a different type of housing or in a different location. Their choices may be limited by income, by racial discrimination, or by low supplies of desirable types of housing.

Echoing Federal goals, the Charter of the City of Flint states, "City officers shall pledge themselves to assure residents decent housing..." Above and beyond simple physical shelter, a decent home and living environment in urban areas such as Flint may be defined, at minimum, by the following characteristics, which parallel the "minimum property standards" used in City of Flint code enforcement activities:

1. Adequate physical space in which to conduct day-to day activities such as sleeping, preparing and eating food, carrying out personal hygiene, resting; adequate privacy.

2. Adequate, code-standard plumbing, electrical wiring, heating.

3. Freedom from health hazards, whether these be structural, sanitary, or induced by outside environmental sources.

4. Access to public improvements (streets, sidewalks, sewer systems, etc.), public facilities (parks, recreation areas, schools, etc.), and public services (police and fire protection, etc.).

5. Freedom of choice in housing.

This definition might be extended to include such factors as a suitable social environment in which to raise a family, an aesthetically pleasing environment, and access to cultural facilities. However, these characteristics are secondary to the five main points listed above. It is in the context of these five characteristics that the adequacy of housing supply for the present and future will be discussed on the following pages.

## Importance of Citizen Involvement

Flint is fortunate in having citizens who are aware of housing problems and who are involved in seeking solutions to those problems. Based in block clubs and civic organizations plus private individuals with interests in urban problems, citizen opinion on housing concerns has been actively articulated through participation in comprehensive

master planning workshops during 1976 and 1977 (described in other sections of the comprehensive master plan), through the Mayor's City-wide Advisory Committee on the Community Development Block Grant, and through the Mayor's Housing Rehabilitation Task Force.

Private groups such as the Northwest Area Improvement Association and the North Cook Neighborhood Improvement Association have helped to focus a previously diffuse demand for housing rehabilitation and neighborhood stabilization. The Flint-based Mott Foundation is interested in school councils for expenditure on neighborhood needs.

Any consideration of housing need in the City of Flint cannot fail to take into account facts and opinions already expressed by citizens. Implementation of housing plans must incorporate existing mechanisms and seek new means of citizen involvement.

Information Sources

In planning for residential areas, three sets of information are needed: 1) information about physical structures (How many, of what type? Where are they located? What condition are they in? How much are they worth?), 2) information about the population which is housed (What size are the households? How much can households afford to spend for housing?), and, 3) how physical structures are occupied, or the interaction between structures and population (What are the characteristics of housing need in Flint? Does demand exceed supply?). In addition, it is desirable to have information available through time in order to identify and judge past trends, to take stock of present realities and to plan for future housing needs.

Information on the physical condition of structures has been taken from two major sources, the decennial U.S. Census of Housing and a visual survey of all structures in Flint, performed each year by the Evidence for Community Health Organization (ECHO), a branch of the Genesee County Health Department. Population information, including statistics on owner-renter breakdowns and income, has also been taken from the Census, from an ECHO sample survey of Flint households, and from selected data collected by the R.L. Polk Company, pursuant to the production of its commercially-distributed city directories. The Polk information is helpful in determining out-and in-migration trends.

Information on present and future housing need, and on the supply and demand characteristics of the Flint housing market is somewhat difficult to obtain. Some conclusions can be made through statistics kept by realtors and newspapers concerning the listings and sales of real property. General trends can be traced through statistical comparisons with other urban areas and with the suburban areas of Genesee County. Changes in housing need can be inferred through comparing past population and housing statistics with the present numbers and with future population and household size projections.

## II. GOALS AND OBJECTIVES

I. Preserve and enhance the stock of decent, safe, structurally sound housing within the City of Flint.

Objectives:

A. Establish a housing data base so that housing-related policy and program decisions can be based on the most complete and recent factual information available.

B. Continue and expand support of housing rehabilitation programs as a primary means of fulfilling the requirements of the federally-mandated Housing Assistance Plan and enhancing the City's existing housing assets.

C. Establish and fund a City-wide residential code enforcement schedule in which each dwelling unit is inspected for code violations at least once every five to seven years.

D. Provide for efficient identification and removal of housing units that cannot be effectively rehabilitated and that represent a blighting influence on surrounding property.

E. Encourage private group and individual efforts in the field of housing maintenance through educational efforts and the matching of private with public dollars.

F. Prohibit by ordinance the destruction of any structure with official historical designation, as outlined in the historical preservation element.

II. Preserve the integrity and enhance the livability of residential neighborhoods within the City of Flint.

Objectives:

A. Encourage the formation of citizen action groups in order to increase individual involvement and especially homeowner involvement, in neighborhood problem resolution and constructive neighborhood-oriented activity.

B. Protect residential neighborhoods from non-residential encroachment through increased enforcement of zoning, provisions for increased buffering between residential and other uses and encouragement of private investment elsewhere in the City.

C. Encourage homeownership and decrease the number of units held by absentee owners wherever possible in existing low density neighborhoods.

D. Continue efforts to promote open access to housing opportunity through fair housing programs and ordinance enforcement. Promote private efforts to alleviate discriminatory attitudes and/or practices.

VI. Promote energy efficiency and alternative energy source utilization in residential areas.

Objectives:

A. Provide requirements for energy efficient construction practices on all new contruction including appropriate site utilization standards.

B. Promote utilization of solar energy wherever possible by providing for "sun rights" in City codes.

C. Encourage energy conservation in existing residential structures, through either assistance or incentive programs to homeowners.

## III. HOUSING MARKET

### Introduction

Prospective buyers and renters look for housing which both meets their space needs and is within what is determined to be their economic limits. While a great variety of social, psychological and economic factors determine choice of housing, the most important of these remain:

1) household size and composition
2) household income
3) availability of housing which falls within the constraints created by 1) and 2)

The following discussion will deal with City and metropolitan market conditions as the product of the above three factors, and will consider other, less quantifiable factors in a series of brief market scenarios illustrating possible housing choices of hypothetical Flint area households. Numerical supply-demand relationships and need determinant criteria and calculations are presented in subsequent sections.

### Household Size and Household Income

Household size is an important factor in selection of housing. In the 1970's, in the United States, most families of four, given a choice, would prefer a private, multiple-bedroom housing unit. Most single individuals would require something smaller. Very large households need more room. Space requirements relate back to the first characteristic of a decent home and living environment in Flint (page 7). (It should be noted that the Census Bureau defines "overcrowding" as more than one person per room. That is the definition which will prevail throughout this section of the comprehensive plan.)

Some general observations with regard to changing patterns of household size and household income in Flint and Genesee County, the Flint housing market area, can be made by referring to Illustration 1.

As can be seen from median income figures for 1970, Michigan and Genesee County, largely due to high wages in the automobile industry (and despite high unemployment rates), are comparatively prosperous. More recent figures[1] indicate that the income gap between Genesee County and the rest of the country is beginning to close.

The out-county area can be differentiated not only on the basis of income, but by the following characteristics[2]:

| | % White | % Over 60 | % Female |
|---|---|---|---|
| Flint | 62.7 | 12.5 | 54.1 |
| Out-County | 94.3 | 8.0 | 50.9 |

---

[1]Internal Revenue Service per capita income relative figures 1967-74.

[2]1975 ECHO Statistics

Illustration 1

Comparisons of Household Size and Incomes

| | 1970[1] | | 1975[2] | | |
|---|---|---|---|---|---|
| | Average Household Size | Median Income | Average Household Size | Median Income | Number of Households[3] |
| U.S. (total) | 3.57 | $ 7,699 | na | na | na |
| U.S. Urban Areas | 3.05 | $ 7,974 | na | na | na |
| Michigan | 3.69 | $11,032 | na | na | na |
| Genesee County (total) | 3.39 | $11,255 | 3.23 | $13,072 | 138,573 |
| Genesee County (out-county) | 3.63 | $12,021 | 3.40 | $14,269 | 82,121 |
| Flint (total) | 3.13 | $10,161 | 3.07 | $11,276 | 56,452 |
| Black households | 3.74 | $ 7,863 | 3.58 | $ 8,565 | 17,292 |
| Female-headed households | na | na | 2.49 | $ 4,761 | 18,078 |
| (with children) | na | na | (3.89) | na | (8,091) |
| (without children) | na | na | (1.36) | na | (9,987) |
| Elderly-headed households | na | na | 1.79 | $ 6,102 | 14,425 |

na = information not available

1 U.S. Census
2 Genesee County ECHO
3 Subtotal figures for Flint may represent households counted more than once, such as household headed by a black female.

All indications (differential birth rates, migration estimates, etc.) point to a short-term continuance of trends toward an over-balance of black-, female-, and elderly- headed households within the City of Flint as compared to Genesee County as a whole. Figures on in-migration to the City of Flint point out that black- and female-headed households seem to be on the increase, while elderly-headed households are decreasing numerically but remain a high proportion of the City's total number of households.

In 1975, black- and female-headed households (with children) had the largest average household sizes and the smallest median income of any groups. An average per capita income for blacks would be about $2,392, or about 59% of the County average per capita income; for all female-headed households, about $1,912, or about 47% of the County average, and even lower for female-headed households with children. These low income figures indicate that black- and female-headed households might be in a difficult situation with regard to finding decent housing within their income limitations.

Elderly households are in a slightly better financial position than other City household subgroups, but average per capita income is still about 16% below that of the County average. Inflation may effect this group of households more drastically than any other, as fixed income from savings and pensions fails to to keep up with increases in the cost of living. Even those elderly home owners with mortgages paid off may not be able to keep up with home maintenance costs.

Illustration 1, while comparing only the years 1970 and 1975, points to short-term household size trends which will have impact on the housing market for at least the next five to ten years. The figures for Genesee County and Flint show a decrease in average household size. A decrease in household size would reflect, on the average, in a stable population, social changes resulting in a greater number of two-person and single person households, and therefore, a greater total number of households to be housed. However, population loss in the City of Flint from 1970 to 1975 (Genesee County's population has remained stable) has led to a decrease in the total number of households. So not only does the City have fewer households, but on the average, somewhat smaller households as well. It is presently unclear as to how population decline will effect future average household size. A more complete discussion of household size changes is included in the Historical Perspective section of the comprehensive plan.

Illustration 1 reveals an increase in median income from 1970 to 1975 of 11% for Flint, 18.7% for the out-County areas, and 16.1% for the County as a whole. For Flint's black households median income increased 8.9%. However, the percentage increase in overall cost of living during this period was 43%. The cost of housing is an important component in increases in cost of living.

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[1]Genesee County ECHO, 1975.

[2]U.S. Census, 1970.

## Housing Availability

The total number of housing units in the Flint market area (Genesee County) is divided roughly 40%/60%, City/Out-County, as is the County's population. The following Table offers some comparisons between housing in the two areas:

| | % well-maintained[1] | % structures built prior to 1939[2] | vacancy rate[1] | % owned or being purchased[1] |
|---|---|---|---|---|
| Flint | 75 | 45.5 | 8.8 | 72.5 |
| Out-County | 85 | 23.8 | 7.9 | 83.6 |

The statistics are composite and do not reflect the fact that both newer, well-maintained neighborhoods as well as older, dilapidated unit groupings exist in both Flint and the out-County. Housing in Genesee County is by no means uniform in any one or any set of characteristics.

A complete inventory and description of housing supply within the City of Flint can be found in the section of this document entitled Housing Characteristics. Housing in the out-County can be placed in four very general categories: older single family, intermediate single family, mid- to high-income multiple rental units, and mid- to high-income single family. Some housing will fall outside these categories. Older single family housing is that which was constructed prior to 1939 either as farm houses, in villages, or along "mile roads" outside small towns. Intermediate single family can be defined as those units built after 1939 which now sell for under $25,000.[3] (Mobile homes might be included here). Mid- to high-income rental units are newer apartments and townhouses with rents from approximately $180 per month up to $350 and above. Mid- to high-income single family is usually newer housing, selling for above $25,000, on large (quarter acre or more) lots.

Given the criteria used in setting up these categories, a to-the-unit inventory would be impossible. However, density studies and building permit records kept by the Genesee County Metropolitan Planning Commission[4] offer a count of single and multiple family structures, while the Flint Board of Realtors' Multiple Listings give an indication of price ranges for different market areas. These sources should be referenced for exact figures.

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[1]Genesee County ECHO, 1975

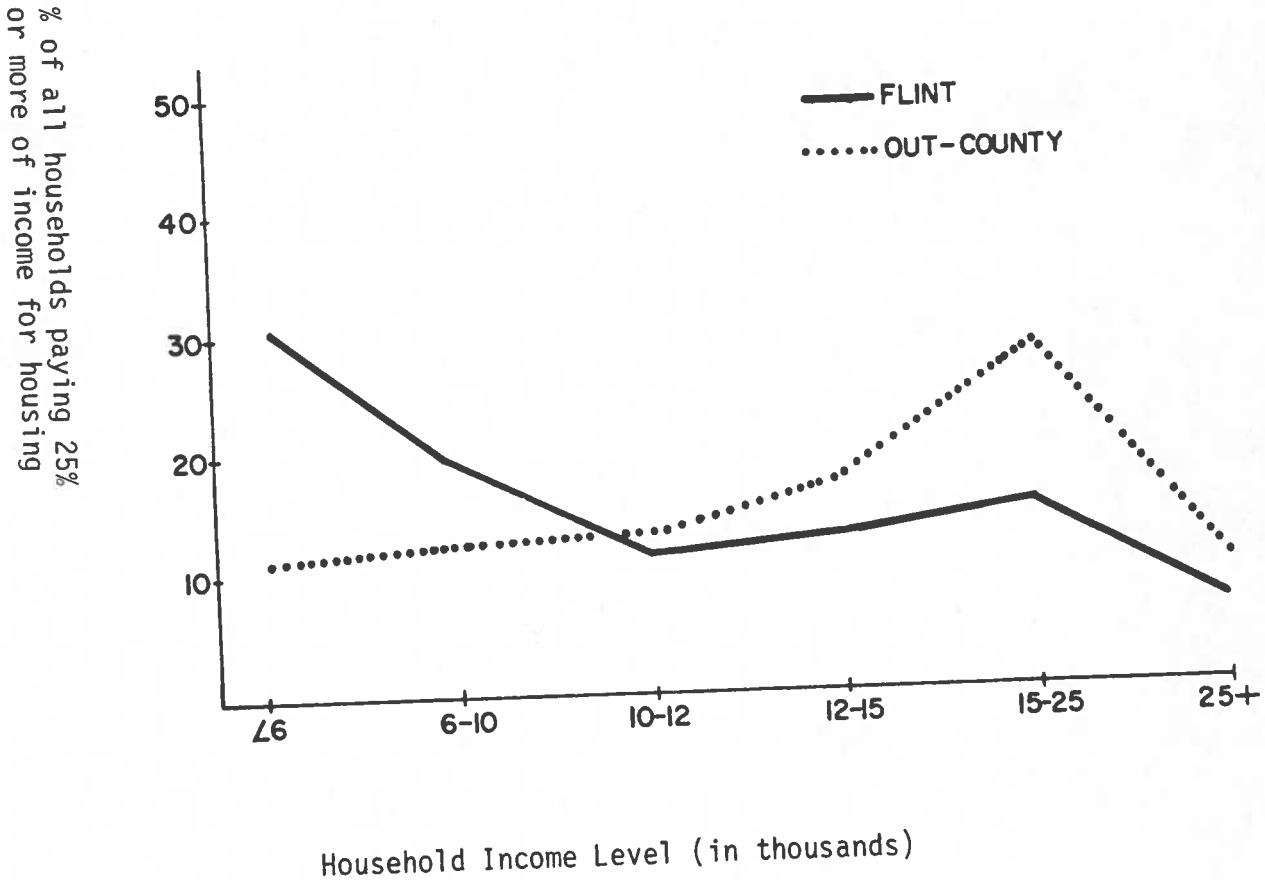
[2]U.S. Census, 1970.

[3]An "affordable" unit for a household with a median income of $13,072, see above, based on an expenditure of 25% of gross income on shelter.

[4]Genesee County Metropolitan Planning Commission Density Study, 1974, and Residential Construction, Summary Report 1970-75 plus 1976.

The general statement that out-County housing is more expensive than housing within the City of Flint can be verified by checking "Homes for Sale" listings in the classified advertising section of the Flint Journal. In addition, a comparison of income level and housing expenditures of households within and outside the City limits indicates that those high-income households who have chosen suburban housing are willing to pay a greater percentage of their household income for it. Illustration 2 shows the percentage of households paying 25% of more of their gross income for housing by level of income, for both City households and out-County households. For example, of those City households with incomes at or below $6,000, approximately 30% spend more than a quarter of that income on housing.

Illustration 2




A comparison of Flint and Genesee County households paying more than 25% of gross income for housing. Source: 1975 Genesee County ECHO household surveys.

## Housing Choices Within the Flint Market Area

The following scenarios represent Flint area housing market conditions as seen by six hypothetical households of various sizes and incomes. It is assumed that each household desires to spend about 25% of its gross income on shelter costs, and that a monthly housing payment represents about 1/100 of the total cost of a unit. Down payments, deposits, financing terms, City-County tax differentials, and leases, while important in considering shelter expenditures, are not considered here. Simple supply and demand relationships are considered.

Household A is composed of a single person making about $8,000 per year, a representative wage for clericals and service workers. At 25% of gross salary or wages, Household A can afford a monthly housing payment of $166 - enough to rent a decent, but not luxurious apartment or house within the City limits or to make monthly payments on a very modest house in the City or in one of the older suburbs. Apartment rentals in newer complexes outside the City and payments on newer single-family detached homes would be beyond the budgetary limitations of Household A.

A number of single persons potentially similar to Household A may be "doubling-up" with others in the same situation or with relatives due to lack of available, affordable, desirable housing in the Flint area. Distance to work site and recreational amenities may be important variables in choice of location and type of housing for Household A.

Household B consists of two persons with a combined income of a little less than $6,000 per year. This Household may be typical of elderly persons living on Social Security, of a single parent in a minimum-wage job, or of another small household living on some form of public assistance.

With approximately $125 per month to spend on housing, Household B is limited to the least expensive housing in the market area - older housing within the City and possibly public housing. Single-family, detached dwellings are out of Household B's range, with the possible exception of an older couple with a paid mortgage. Even then, maintenance and fuel costs may strain Household B's budget.

Primary considerations for Household B in choosing housing may be easy access to public transportation, medical facilities, jobs or job prospects. Optional amenities such as garage space, yard areas, and interior decoration of a housing unit are secondary to B's need for adequate space and decent living conditions.

Household C consists of seven persons with a primary wage earner making about $8,000 per year. This household is typical of the large, sometimes extended, family which finds that housing units large enough for them are priced beyond their means. With about $160 per month to spend on housing, Household C has two general options: purchase or rent an older home, probably in poor condition, within the City which provides enough space for all household members, or purchase or rent a smaller unit and put up with overcrowded conditions.

As with Household B described above, primary considerations for Household C include adequate space and decent living conditions, although one of these requirements may be sacrificed to fulfil the other.

Household D consists of four persons with a primary wage earner making about $11,500 per year, slightly less than the median income for the Flint market area. With about $240 to spend per month on housing, Household D can afford modest, single-family detached housing either in the City of Flint or in the less expensive, out-County suburbs.

Household E represents two persons who, singly or together, earn about $14,000, slightly more than the Flint market area median. This household may be a recently married couple who will spend money on travel and entertainment before starting a family. With almost $300 per month budgeted for housing, Household E could afford a luxury two-bedroom apartment anywhere in the market area or could opt for a reasonably nice "starter home" or moderately-priced condominum. It is likely that such amenities as proximity to recreational facilities (pools, tennis courts) and modern conveniences (garbage disposals, garage space, dishwashers) may be important here. When affordability is not a question, market "extras" become critical factors. The newer housing in out-County areas, because of the "extras" offered, may be more attractive to Household E.

Household F consists of five persons with the primary wage earner's salary at $21,000 - middle-management level. Household F has about $425 per month to spend on housing. If this household is composed of parents with three children, school-aged or younger, it is likely that the following criteria will be important in choosing a single-family detached house:

Affordability
School district/general location
Size of unit and lot
"Modernness" of unit

Household F will be looking for something in the $35,000 to $50,000 range, which might include the better neighborhoods within the City limits and the moderate- to expensively-priced suburban areas. Flint has been steadily losing households of this type since 1970[1] (also, see Historical Perspective section of comprehensive master plan). This loss can be attributed partially to the lack of modern housing on large lots and to a decline in the perception of Flint as a good place to raise a family (based on quality of schools and upkeep of neighborhoods).

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[1]Demographic trend analysis, Flint Department of Community Development and Genesee County ECHO, unpublished, 1977.

DdF:mw:S/2

## IV. HOUSING CHARACTERISTICS

The present composition of Flint's housing is typical of most major Michigan cities.* The homes in Flint are about the same size as those in other major Michigan cities, averaging about five rooms each. Also, of the housing in Flint and comparable cities, nearly 50% has three or more bedrooms.

### General Characteristics

Some of Flint's characteristics do differ from other Michigan cities. Flint has one of the largest percentages of single-family residences, and conversely, one of the lowest percentages of structures containing five or more units. The mobile home count makes up nearly 3% of all residential units in Flint, much higher than any of the comparison cities.

Flint recorded the lowest number of rental units, 30%, of any of the comparison cities. Ann Arbor has nearly 55% of its housing being rented. The number of housing units built prior to 1940 was over 60% of the total housing stock in Detroit, Grand Rapids and Saginaw, while Flint's early construction included only 45% of the total.

Nearly 40% of the land area of the City is taken up by residential housing, while an additional 15% is devoted to schools, churches and open spaces. Of this residential land area, most of the residences are single-family structures. Currently over 75% of all housing units in Flint are single-family dwellings, with only 7% in duplexes and 13% in multiple-family structures. Most of the remaining units are in mobile homes.

Further detail on housing characteristics by geographic area of the City can be found in Appendix A.

### Building Activity and the Age of Housing

According to the 1970 Census, 45.6% of the existing housing stock in Flint was built before 1940. An additional 16% was built during the 1940's, with 23% more being built during the decade of the 1950's. During the 1960's, residential housing construction began to taper off. The decade of the 1960's added only 8,000 units to the housing stock of the City, of which less than half were single-family units. Similar building patterns were recorded in 1970 and 1971, however, in 1972 residential housing construction came to a standstill in Flint. From 1972 through 1976 only 284 new residential units were authorized for construction, of which 172 were single-family.

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*All state-wide comparisons are based on 1970 Census of Housing data. The comparison cities include Ann Arbor, Detroit, Grand Rapids, Lansing and Saginaw.

There has been substantial building in the areas surrounding the City. Construction in the out-county area maintained a constant pace throughout the 1950's and 1960's. Of all building activity in Genesee County during the 1960's, only 29% took place within the City. This movement of new residential developments to the suburbs surrounding the City was even more pronounced in the 1970's. Although construction throughout the county has fallen below the level of the 1960's, the City has been able to keep only 12% of the building activity within its boundaries.

## Maintenance of Housing

The condition of Flint's housing units has been deteriorating seriously over the past few years, and more rapidly among rental than among owner-occupied units. This is evident when looking at the Environmental Block Appraisals, an exterior housing maintenance survey, done annually since 1972 by a branch of the Genesee County Health Department. At the inception of this program in 1972, the City recorded 82% well-maintained housing units. The latest survey in 1976 reported only 71% well-maintained units, an 11% decrease in 4 years. This decline, however, is not uniformly spread throughout the City. Several areas, mostly around the periphery of the City, have shown increases in the number of well-maintained units, while others remained relatively unchanged between 1972 and 1976. Many areas in the central core of the City and the area to the north and south have shown severe deterioration. Illustration 3 depicts the change in housing maintenance by census tract.

## Housing Values

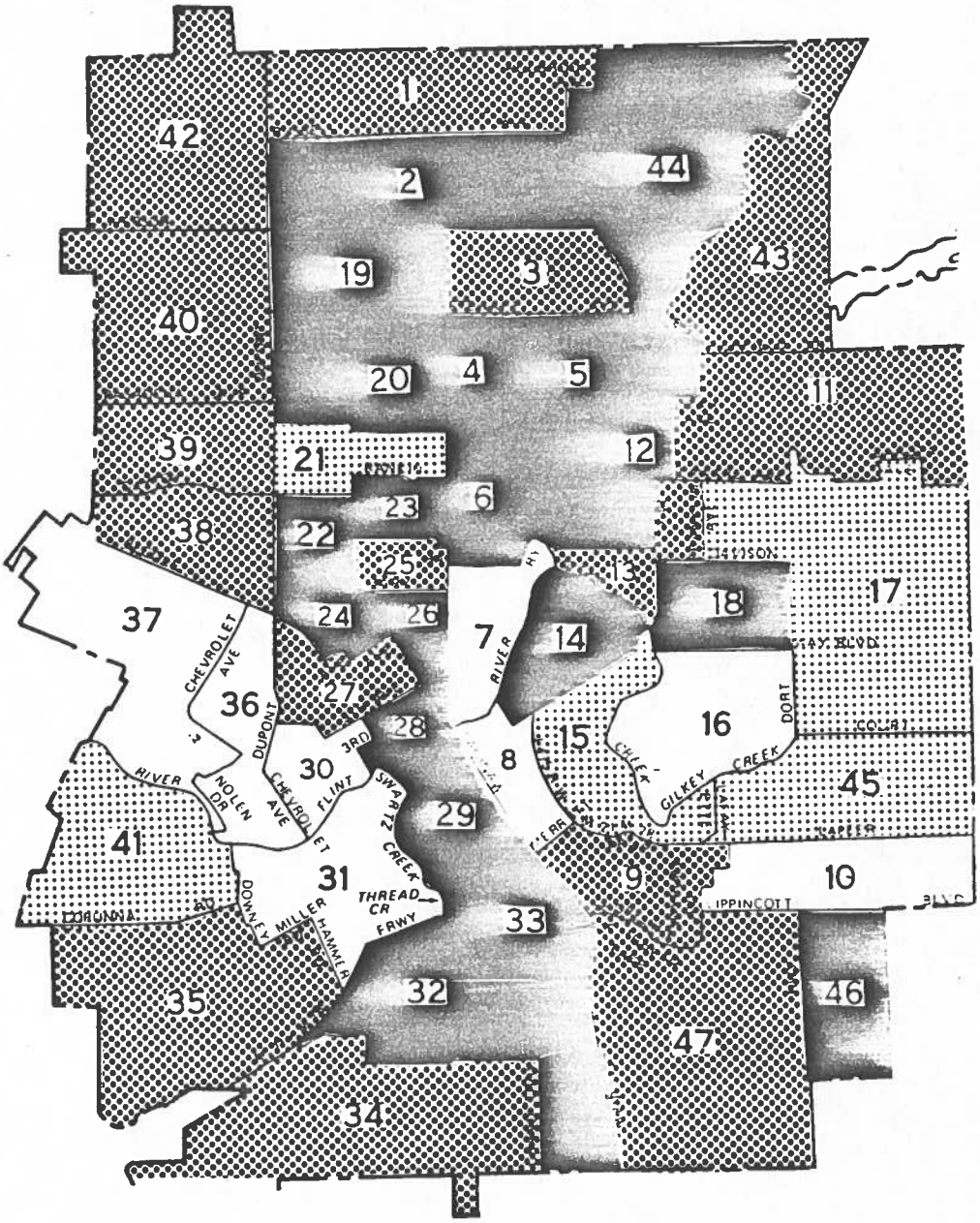
The value of residential housing varies considerably throughout the City. Average values are the highest in the area southeast of the college and cultural center and in the southwest area of the City around the Swartz Creek Golf Course. Values tend to be the lowest in the north central section of the City. In general, higher values tend to coincide with the newer residential areas while the lowest values are in the central core and the older developed neighborhoods. This is not the case, however, in the two areas mentioned earlier, the college and cultural center and Swartz Creek Golf Course. These areas were developed in the 1920's and consist of mainly two and three story, three and four bedroom houses on oversized lots. Based on the 1970 Census, the median housing value for the State of Michigan was $17,600. Flint, however, had a much lower median residential housing value, $14,600.

## Housing Unit Count

As the table on the following page shows, in 1975 there were 58,915 housing units in the City of Flint. There is an additional 1843 units not included in this table which represent the mobile homes within the City. The mobile homes are distributed among fourteen mobile home parks

ILLUSTRATION 3

# PERCENT CHANGE IN WELL-MAINTAINED HOUSING UNITS 1972–1976




20%+ DECREASE
5-20% DECREASE
0-5 % DECREASE
1-16 % INCREASE

in Planning Districts[+] 3, 8 and 10 (refer to Illustration 4 for a map showing the planning district boundaries). This brings the total units available for residential housing in the City to 60,758 as of 1976.

Two hundred seventy-five of these units were identified as being dilapidated by the ECHO evaluators. These unsound (or dilapidated) structures are not included as part of the total housing stock because they are not habitable nor are they worthy of rehabilitation.

City of Flint
1976 Housing Unit Count
By Planning District

| Planning District[+] | Total Housing Units* | Unsound Units | Total Housing Stock |
|---|---|---|---|
| 1 | 5,263 | 9 | 5,254 |
| 2 | 5,951 | 29 | 5,922 |
| 3 | 3,978 | 158 | 3,820 |
| 4 | 4,468 | 9 | 4,459 |
| 5 | 3,895 | 46 | 3,849 |
| 6 | 6,436 | - | 6,436 |
| 7 | 5,556 | 17 | 5,539 |
| 8 | 6,108 | 1 | 6,107 |
| 9 | 4,189 | 1 | 4,188 |
| 10 | 4,562 | 1 | 4,561 |
| 11 | 4,506 | 4 | 4,502 |
| 12 | 4,003 | - | 4,003 |
| TOTAL | 58,915 | 275 | 58,640 |

*Does not include mobile homes

Source: 1975 ECHO

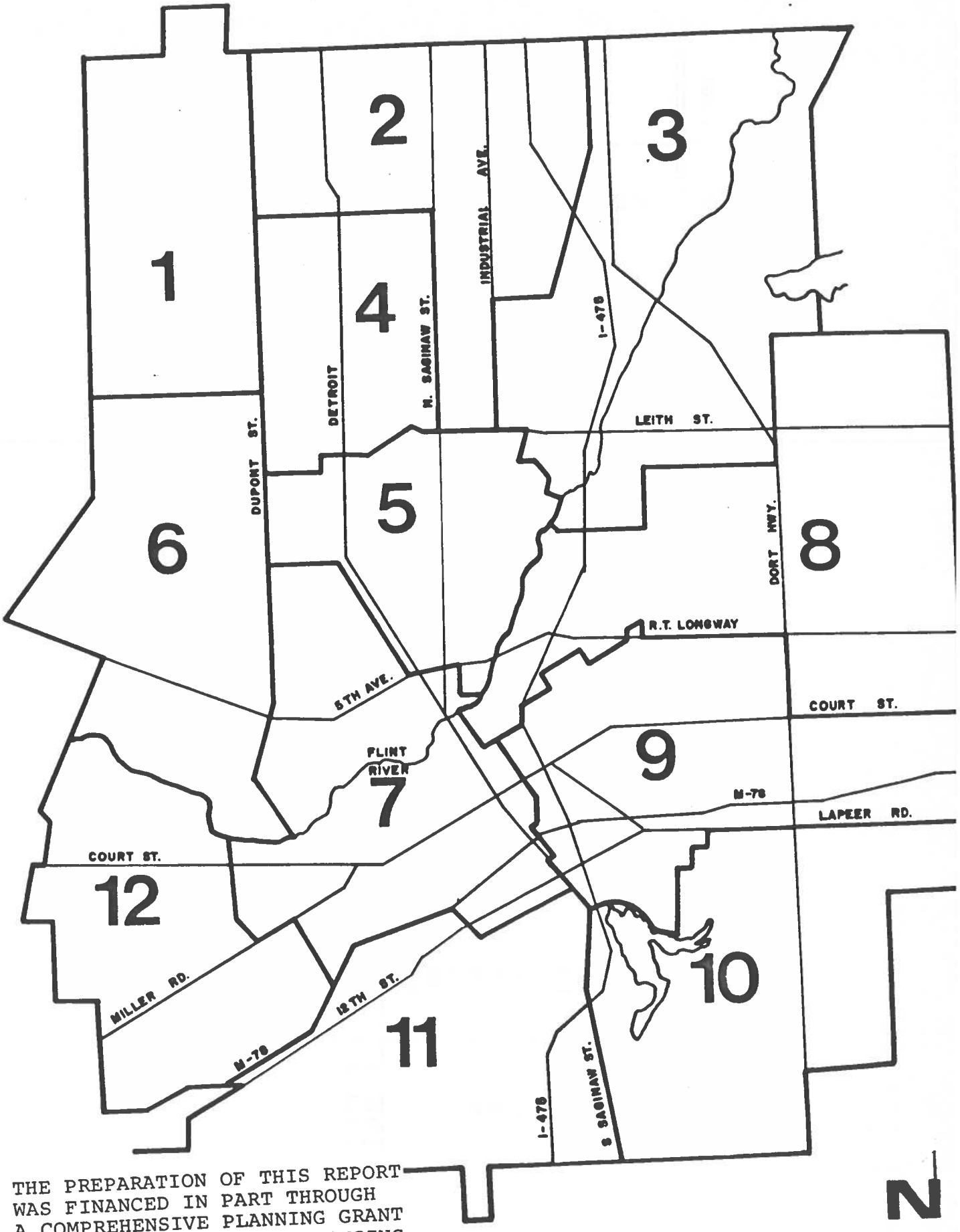
Subsidized Housing

Illustration 5 showing the number of federally assisted housing units in the City identifies the number of housing units sponsored under each federal housing program within each planning district. The information in this illustration was derived from several sources. The number and location of public housing units was given by the Flint Housing Commission in April, 1977. All of the 202,221(d)(3), and 236 complexes were individually contacted in March, 1977, to obtain the most current information on them.

[+]Twelve planning districts have been established in the City of Flint for data aggregation purposes (see Appendix A).

ILLUSTRATION 4

CITY OF FLINT PLANNING DISTRICTS




THE PREPARATION OF THIS REPORT WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; CPA-MI-

## V. EQUAL OPPORTUNITY IN HOUSING

The Flint City Council adopted an ordinance in 1967, entitled the Open Occupancy Ordinance, which prohibits discrimination in real estate transactions on the basis of race, color, religion, national origin, or ancestry. The passage of this ordinance was meant to halt the practice of excluding blacks from all-white areas of the City and to integrate and stabilize neighborhoods. While it is now illegal to bar racial minorities from renting or purchasing housing anywhere within the City limits, expansion of minority populations away from central City residential areas, to the extent that this has been the case, seems to be due to factors other than fair housing policies and legislation. The latest available annual report (1975-1976) of the City of Flint's Human Relations Commission, the enforcement agency for the Open Occupancy Ordinance, states, "Housing complaints, which were expected to increase, did so, by 64% (from 14 to 23), apparently due to greater numbers of landlord/tenant disputes and deterioration in services, rather than to overt discrimination in sales, rentals or leases."

Residential segregation, to the extent that it exists within the City of Flint, does not seem to be a product of lax law enforcement or of willful neglect on the part of the City government. In fact continued efforts to alleviate racial impaction and physical housing problems through urban renewal, combined with newer, more expensive housing supply in the out-county areas and high correlations between race and employment/income/education seem to be prime factors.

### RACIAL FACTORS IN HOUSING

Combined with the larger size of black households (3.58 persons compared to 3.07 city-wide)[1], the limited income of most black households seems to restrict their choices to older or less expensive neighborhoods, most of which are within the City limits. Planning districts with the highest concentrations of minorities in 1975 also had the highest concentrations of unemployed.[2] City-wide in 1975, the average household income was $9,480, but median income for white households was $9,812, while median income for black households was $8,656.[3]

Illustration 6 provides comparisons of the racial distribution of persons by City planning district from 1970 to 1975. Of all districts, Planning District 1 has experienced the most pronounced change in racial composition. This district is the only one in the City which experienced any notable increase in population, and it appears that the increase is attributable to a large influx of blacks. Outmigration of whites from this area, while proportionately not the greatest outmovement of white population, is numerically the largest shift of white population in any area of the City.

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1,2,3 ECHO 1975 Household Survey

Some loss of population in Planning District 2 is attributable to clearance activities for the I-475 right-of-way. In Planning District 3 some of the worst housing in the City was demolished for the construction of the St. John Industrial Park; the 29.4% drop in black population for this planning district is largely attributable to this urban renewal clearance. Planning Districts 7 and 9 have also lost both black and white residents due to expressway construction.

Within those planning districts which appear to be integrated, there are in fact few stable, integrated neighborhoods. Obviously, the residents of the City need more than codification of open housing goals to enable them to freely choose housing to meet their needs. The City should continue efforts to promote open access to housing opportunity through it's Fair Housing Program and by ordinance enforcement.

Flint's Fair Housing Program contains activities to address negative factors supportive of discrimination. These activities range from affirmative counseling and affirmative marketing agreement with the private sector. Educational programs to address discriminatory attitudes on a community wide basis are also a component of the program.

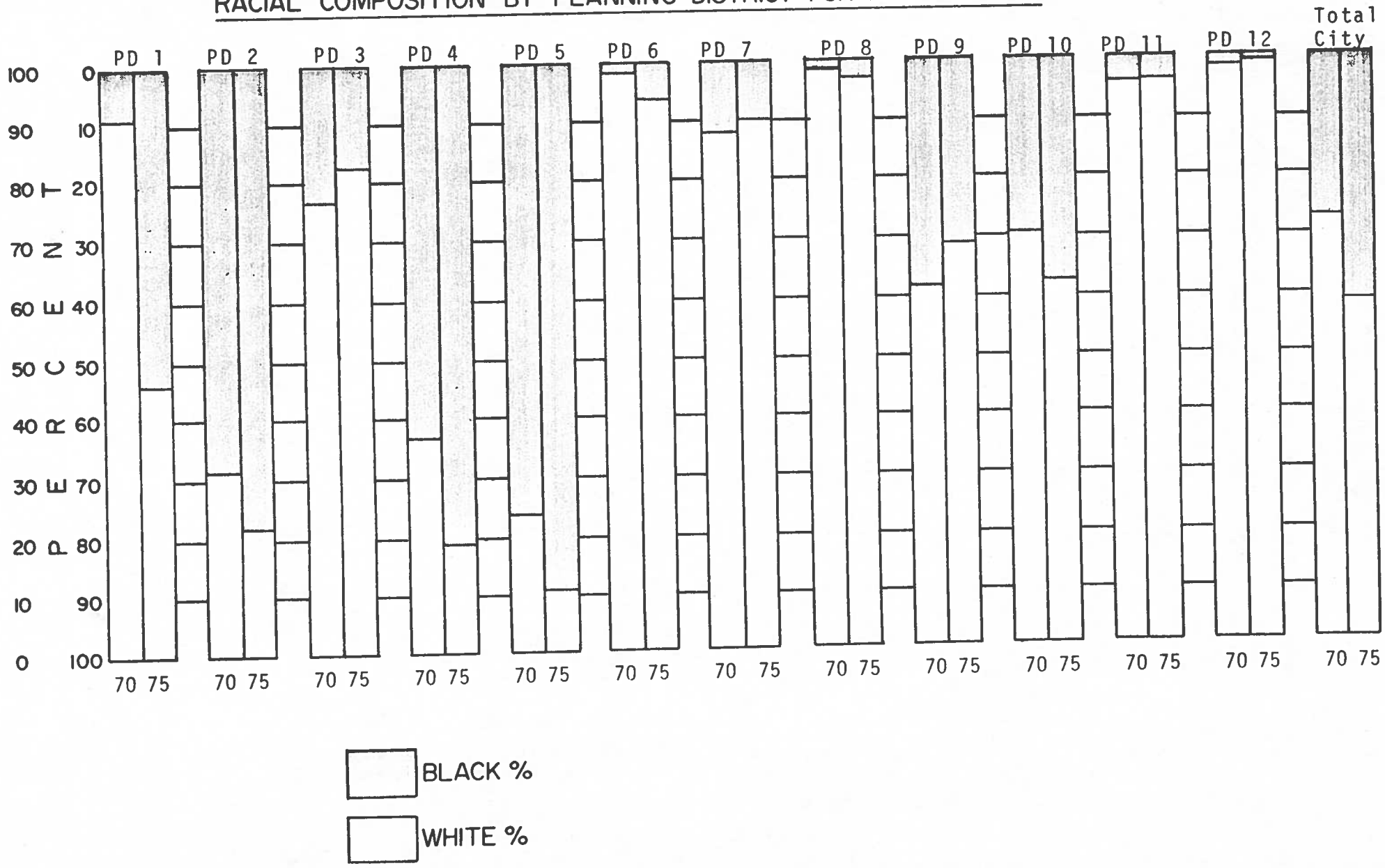
In addition to housing programs sponsored by the City alone, Flint can join with surrounding units of government, through the GLS Region V Planning and Development Commission, to establish and maintain a regional "fair share" housing plan. The plan would assign each community in Region V (Genesee, Lapeer, and Shiawassee Counties) its fair share of low- and moderate-income housing. The intent of such a plan would be to reduce undesirable concentrations of subsidized housing in Flint and to afford low-income and minority households housing choices in suburban areas.

The housing market section of this document points out that Flint housing concerns extend past the City limits. In addition, recent court cases in Illinois and New Jersey have emphasized that subsidized housing should be a regional, not an exclusively local responsibility. The U.S. Department of Housing and Urban Development provides monetary and programmatic incentives to communities who participate in regional housing plans; HUD's Housing Opportunity Plan finances extra expenditures for housing and community development in participating communities and Community Development Block Grant Housing Assistance Plan (HAP) guidelines may be waived if the local HAP meshes with the regional plan.

For all these reasons, the City of Flint members of the Region V Commission should initiate discussions on formulation of a "fair share" plan for this area.

ILLUSTRATION 6

## RACIAL COMPOSITION BY PLANNING DISTRICT FOR 1970 AND 1975



NOTES ON ILLUSTRATION 6:

Changes reflect an unadjusted total of the entire population for each planning district. Differences in birth and death rates by race, City in- and out-migration, and inter-district moves have not been figured separately into the totals. Birth and death rate differentials should account for one percent or less of the total change per planning district, with intra-City or inter-area migration accounting for the remainder.

Included in the definition "white" are all persons other than those enumerated as black. In 1970, those persons enumerated in categories other than white or black totalled 1015, or 0.5% of the population; in 1975, 4259, or 2.3% of the population. A large majority of those in categories other than white or black are Spanish-speaking.

While 1970 figures were taken from the U.S. Census survey, 1975 figures were taken from a statistically valid sample of Flint households. Small errors in the sample might be reflected in cases such as the reporting of zero percent black in Planning District 12. This simply indicates that black population here is so small that blacks have an extremely low probability of showing up in any sample.

# VI. EXISTING HOUSING NEEDS

## Magnitude of Housing Needs

The City of Flint has some special needs in the area of housing. There is no housing shortage in the usual sense; that is, there are more housing units than there are households. This condition exists solely because the City's population is declining. Between 1970 and 1976 the average annual loss of population was 8049 while the average annual in-migration was only 2213 per year. This represents a net loss per year of roughly 6000 persons or almost 2000 households. Consequently, and despite considerable demolition and clearance, the City's vacancy rate has increased from slightly over 5 percent in 1970 to slightly over 7 percent today.

Although some types of housing are in short supply, there is no "general" need for substantial new construction. There is, however, housing need in Flint. Many households are living in substandard structures in need of repair. Others are paying too large a portion of their incomes for the housing they occupy. Still others are forced, for a variety of reasons, into housing that is too small for their needs. A few have two or more of these problems. The following table indicates the magnitude of these problems.

| | All hshlds | Low income hshlds |
|---|---|---|
| Living in substandard | 6,742 | 6,691 |
| Overcrowded | 2,002 | 1,971 |
| Paying over 25% of income | 8,956 | 8,189 |
| Total with one or more problems | 14,426 | 13,932 |

There are a number of things that should be noted about these figures. First, the columns do not sum to the total at the bottom because double counting has been eliminated in computing the totals. That is, households are only counted once in the total even though they may have two, or even all three, of the problems. Secondly, low income households are those whose annual incomes are below 80 percent of the median income for the area.[+] This means all households with incomes below $11,000.00 and this definition will remain the same in all tables to follow. Finally, the table indicates that overcrowding is the least frequent problem while overly expensive and substandard units are far more numerous.

[+]The Flint area is defined by HUD as the Flint Standard Metropolitan Statistical Area (SMSA), composed of Genesee and Shiawassee Counties.

The information for this, and subsequent tables in this section, is derived from a survey administered to a sample of almost 3000 Flint households. The interviews were conducted by the Evidence for Community Health Organizations (ECHO) program during 1975 and 1976 with specific tables and data format designed by the Department of Community Development. Information for the City based on this sample is statistically accurate to within 5 percent. This means, for example, that actual total need reported in the table at 14,426 could be as high as 15,147 households or as low as 13,705 households. This information is also the basis for preparing the annual Housing Assistance Plan for the City of Flint.

Variability by Household Types

Tables in this section of the analysis point to the fact that need is variable for different household types. For example, although renters comprise only about 27 percent of all households, they make up well over half of the households with housing problems. Other relationships are revealed in the following table.

| | Low Income Households | | | |
|---|---|---|---|---|
| | Elderly Hshld | Family (1-4 persons) | Large Family (5 or more) | Total |
| Owners | 1,152 | 2,533 | 2,429 | 6,114 |
| Renters | 2,042 | 4,792 | 4,792 | 7,818 |
| Total | 3,194 | 7,325 | 3,413 | 13,932 |

The column of households with an elderly head has been restricted to one and two persons in size, and a household head is considered elderly if over 62 years of age. This category comprises about 23 percent of all low-income households with housing problems. This is about the same proportion of all households which are headed by elderly individuals. On the other hand, households with five or more members comprise only around 19 percent of all households, yet they make up almost 25 percent of those low-income families with housing problems.

Other categories of households, by household head, appear in the next table.

| | Low Income Households | | | |
|---|---|---|---|---|
| | Female households | Black households | Male households | Non-Black households |
| Owners | 2,654 | 3,014 | 3,460 | 3,100 |
| Renters | 4,549 | 3,355 | 3,269 | 4,463 |
| Total | 7,203 | 6,369 | 6,729 | 7,563 |

From this, it can be seen that 52 percent of all low income households with housing problems are female-headed and that 63 percent of these female-headed households are renters. Likewise, 46 percent of these low income households are Black, yet Black households comprise only 31 percent of all households in the City. Only among low income male householders do the owners outnumber renters.

Variability by Geographic Area

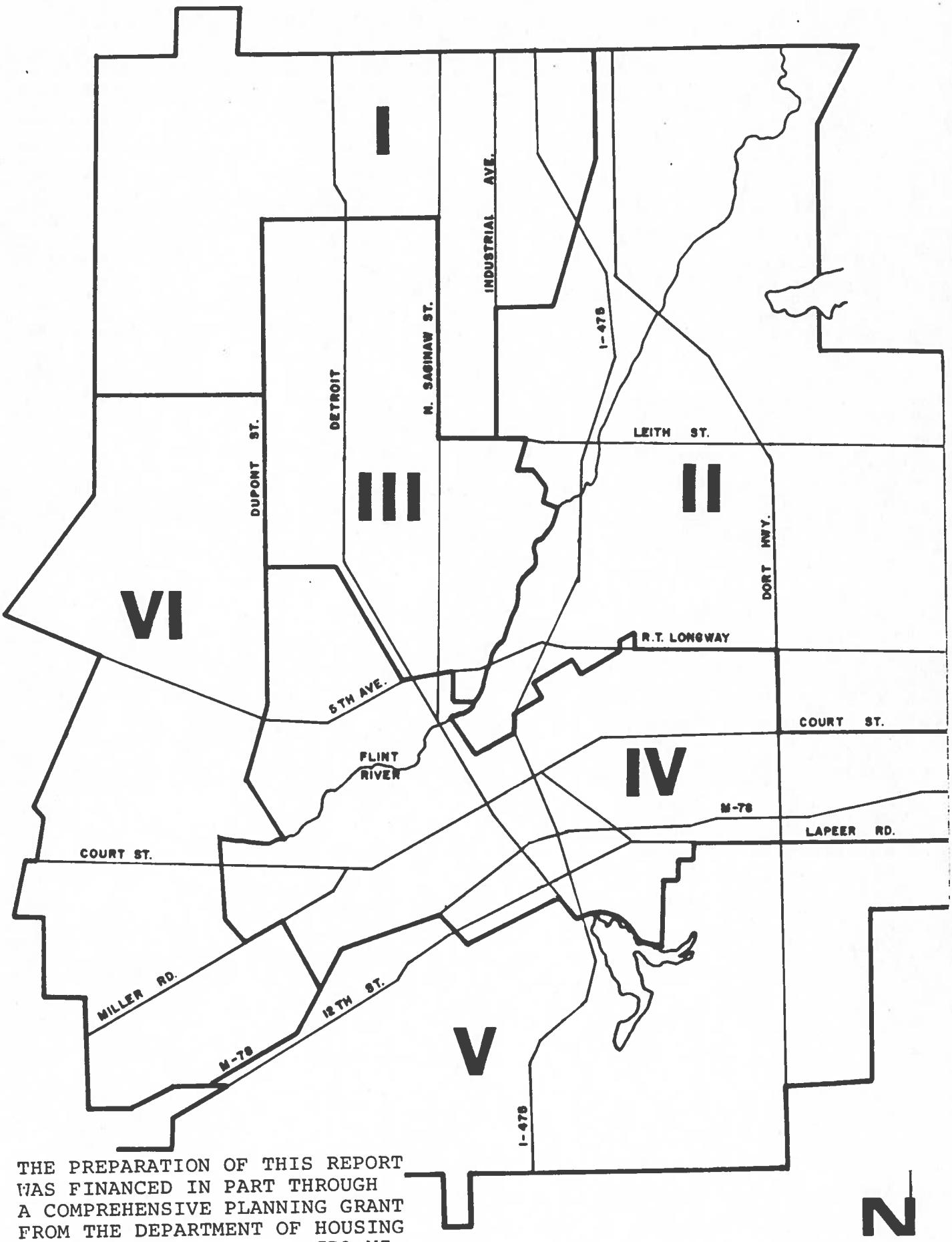
Housing problems and needs are not evenly distributed throughout the City, but rather tend to cluster and create impacted areas. The tables in this section display the information on housing need for twelve planning districts in the City. In some instances the data is not statistically reliable at the planning district level and so a set of six combined districts contains two contiguous planning districts. These are displayed in Illustration 7.

Total housing need is highest in Planning Districts 2, 5 and 8 as shown in the following table:

| | Low income households with one or more housing problems | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Owners | 588 | 1072 | 379 | 607 | 853 | 550 | 360 | 644 | 95 | 360 | 322 | 284 |
| Renters | 152 | 1042 | 834 | 512 | 1080 | 190 | 1183 | 1194 | 493 | 569 | 398 | 171 |
| Total | 740 | 2114 | 1213 | 1119 | 1933 | 740 | 1543 | 1836 | 588 | 969 | 720 | 455 |
| % of City Need | 5.31 | 15.17 | 8.71 | 8.03 | 13.87 | 5.31 | 11.08 | 13.18 | 4.22 | 6.67 | 5.17 | 3.27 |

ILLUSTRATION 7

CITY OF FLINT COMBINED DISTRICTS




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Districts 5 and 2, which rank the worst in frequency of housing problems, also rank 11th and 12th among all districts on median family income levels. Moreover, they also rank in the same positions on average valuation of residential property. The position of the other planning districts on these items shows no such clear pattern.

Type of housing problems by planning district

| | Low Income Households | | | All Households | | |
|---|---|---|---|---|---|---|
| | Substandard | Overcrowded | Excess Cost | Substandard | Overcrowded | Excess Cost |
| 1 | 114 | 171 | 512 | 115 | 153 | 559 |
| 2 | 1024 | 437 | 1156 | 1028 | 440 | 1160 |
| 3 | 644 | 189 | 776 | 650 | 190 | 905 |
| 4 | 398 | 227 | 815 | 402 | 237 | 865 |
| 5 | 1127 | 228 | 796 | 1340 | 230 | 801 |
| 6 | 284 | 152 | 436 | 285 | 155 | 436 |
| 7 | 1137 | 114 | 778 | 1143 | 121 | 851 |
| 8 | 834 | 170 | 1214 | 841 | 171 | 1357 |
| 9 | 209 | 19 | 474 | 209 | 19 | 518 |
| 10 | 190 | 208 | 588 | 191 | 209 | 713 |
| 11 | 341 | 18 | 379 | 349 | 19 | 511 |
| 12 | 189 | 38 | 265 | 189 | 38 | 280 |

The sample sizes for overcrowded households were very small, therefore accuracy for an actual household count by planning district is questionable. However, the figures are sufficiently accurate for comparison among planning districts over the relative concentration of all three problems. Also, the comparison of all households to low income households indicates very few changes, either in totals or in the distribution by planning district. Substandard units are concentrated in Planning Districts 2,5 and 7. Overcrowding is predominate in 2,4 and 5 with a relatively large number in Planning District 10, also. Households paying over 26 percent of their income for rent or housing payments are most numerous in 2 and 8.

When the planning districts are combined into six geographic areas, more detailed analysis of housing needs is possible. The following table displays the distribution of need among low income households by race and sex of household heads and by tenure.

| | | Area I | Area II | Area III | Area IV | Area V | Area VI |
|---|---|---|---|---|---|---|---|
| All | Owners | 1649 | 1024 | 1460 | 455 | 682 | 844 |
| | Renters | 1194 | 2028 | 1599 | 1680 | 967 | 350 |
| | Total | 2843 | 3052 | 3059 | 2135 | 1649 | 1194 |
| | Row % | 20.41% | 21.91% | 21.96% | 15.32% | 11.84% | 8.57% |
| Female | Owners | 853 | 303 | 758 | 284 | 275 | 181 |
| | Renters | 815 | 891 | 1080 | 810 | 682 | 271 |
| | Total | 1668 | 1194 | 1838 | 1094 | 957 | 452 |
| | Row % | 23.16% | 16.58% | 25.52% | 15.19% | 13.29% | 6.28% |
| Blacks | Owners | 1270 | 76 | 1364 | 95 | 152 | 57 |
| | Renters | 1043 | 208 | 1327 | 417 | 322 | 38 |
| | Total | 2313 | 284 | 2691 | 512 | 474 | 95 |
| | Row % | 36.32% | 44.46% | 42.25% | 8.04% | 7.44% | 1.49% |

The row percents indicate how the various low income households with needs are distributed between the six areas. Almost half of the female-headed households are in areas I and III. Black households show an even more pronounced concentration with 79 percent being located in those same two areas. The owner-renter breakdown in these planning areas is about equal. In those districts with lower concentrations of Black and female headed households with housing needs, renters outnumber owners by roughly 3 to 1.

The distribution of Black- and female-headed households within each area is also revealing.

Percent of need by household type and area

| | Area I | Area II | Area III | Area IV | Area V | Area VI |
|---|---|---|---|---|---|---|
| Female | 58.67% | 39.12% | 60.08% | 51.24% | 58.04% | 37.86% |
| Black | 81.36% | 9.31% | 87.97% | 23.98% | 28.74% | 7.96% |

Here, the concentrations of need by sex, and especially by race, of household heads is extremely pronounced.

The following table provides a similar distribution by planning area, but this time the households are categorized as one- and two-person elderly units, small families of four or less persons (except elderly) and large families with five or more persons.

Low-income households with housing problems by type

| | | Area I | Area II | Area III | Area IV | Area V | Area VI |
|---|---|---|---|---|---|---|---|
| Elderly+ | Owners | 190 | 104 | 488 | 75 | 171 | 124 |
| | Renters | 152 | 696 | 436 | 417 | 341 | + |
| | Total | 342 | 800 | 924 | 492 | 512 | 124 |
| | Row % | 10.71% | 25.05% | 28.93% | 15.40% | 16.03% | 3.88% |
| Family | Owners | 682 | 493 | 398 | 284 | 348 | 328 |
| | Renters | 701 | 1080 | 891 | 1229 | 550 | 341 |
| | Total | 1383 | 1573 | 1289 | 1513 | 898 | 669 |
| | Row % | 18.88% | 21.47% | 17.60% | 20.66% | 12.26% | 9.13% |
| Large Family | Owners | 796 | 417 | 588 | 95 | 171 | 362 |
| | Renters | 302 | 246 | 284 | 57 | 76 | 19 |
| | Total | 1098 | 663 | 872 | 152 | 247 | 381 |
| | Row % | 32.17% | 1943% | 25.55% | 4.45% | 7.24% | 11.16% |

When categorized in this way, the differences between planning districts, indicated by the row percents, are not as pronounced. There is some clustering among the elderly and among large families in areas I, II, and III. Households with one to four members, which are the most numerous, are relatively evenly distributed over the areas with the possible exception of area VI. This, however, is probably due to the fact that all three household types are found much less frequently in area VI than any where else.

Differences within planning areas are displayed in the following table:

Column percents

| | Area I | Area II | Area III | Area IV | Area V | Area VI |
|---|---|---|---|---|---|---|
| Elderly | 12.03% | 26.21% | 30.21% | 23.04% | 31.05% | 10.39% |
| Family | 48.65% | 51.54% | 42.14% | 70.87% | 54.46% | 56.03% |
| Lrg. Fam | 39.32% | 22.25% | 27.65% | 6.09% | 14.49% | 33.58% |

+data set too small for accurate estimation

Here a consistent pattern appears with the exception of area IV, where only 6 percent of low income households with housing problems are in the large family category. Area I, by contrast, has a much larger portion of need comprised of large families.

Summary

Housing needs in the City do not appear to vary greatly when restricted to households with incomes below 80 percent of the area median, leading to the conclusion that housing problems are largely limited to low-income households and areas. Further, among low income households, housing problems are heavily concentrated among those with female heads. Black households, likewise, make up a much larger proportion of those with needs than their numbers among the general population would dictate. In a few areas, over 80% of households with needs are Black.

Substandard housing and excessive cost appear to be the most frequent problems, and are more frequent among renters than owners. Overcrowding is a much less serious problem, in terms of numbers, but one that occurs more often among owners than among renters. Overall, renting households make up slightly over half of those with housing problems.

# VII. FUTURE HOUSING NEEDS

## Factors Determining Needs

Future housing needs in the City of Flint will depend largely on two factors, the number of households and the supply of housing units. The number of households at any future time will depend on the rate at which new households are being formed, through either natural increase or in-migration, and the rate at which existing households are lost, through either natural decrease or out-migration. The number of housing units at any future time will depend upon the rate at which new units are being created, through construction or division of large units, and the rate at which units are being lost through deterioration and demolition. This section will attempt to predict what the impact of these factors will be between now and 1980.

## Projections of Housing Supply

The population projections which appear in the table below are based on what the trends in population change have been since 1970. The model employed is a simple one based on the idea of a constant rate of change. This rate can be found by taking the size of the population at two points in time and employing the following formula:

$$\frac{P_2}{P_1} = (1 + r)^n$$

Where $P_1$ = population at time one
$P_2$ = population at time two
$r$ = rate of change annually
$n$ = number of years between $P_1$ & $P_2$

Using a 1970 population of 193.317 as $P_1$ and a 1976 population of 170,650 as $P_2$, the formula yields an annual rate of change of .02057. The negative value of the change rate indicates a declining population. Projecting that rate of change forward several years produces the expected populations indicated in the following table.

Population and Housing Unit Counts

| Year | Population | Decrease | Housing Units | Average Family Size | Vacancy Rate |
|---|---|---|---|---|---|
| 1970+ | 193,317 | | 63,309 | 3.13 | 5.10 |
| 1973 | 185,000 | 4.3% | 62,549 | na++ | na |
| 1975 | 175,003 | 5.4% | 61,137 | 3.07 | 7.00 |
| 1976 | 170,650 | 2.49% | 60,268 | 3.05 | 7.16 |

Population and Housing Unit Projections

| Year | Population | Decrease | Housing Units | Average Family Size | Vacancy Rate |
|---|---|---|---|---|---|
| 1977 | 167,139 | 2.06% | 59,776 | 3.01 | 7.10 |
| 1978 | 163,720 | 2.05% | 59,287 | 3.00 | 7.95 |
| 1979 | 160,334 | 2.07% | 58,803 | 2.99 | 9.11 |
| 1980 | 157,035 | 2.06% | 58,322 | 2.98 | 9.60 |

+ Data for 1970 taken from the decennial census. All other years are estimated from local surveys by ECHO and DCD.

++ Not available

The population estimates for 1977 through 1980 derived from this model are not expected to be entirely accurate as many things may happen to change the rate of annual decline. However, in the short run the estimates seem reasonable. The City has experienced a net loss through migration alone of roughly 6,000 individuals per year and there is little in the immediate future that is likely to reverse this trend.

The housing supply projections are, likewise, generated from the experience of recent years. Two other factors are also considered: the extent and magnitude of housing deterioration and the planned construction of additional units. Similarly, recent declines in birth rates and family size were used as the basis for predicting the future average family sizes.

The housing supply projections may prove to be slightly conservative. That is, as rehabilitation programs recently begun start to have an effect, the number of demolitions predicted may not occur. Also, the average family size may not actually get much below 3 persons. If either of these conditions came to pass, the vacancy rate would become even larger than predicted, other things being equal.

The one figure that might cause a decrease in the predicted vacancy rates would be an increase in the population. This is not anticipated before 1980. No major increase in employment is expected in the area, nor are any other events which might cause an unexpected population increase. However, by 1980 the vacancy rate is projected to be approaching 10%. Vacancy rates of this magnitude may generate market pressures which would work to stabilize migration patterns.

## Probable Housing Needs by Household Types

The comparison of housing supplies with numbers of households provides one aspect of need. However, housing needs are sometimes created by mismatching units and households even though the overall supply appears adequate. The table below utilizes the three categories of housing need established in the section on Existing Housing Needs, which are households in substandard units, households in over-crowded units and households paying over 25% of their annual income for housing. The table is restricted to low-income households who need some type of assistance to solve housing problems.

Projections of Low Income Housing Needs

| | | | | Projections | | | |
|---|---|---|---|---|---|---|---|
| | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 |
| Black hshlds | 5,433 | 5,618 | 6,369 | 7,993 | 8,684 | 9,116 | 9,396 |
| Female hshlds | 5,678 | 6,969 | 7,203 | 8,306 | 8,350 | 8,428 | 8,352 |
| Elderly hshlds | 2,209 | 2,805 | 3,194 | 3,134 | 3,507 | 3,784 | 3,654 |
| Small Family | 4,985 | 6,305 | 7,288 | 8,113 | 9,018 | 9,116 | 9,420 |
| Large Family | 2,443 | 3,014 | 3,450 | 4,425 | 4,175 | 4,300 | 4,326 |
| All hshlds | 9,637 | 12,124 | 13,932 | 15,672 | 16,700 | 17,200 | 17,400 |

An increase in total number of households needing assistance is anticipated in each of the next four years. This is expected as a result of establihsed migration patterns. The typical out-migrating household is above average in income while the typical in-migrating household is at or below the median income for the area. Existing programs of assistance, plus the increasing latitude in housing supply, are expected to mitigate the increase in need so that the rate is expected to go down even though the actual count will continue to rise through 1980.

Also, based on past and expected patterns of migration, the proportion of black households with specific housing needs is expected to increase. Female-headed households are expected to increase in numbers through 1980, but decrease in terms of their proportion of total households. Those households with 1 to 4 members will continue to be the most frequent largely because of their predominance among all households. This is reflected in recent and projected changes in average household size discussed above.

## VIII. EXISTING AND FUTURE HOUSING DEMAND

Housing demand is defined as the number of units that will be absorbed at a specific pace.[1] It is concerned primarily with new units entering the market and only secondarily with exchanges in the existing housing stock. While the construction of new housing units in the Flint market area (Genesee County) has tapered off to less than half of what it was in the early 1970's, construction in Flint is almost non-existent (See Illustration 8 and further detail in Housing Characteristics section). Flint's population is declining and little vacant and developable land remains within the City limits. Very limited and specialized new construction (elderly high-rise units, the Doyle redevelopment project, possibly some luxury units) is expected in the future.

Because Flint's population is expected to decline slowly within the next twenty years, while the population of Genesee County as a whole remains fairly stable[2], it is logical to assume that new housing construction in the out-County areas will satisfy future housing demand.

Exceptions include:

1) The demand for well-built, expensive older housing. Few out-County areas can duplicate the estate areas of Flint, Woodcroft Estates on the west side and the area around Burroughs Park. These and a few other areas contain well-built Tudor-, Colonial- and Contemporary-style homes on very large lots, with exceptional interior features and "extra" rooms such as libraries, sitting rooms, pantries and formal dining rooms. Although many sales in these areas are on land contract terms between private parties, from existing records of sales it can be determined that these homes will sell for up to $250,000.

2) Urban apartments for small upper- and middle-income households. A 1975 Department of Community Development survey[3] revealed that many apartment dwellers in out-County areas would move back into the City if apartments with modern interior appointments (garbage disposal, laundry facilities) and amenities such as good security arrangements and adequate landscaping were available. The Doyle project may absorb some apartment dwellers who desire a truly urban atmosphere. Downtown hotel conversions, provided units converted are modernized and sufficiently roomy, may also take up some of this demand.

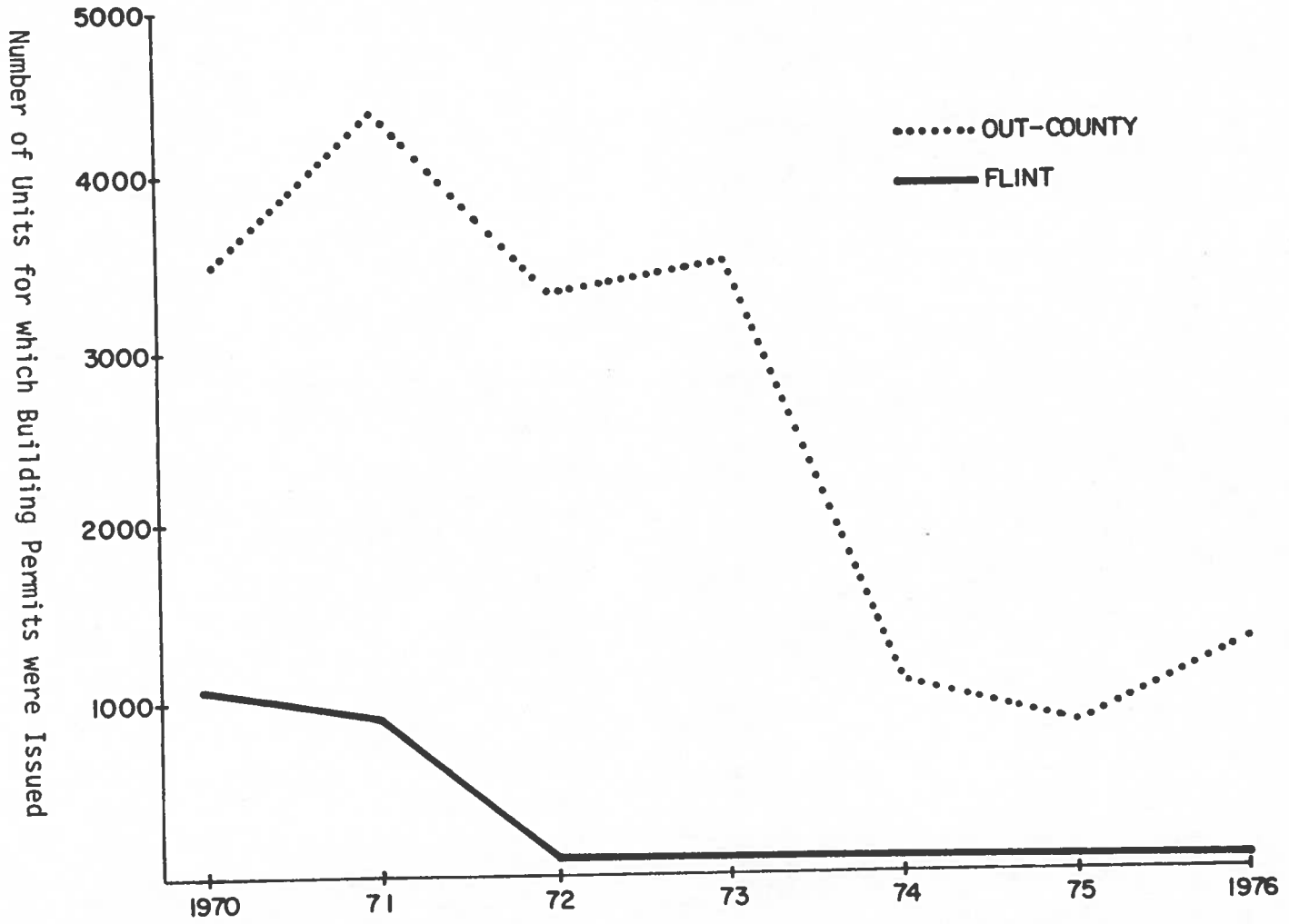
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[1]FHA Techniques of Market Analysis, HUD, 1970.

[2]GLS Region V Planning and Development Commission, Population Projections for the 208 Water Quality Program dated May, 1977.

[3]Department of Community Development, City of Flint, Michigan, 1975. On file in Department Offices.

ILLUSTRATION 8




A comparison of Flint and out-County residential construction activity as indicated by building permits granted by 1970-1976. Source: Genesee County Metropolitan Planning Commission

3) Starter homes for younger families. This demand category may overlap the previous category and may also include more "need" than "demand" situations. Affordable, modern two- and three-bedroom homes and the previously-mentioned modern apartment units are more in demand as household sizes decline and as decisions on starting families are postponed. Recent response to the City of Flint's Property Release Option Program (PROP) indicates a demand for units which could be rehabilitated and remodeled to modern standards.

It seems that demand for units in all three of the above categories will continue into the future, regardless of population change. While the City can do nothing to effect the supply of older, well-built units, it can encourage the addition of modern apartments in the downtown area and promote programs which tend to maintain or increase the stock of "starter" units within the City.

## IX. HOUSING DEVELOPMENT POLICIES

This section will concentrate on identifying what type of housing is needed to adequately house families in specific geographic areas throughout the city. Households with one or more housing problems (those living in a substandard structure, those living in overcrowded conditions, or those paying more than 25 percent of their income on housing expenses) were identified both demographically and geographically in the section on existing housing needs. The analysis here will center around how to reduce the number of households with some type of housing problem. Also, these solutions will be directed at low-income households, since less than 4 percent of the households with a housing problem were in higher income brackets.

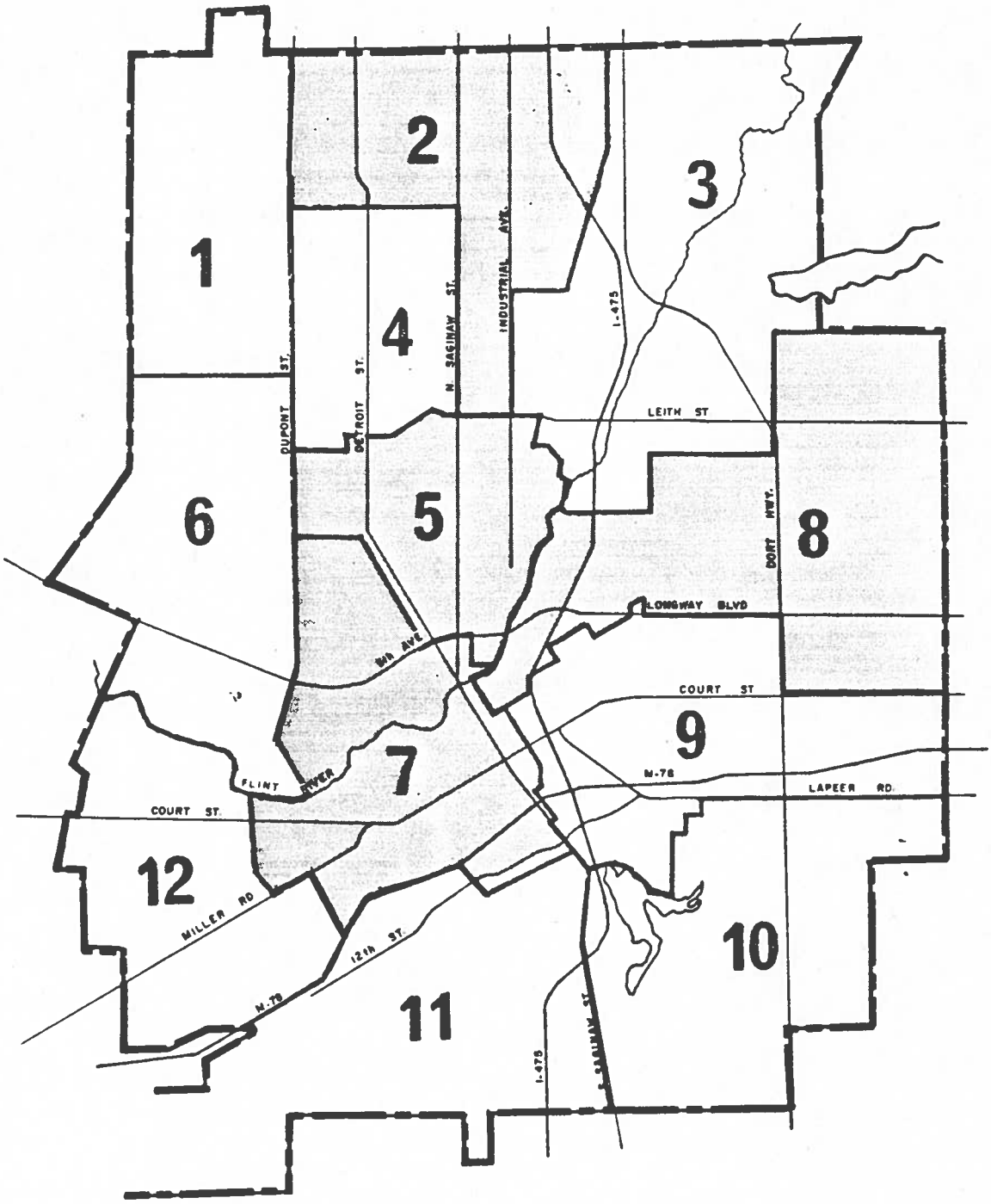
The least serious housing problem arises from overcrowding, only 14 percent of the low-income households with problems. This would indicate that the size of homes and apartments throughout the city are, in most instances, adequate to serve the needs of the households. Forty-eight percent of the households with some sort of housing problem live in substandard housing. This suggests the need for rehabilitation programs. Although beneficial to the neighborhood and the city as a whole, a problem arises. Because these are predominantly households with low-incomes, it is difficult for them to obtain a conventional loan for rehabilitation purposes. It is also sometimes difficult for the household to repay even a subsidized low-interest loan sponsored by an organization such as the Flint Neighborhood Improvement and Preservation Project Incorporated. Therefore, in some cases only a grant will enable some households to rehabilitate their property. The majority of the households in need are those paying more than 25 percent of their income towards housing expenses (59 percent of the low-income households with housing problems). This implies that a substantial number of families are in need of some sort of housing assistance, either as rental assistance or purchase subsidy.

With all three types of housing problems combined, Planning Districts 2, 5, 7 and 8 show the greatest concentration of households with problems (see Illustration 9). Together these three planning districts include over 53 percent of the total existing need. The composition of the households differ significantly. Three-quarters of those in need are made up of small families one to four individuals. One-quarter of these are elderly households of one or two persons. These small families and elderly households are made up of 65 percent renters. Large families (those with five or more persons) which make up one-quarter of those in need, are primarily owner occupants, about 71 percent.

From this, assumptions can be made as to the type of assistance needed to best serve the low-income households currently living in a situation with one or more of the defined housing problems. Households living in substandard dwellings and those paying more than 25 percent of their income for rent or housing payments are the most numerous of the problems indicated, and therefore assistance should concentrate on alleviating these situations.

ILLUSTRATION 9

# HIGHEST CONCENTRATION OF HOUSEHOLDS WITH HOUSING PROBLEMS



Throughout the City there are about 5,100 dwelling units that are in substandard condition, according to the 1976 ECHO Environmental Block Appraisals. Five percent of these units were considered dilapidated and cannot be rehabilitated. Of the units that could benefit from rehabilitation, over 98 percent are occupied by low-income households. Rehabilitation programs, offering grants and low-interest loans, would be beneficial to these neighborhoods. Planning Districts 2, 5, 7 and 8 show the highest concentration of low-income households living in substandard dwellings.

The most serious of Flint's housing problems is that of households paying over 25 percent of their income for housing expenses. The need for increased government-assisted housing programs is evident. Currently all programs sponsored for the elderly are at full occupancy, with about a two-year waiting list. Public Housing sites are also completely utilized, with a similar waiting list. Other federally subsidized rental units have very high occupancy levels.

Although some types of housing are in short supply, there is no "general" need for substantial new construction. Concentration should be given to acquiring existing units that could be rehabilitated if necessary and used as subsidized residences. Because there was about a 50/50 split between owners and renters in need, not only should rental units be acquired, but consideration should be given to purchase subsidies.

From the household characteristics detailed in the section on existing need, the size of needed units can be determined. Rental units should be predominately two bedroom units to accommodate small families and elderly persons, who make up the majority of the rental need. On the other hand, homes to be used in an ownership subsidy program should be larger units (predominately 3 and 4 bedroom homes) because large families demonstrate the most interest in purchasing a home.

The 265 program, an extension of the previous 235 homeownership subsidy program, will allow subsidies to existing substantially rehabilitated homes as well as new construction. This program could provide assistance to many of the homeowners in need. Priority for new construction should be centered around one and two bedroom units for the elderly, who make up a large proportion of the rental assistance need. With long waiting lists at existing sites, the demand is evident.

Some of this needed new housing is presently being developed on a site just north of downtown Flint. The Doyle Residential Project was an urban renewal area acquired and cleared by the City of Flint. When completed, it will provide 495 housing units in townhouses, garden apartments, patio houses, and an elderly high-rise. The Doyle Area was designed to create a neighborhood that would attract many different types of families. Some of the apartments, along with the elderly complex, will be federally subsidized, while the remainder of the rental units would rent conventionally.

There may be other opportunities for new construction in or near the downtown area. Additional housing for the elderly, students and employees of the University of Michigan, and those otherwise employed downtown is a possibility. High-rise units could be built given purchase and clearance of presently under-utilized commercial and residential sites. The City of Flint should not attempt further clearance and construction activities downtown due to already heavy financial commitments to the Riverfront Center, Doyle, and Flood Control projects. However, the city can take steps to ensure that zoning, site planning, and permit procedures are expedited for private developers and that public services provided (streets, utilities, security, etc.) are of the highest calibre.

Other specific geographic locations for new construction are limited to currently undeveloped property. At the present time, within the city limits, there are a few major tracts of land, totalling some 300 acres, that could be developed as residential neighborhoods (see Illustration 10). The majority of this undeveloped land is presently zoned for residential uses, either as single-family or some type of multiple-family use.

Most of this land is owned by private developers, therefore the City has minimal control over how and when the property is developed. Currently the City of Flint owns only one of the smaller sites. So if any major subsidized residential developments are to take place, the City would have to acquire land from, or contract with, the individual property owners.

These tracts of undeveloped land may be suitable for the type of luxury apartment or townhouse development which has drawn middle- and upper-income households to the out-County areas in recent years. Every effort should be made to promote attractive, modern, well-landscaped development. In attempting to solve problems of low income households, the City should not spare efforts to attract higher income households back to the City. This secondary goal will assure long-term residential tax base stability and the socio-economic diversity which makes the urban environment culturally stimulating and attractive.

## Summary

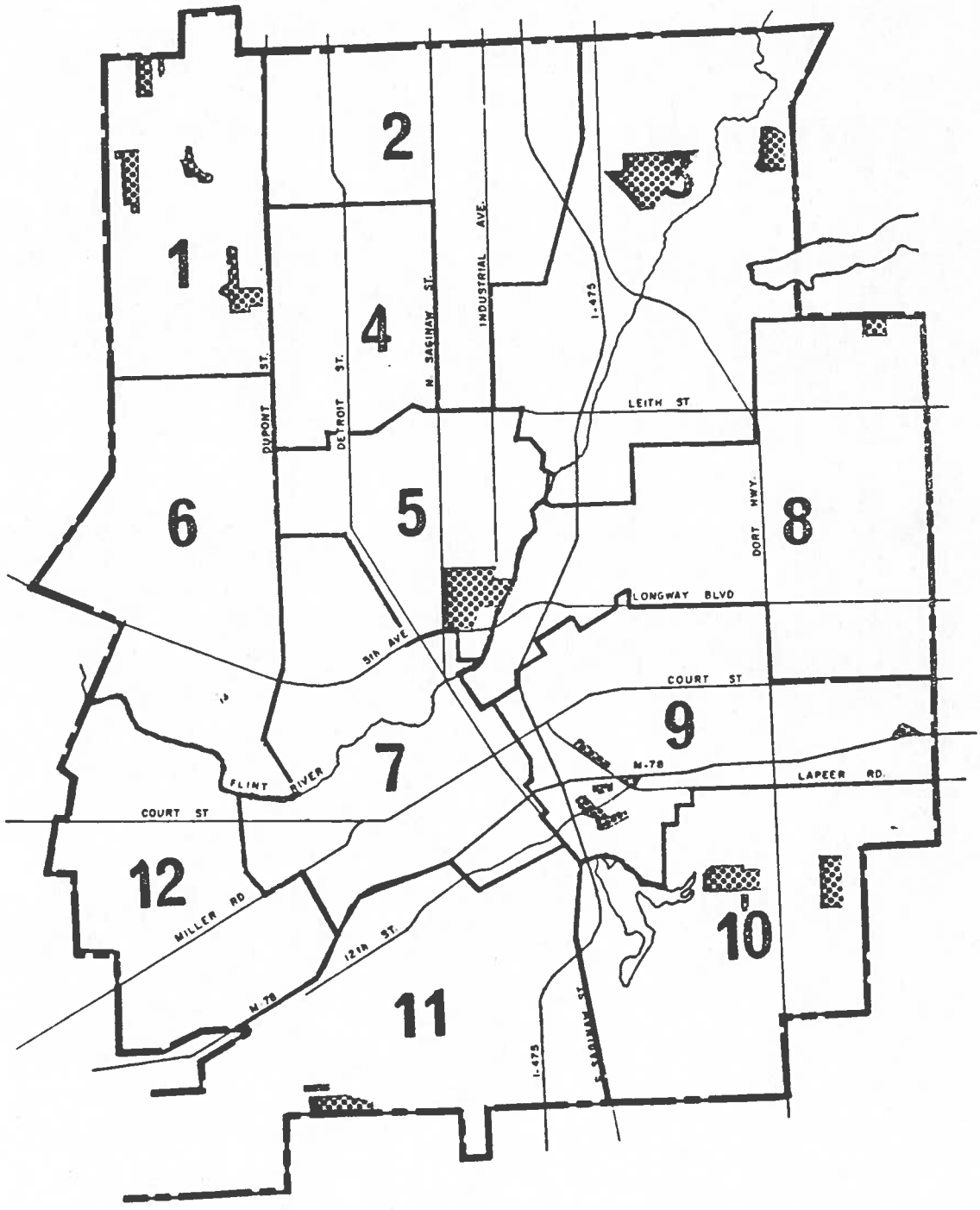
Summarizing the discussion above, the following policies should guide housing decisions in the City of Flint:

## Housing and Residential Policies

1. It shall be the policy of the City to preserve and enhance the existing housing stock and to safeguard the neighborhoods from undesirable effects and conditions. The City will act to support and promote rehabilitation in viable residential areas and the

ILLUSTRATION 10

# POTENTIAL AREAS FOR NEW RESIDENTIAL DEVELOPMENT



formation of neighborhood organizations toward these ends. The City shall take no action which will result in physical impaction, social or racial segregation, or which will adversely affect the residential character of an existing viable neighborhood.

2. It shall be the policy of the City to annually assess the housing needs and problems of the residents and to allocate the resources of the City on a priority of need -- the largest proportion of available resources being committed to areas where need is greatest.

3. It shall be the policy of the City to provide for and promote an increased resident population by encouraging the private development of higher density housing structures wherever feasible and in line with neighborhood standards, with special emphasis on the downtown. Wnenever possible, stress will be placed on increasing the number of housing units of types in shortest supply on the market.

4. It shall be the policy of the City to promote equality of access to housing opportunities to all residents regardless of race, sex, age, creed or national origin, and to ensure against discriminatory practices through strict enforcement of City ordinances and appropriate laws. The City will take no action, nor permit action to be taken by others, which conflicts with this policy, or in anyway interferes with a citizens right to safe, sound and decent housing of their choice.

5. It shall be the policy of the City to participate in programs of the Federal or State governments providing construction or subsidy of housing for the elderly, handicapped and low to moderate income families to the full extent that a need for such housing is substantiated, and limited only by the availability of financial and other resources for this purpose.

6. It shall be the policy of the City to require annual inspections of multi-unit residential structures and regular inspection of all residential structures. The City shall strictly enforce the codes and regulations in all residential areas and will act expeditiously to condemn and remove any obsolete and blighting structures from viable neighborhoods or incentive programs to home owners.

## X. IMPLEMENTATION MECHANISMS

While satisfaction of housing needs and demands may be dependent upon a number of factors beyond the City's control, from prevailing mortgage lending rates to the price of fuel, the City of Flint can influence the meeting of housing goals by actively carrying out the policies described above. Three sets of mechanisms, the City's provision of traditional urban services, the City's role as a community development agency, and the city's ability to influence and/or coordinate with private-sector decision-making, can be utilized to carry out housing policy.

## HOUSING AND THE IMPORTANCE OF URBAN SERVICE PROVISION

The quality of life in Flint neighborhoods is dependent not only upon the availability of decent housing but upon the efficient provision of basic urban services,[1] which include:

Community schools
Protection from crime against persons and property
Fire protection
Sewer and water provision
Code enforcement
Street maintenance and traffic control
Provision of parks and recreation opportunities
Sanitation services
Animal control

The City of Flint administers all these services, with the exception of community schools, the province of the Flint Board of Education, and animal control, which is handled by Genesee County.

Provision of these services relates back to the definition of a decent home and living environment. In addition, provision of satisfactory levels of such services tends to stabilize residential property values and serves as an attraction to potential in-migrants.

While departments within the City of Flint have done an adequate, and in some cases, exemplary, job of providing these basic urban services, service provision has been determined largely by general professional standards or by year-to-year funding availability. No coherent set of goals or policies, specifically formulated to meet Flint's needs, has guided all departments. Preserving the integrity of residential neighborhoods can serve as a guiding policy.

In addition to the absence of a set of guiding policies for service provision, there has been a failure to adequately evaluate the effectiveness and efficiency of some urban services with regard to such criteria as future year budget constraints, equity of service to all areas of the city, and inter-service impacts (that is, the effects of provision of one service upon provision of another, for example, what level of street lighting may deter crime in what section of the city?).

Both the setting of service provision goals and monitoring and evaluation of progress toward these goals are activities internal to City Hall, and under the control of the City Hall Administration. The institution of two programs, one mandated by State law and the other functionally necessary to set rational service priorities, will enable the city to provide basic services in a more efficient and effective manner. This cannot help but enhance the attractiveness and stability of Flint's neighborhoods.

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[1]Such other urban services as the visiting nurse program, senior citizens' centers, and provision of public transportation are very desirable but usually not considered basic to the operation of a City.

## Capital Budgeting and Programming

A capital budgeting and programming process must be initiated for the City of Flint. A capital program describes, roughly costs out, and prioritizes by year, all major, non-recurring improvements (e.g. sewers, streets, parks, etc.) contemplated by a city five to six years into the future. A capital budget details the funding sources and expenditures to be made during the first year of the program. The State of Michigan Municipal Planning Act of 1931 mandates this process for all cities in the State. The Charter of the City of Flint states that the Chief Planning Officer is charged with the responsibility of preparing "the annual capital agenda and capital budget." The Mayor's office, the Finance Department, and implementing departments for capital projects all play critical roles in the process. A more detailed proposal for initiating a capital improvements budgeting and programming process is contained in Appendix C.

## The Responsive Municipal Services Program: A Budgeting and Evaluation Tool

Perhaps the most important (and often the most overlooked) part of budgeting for public service provision is determination of the actual effects of dollars spent. Usually no attempt is made to quantify the effects of services and improvements with regard to the needs of individual neighborhoods and the needs of the city as a whole. Quantification involves measurement and evaluation of the level of service provided so that continuance of or improvements in a certain service can be made. The Responsive Municipal Services Program (RMSP) is proposed by the Department of Community Development to complement the capital programming process by objective measurement of effects of services rendered and improvements constructed.

The RMSP would divide the city into monitoring areas, consistent with census tracts. The present configuration of separate service districts for each city service (e.g., garbage pickup, snow removal, etc.) is necessary for purposes of actual operation, but does not lend itself to evaluative efforts. Operating service districts may split neighborhoods, or even take in one side of a residential street and not the other.

Monitoring would take place on a yearly basis. A "score" would be assigned to each of the monitoring areas for each type of city service, and an average "score" computed for the city as a whole. Those areas with "scores" deviating significantly from the city average would receive increased attention in budget allocations and/or higher priority in regular service delivery.

A more complete explanation of the workings of the RMSP can be found in the description of the capital improvements programming process in Appendix C.

## Code Enforcement: A Special Case

The RMSP would provide a rational context for the re-evaluation of one city service which is critical to the preservation and upgrading of housing stock: code enforcement. This service has a particularly stormy history in the City. There are those who claim that code enforcement discriminates against the lower income household and serves, in general, to raise property taxes for all homeowners. However, uniform enforcement of building codes is absolutely necessary to the health and safety of the community. The RMSP would enable decision-makers to set realistic, equitable code enforcement goals for all areas of the City.

Presently, residential housing code enforcement is limited to the following categories (with approximate percent of all cases):

- Inspection upon sale of single-family and duplex structures (mandated by City ordinance) (25%)
- Yearly inspection of all multi-family structures (10%)
- Yearly inspection of vacant vandalized or fire-damaged dwellings (20%)
- Investigation and inspection as a result of complaints (45%)

While cases in the first three groups must be dealt with by necessity, complaints, representing the largest single source of code inspection work, may arise due to lack of enforcement or lack of uniform enforcement.

A rotating schedule of residential code enforcement, based on the Responsive Municipal Services Program would be likely to have the following effects:

1. Ensure decent and safe housing in all areas of the City.
2. Reduce the total number of code-related complaints.
3. Provide interior condition information and comparative data for decision-makers and housing policy planners.
4. As a "preventive" City service, reduce the caseload, and therefore the cost, of other public services, such as fire protection and sewer servicing.

A rational schedule, in order to be effective, should be based on a cycle no longer than five to seven years. During this time period, a unit exposed to average occupant wear and tear plus Michigan winters can be expected to show some signs of use. The extent of possible code violations would depend, of course, on the age of the structure, the amount and quality of maintenance, and other factors.

In the past, proposals for a City-wide code enforcement program have run into a number of political and administrative obstacles. It is therefore recommended that the Director of Building and Safety Inspections conduct an informational study on the feasibility of establishing a rotating residential code enforcement schedule. The study should include, but not be limited to, the following factors:

1) Length of inspection cycle to be instated.

2) Availability of adequate budget and personnel to perform schedule.

3) Type of criteria education program to accompany code enforcement effort.

4) Expected long-term increases in residential tax base following establishment of code enforcement.

5) Relation of code enforcement scheduling to other City programs and services (e.g., housing rehabilitation, urban renewal plans, capital improvements investments).

Summary

Establishment of the capital improvements programming and budgeting process and concurrent initiation of the Responsive Municipal Services Program would insure adequate service levels in all city neighborhoods thereby, as mentioned previously, effecting 1) tendencies for persons to become and remain homeowners in the city, 2) increases in property values, and 3) pride of neighborhood, resulting in better upkeep of housing and less need for extensive public investment to upgrade neighborhoods. The two programs provide an excellent opportunity to relate public improvement needs to public and private housing rehabilitation efforts in selected target areas.

The two programs, providing a context for both goal-setting and evaluation of progress toward goals, require a minimal dollar investment, plus some retraining of present City staff. The programs can be effected through the Department of Community Development or directly through the Mayor's Office, in conjunction with review by the Chief Planning Officer.

## THE CITY'S ROLE AS A COMMUNITY DEVELOPMENT AGENCY

As a community development agency, the City of Flint can advance housing goals and carry out housing policy directly through application of local ordinances and through various urban renewal and other physical development efforts. While new construction of housing units (either through the Flint Housing Commission or through State or Federally-subsidized programs, such as part of the proposed Doyle development) can be very desirable, it is impractical to rely heavily upon the construction of new units to alleviate housing problems within the City of Flint. Vacant parcels are scattered throughout inner city neighborhoods; land assemblage on a moderate to large scale is infeasible. The types of incentives needed in order to lure a great deal of new construction to the City (massive tax breaks, an assured market, provision of public improvements at nominal cost) are, for the most part, beyond the City's legal and fiscal capacities.

The City is currently placing emphasis on housing rehabilitation in selected target areas and on limited demolition of unsound housing as the two most suitable short-term methods of insuring an adequate supply of decent and desirable housing to its residents.

Over the long term, the City must use its statutory zoning and planning powers to the fullest in order to preserve the best qualities of attractive neighborhoods and to prevent further residential deterioration. Neighborhood preservation can be affected by changes in the zoning ordinance and by adherence to strict standards in the granting of use variances and other special exceptions.

### Housing Rehabilitation

The City of Flint has experienced a marked decline in the relative housing quality of residential structures over the last five years. Since 1972 the City has experienced a drop of 11% in the category of well-maintained housing units, in spite of urban renewal and redevelopment projects that cleared large numbers of substandard dwellings. Concurrently, the numbers of slightly deteriorated and generally deteriorated structures have grown to 28% of the stock. Clearly the general maintenance of the residences in the City has deteriorated and, projecting along current rates, by the 1980's we could expect no more than one-half the structures to be in a well-maintained condition.

Rehabilitation of existing housing units appears to be one method to stem the tide of deterioration. But the situation is complicated. A majority of householders owning in deteriorated dwellings are in low-income ranges, making it extremely difficult to arrange home improvement financing. The task of implementing and perpetuating a viable housing rehabilitation program is problematic.

The following discussion describes the current rehab program, alternative funding sources and program guidelines and projections.

## Recent Rehabilitation Trends

The implementation of Rehabilitation Programs in Flint has been visible only in the last five or six years. Federal Section 312 Rehabilitation Loans have been sporadically applied to the original Neighborhood Development Program (NDP) areas since 1970. But the levels of loan funding have been low and time of funding uncertain. For the most part, the homes rehabbed with 312 monies have been maintained in good condition.

Recently, the City of Flint's Department of Community Development (DCD) has embarked on a large-scale rehab program in selected target areas scattered throughout the City. A pilot program was begun in late 1976 using first-year Community Development Block Grant (CDBG) funds in a loan/grant disbursement schedule. Thirty-five to 50 households will be served, depending on individual loan/grant needs, in Census Tract 25, a portion of the deteriorated Oak Park NDP. A larger program, developed through the Flint Neighborhood Improvement and Preservation Program, Incorporated (FNIPPI), a City-funded, non-profit corportaion, will be described later.

## Housing Maintenance and Housing Rehabilitation Programs

A housing up-grading program can be divided into two areas or approaches, maintenance and rehabilitation. A maintenance program would be formulated to assist home owners with minor types of home maintenance, generally such items as the average resident would undertake on his/her own. These items could include the replacement of a broken window pane, repair of a missing porch railing or stair tread and minor painting projects. Generally, these projects would necessitate the advice or technical assistance of individuals in building or home repair trades, but not necessarily active participation. A maintenance program in selected areas would be designed to offer residents technical assistance on home repair projects and possible arrangements for discounts on building materials. These areas would be categorized as Monitoring-Maintenance tracts and would be closely watched by the City Department of Community Development staff on a year-to-year basis to detect early signs of deterioration in housing quality. Maintenance activities would not include code-related types of deficiencies.

A formal rehabilitation program would concentrate on improving the livability of an individual or family residence that has shown marked deficiencies and/or deterioration. Rehabilitation, in this context, would refer to home repair activities not normally undertaken by an owner or resident on his/her own, and would generally involve code-related deficiencies. The services of a contractor would be sought for such repairs as a new roof, major plumbing or heating projects, replacement of exterior siding or extensive exterior painting. The cost for these repairs could span the spectrum from a few hundred dollars to several thousands, necessitating some type of financing program. Federally subsidized loans or grants would be made available to individuals who meet specified eligibility requirements.

## Housing Rehabilitation Target Area Selection

Census Tracts appear to present the most usable geographic configuration for housing quality analysis, inasmuch as these areas offer the greatest amount of available data. Additionally, the tracts are of small enough size to allow for some degree of homogeneity within. In a few instances, housing quality is not uniformly distributed within a tract, but inferences can still be established on the basis of the data. While Census Tracts do not always match what residents consider neighborhood boundaries, they are the best substitute available.

Target area selection and the prioritization of housing rehabilitation programs within the City of Flint should follow the guidelines and formula presented in the Flint Community Development Block Grant application for 1977-78. The criteria used include: age of housing, median household income, housing quality, proportion of owner-occupied and proportion of single-family units for each Census Tract in the City. The five criteria represent residential attributes that can be easily quantified. Other potential criteria such as code violations and average assessed housing valuations are recorded but are either generally not in an aggregate form or lack other quantifiable factors. Two variables, average assessed housing valuation and incidence of well maintained structures, are statistically highly correlated but contain other relationships such as dwelling and lot size that are impractical to determine.

The target area selection process should be formulated to assist low and moderate income home owners in deteriorating dwellings and to meet the guidelines mandated by the Federal Department of Housing and Urban Development (HUD). State of Michigan House Bill No. 4251 currently under discussion, would enable the Michigan State Housing Development Authority (MSHDA) to administer its own Neighborhood Improvement Program (NIP) throughout the State in selected rehab target areas. MSHDA's preliminary eligibility criteria almost exactly parallel those of HUD, at least on a quantitive basis. Adoption of the rehab criteria suggested here will allow flexibility in the program to accommodate the pending State legislation as well as existing Federal guidelines.

Previous Federal housing programs encouraged municipalities to designate their most severely deteriorated and dilapidated areas as redevelopment districts. After enormous expenditures of funds, success seemed to elude the planners. The focus in housing rehabilitation efforts in Flint should be to place limited funds and resources into areas where substantial impact can be made, i.e., transitional neighborhoods that show evidence of incipient deterioration and where livability, visibility and marketability may be enhanced through rehabilitation.

A priority ranking should lead to categorization of tracts in three groupings. The first category would be a Monitoring Group and would contain those tracts exhibiting high degrees of housing quality and

and household income and which are not in immediate danger of advancing blight or major deterioration. These tracts would be monitored on a year-to-year basis to spot initial signs of neighborhood transition or incipient decline.

A second category would contain those areas that because of extreme age, very low household income, extreme structural deterioration or other factors make rehabilitation an impractical investment. Inasmuch as housing market value is related to supply-demand and resale value within a neighborhood, the impact of a few rehabilitation jobs would be minimal. This second category would be termed a Non-Rehabilitation Group in that no tract-wide rehabilitation program would be developed. Instead, spot clearance and reuse plans would be proposed for the neighborhoods in this category in an effort to remove the most deleterious blighting influences. Rehabilitation loans/grants might be provided based on an individual homeowner's ability to maintain the structures in a post-rehab condition and with due consideration of income levels.

The last category, Rehabilitation Groups, would include all those tracts that could profit by rehabilitation programs offered on the neighborhood level, and ones that would manifest the greatest degree of visibility for the program. These tracts all show common attributes in that they all exhibit moderate amounts of deterioration, high owner-occupancy rates and low-to-moderate income levels. Loans and grants would be offered in these areas on a tract-wide basis.

All data used for the prioritization process should be updated on an annual basis as conditions in individual Census Tracts change. Monitoring is required at least yearly to help pinpoint changes that may warrant reassessment of a particular area in relation either to its City-wide ranking or influence upon an adjacent tract.

## Ongoing Rehabilitation Efforts

The present City of Flint-sponsored rehabilitation program is administered by the Flint Neighborhood Improvement and Preservation Program, Incorporated (Flint NIPP Inc.). This organization, under the name Genesee Community Development Conference, was actively involved in the early 235 and 236 programs during the late 60's and early 70's and established a good reputation in housing development areas. Flint NIPP has adopted, as a non-profit corporation, the goal of improving housing conditions in the City through studying factors which affect the supply of decent, safe, and sanitary housing, preparing comprehensive public and private housing programs for the City, encouragement of citizen participation activities, and participation in program authorized by the Michigan State Housing Development Authority, the National Housing Act and Federal Housing Administration regulations for mortgage and loan insurance. A performance contract, executed by the Flint Department of Community Development, allows Flint NIPP to operate during 1977-78 with funding of over $2 million from Flint's Community Development Block Grant.

The contract with the City specifies the conditions, goals and performance criteria that Flint NIPP must meet. Additionally, the City reserves the right to select rehabilitation target areas. Flint NIPP must work toward the goals and objectives of the Housing Assistance Plan (HAP) as specified in the Community Development Block Grant.

Because of the need for grants and low interest loans to low- and moderate-income households, future rehabilitation programs for the city will hinge on continued subsidies from the Department of Community Development, private foundations or State programs. The Michigan State Housing Development Authority (MSHDA) is currently formulating housing and neighborhood improvement programs geared to loan/grant applications in the State. Preliminary eligibility criteria reflect a concern for low-and moderate-income households.

A potential problem arises if and when Flint NIPP is no longer funded solely through the City of Flint. At that juncture, the corporation will be free to pursue its own goals as related to housing development and rehabilitation in Flint. Potential private or foundation monies would replace the HUD pass-through funding and create a situation where the City of Flint would not be able to control selection of target areas. Operating as an autonomous entity, the corporation would be guided largely by the wishes and demands of the new funding source. In other words, movement toward the goals and objectives of this Plan would no longer be determined solely by the public body, the City of Flint.

Funding for City-sponsored housing rehabilitation in coming years is neither inexhaustible nor certain. Decreasing funding levels from the federal government may necessitate a modified program. A revolving loan fund arrangement would allow Flint NIPP to generate additional financing. The longevity of the corporation must be assured, inasmuch as the loans will run for 12 year terms and the corporation will have the payments assigned to it by the lending institutions.

## Magnitude of Housing Rehabilitation Problems

At this time 28% of the housing unit stock in the City of Flint is in need of rehabilitation and/or refurbishing. Included in this are 11,971 units that ECHO has categorized as slightly deteriorated and another 4,827 that have been classified as generally deteriorated. The total of 16,798 units represents a need that must be met as soon as possible in light of the ever-increasing rate of deterioration in the City.

The rehabilitation program administered by Flint NIPP under FY 77 Block Grant funding has targeted 250 units for its first year efforts. Given present staffing levels this represents the maximum number with which the corporation can effectively deal. A target projection of 250 per year until 1980 would impact a total of 1,000 units or approximately 6% of the need. Given the rate of deterioration of approximately 2% per year, this program funded at present levels could not keep pace.

Recent experience in the City-sponsored Oak Park Pilot Rehabilitation Project has emphasized the wide range of rehab costs involved. The generally deteriorated dwellings have been costing approximately $10,000 to refurbish, the slightly deteriorated approximately $5,000 each. If these same cost breakdowns were applied to each target area, 125 generally deteriorated and 125 slightly deteriorated units could be served within present funding levels.

Since 1972 the numbers of slightly deteriorated and generally deteriorated structures have increased over 60% with a paralleled decrease in number of well-maintained units. In spite of the loss of some 1,500 housing units in the last five years through urban renewal clearance efforts the general quality of housing continues to decline. Every year 2% of the well-maintained structures fall down into one of the two lower categories. Any rehab program designed to neutralize this loss must serve approximately 400 to 500 units per year, twice the number currently proposed. A program of this scale would require a funding level of nearly $3.8 million, almost $1.8 million more than budgeted for the current program. The $3.8 million includes the added inspections, rehabilitation and enlarged staffing necessary to meet a goal of 500 rehabbed units per year.

Clearly Flint's Department of Community Development cannot maintain this level of funding through Block Grant funds for coming years without seriously jeopardizing other programs and commitments. Other funding sources must be found.

## Demolition of Substandard Structures

### Past Demolition Actions

Although expressway and urban renewal clearance had taken place in the sixties, City funds, embarked on a City-wide effort to eradicate hazardous, unsafe, substandard dwellings. In three years over 750 structures, most of which were vacant or fire-damaged, were demolished. Today, the Building and Safety Inspection Division of the Department of Public Works is charged with the responsibility of removing from the City these types of structures. In the last ten years, a total of approximately 2,500 dwellings have been razed City-wide.

### Present Demolition Programs

The present demolition program functions as an adjunct to code enforcement activities. Potential demolition cases are brought to the attention of Building and Safety Inspection through various means. Complaints from residents taken by the Citizens Action Center are forwarded and placed on a list to be field checked. Also, during a real estate transaction, an inspector may discover a sub-standard structure as he is inspecting the property. All premises "for sale" must be inspected for code violations before the transaction can be completed. The inspection division also conducts an annual survey of all vacant residences in the City of Flint to ascertain their general condition.

The Building and Safety Inspection Division follows the guidelines in the universally used Building Officials Code Administrators (BOCA) Basic Building Code and Property Maintenance Code - 1975, for housing and code inspections. Determination of a structure suitable for demolition is based solely on the BOCA standards.

A sub-standard structure can fall into one or all of three general categories; unsafe, hazardous or sub-standard. The distinctions are not clear among the three since any number of code violations in the aforementioned categories can constitute a sub-standard structure. The following section from the BOCA code provides a definition:

SECTION 124.0 UNSAFE STRUCTURES

124.1 Right of Condemnation: All buildings or structures that are or hereafter shall become unsafe, unsanitary, or deficient in adequate exitway facilities, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or which by reason of illegal or improper use, occupancy or maintenance, shall be deemed unsafe buildings or structures. All unsafe structures shall be taken down and removed or made safe and secure as the building official may deem necessary and as provided in this section. A vacant building, unguarded or open at door or window, shall be deemed a fire hazard and unsafe within the meaning of this code.

The relative condition of the structure is assessed by the inspector making the inspection. He notes the code violation and prepares a report which details the deficiencies and determines cost estimates for the repairs to correct the violations. Sections 106.2 and 106.3 of the BOCA code specify that a material alteration of a structure that involves repair totaling more than 50 percent of the fair market value must follow BOCA guidelines for new construction. Many owners are unwilling or financially incapable of rehabilitating their property under new construction specifications. Additionally, recent code changes may have raised minimum standards beyond those which were in existence at the time the structure was built.

After proper notification to the owner of the property, a hearing on the property in question is held by the Appeal Board (selected from local licensed builders, architects and engineers). Testimony from the owner is solicited at the hearing by the Board and a decision is made to either allow the owner sufficient time to correct the deficiencies or uphold the order to demolish the structure. If demolition is upheld, the property address is then placed on a demolition list and submitted to City Council for approval, allowing the costs to be billed to the owner. Approval by City Council signals the placing of properties on demolition bid lists.

At any time after the notice of violation the owner may seek to have the condemnation process enjoined by Circuit Court. In most cases, the owner is absent or otherwise unavailable and the procedure culminates in condemnation.

The total cost of the condemnation proceedings, which include the actual demolition, administration and mailings, is charged to the owner of the property, who is given up to four years to repay the expense. This can run as high as $1,000 per structure, including incidental costs.

Since 1975, when Building and Safety Inspection began city-wide demolition, 381 structures have been razed. An additional 113 are awaiting final bid approval from City Council.

## Effects of Demolitions on Housing Quality

Comparisons of 1970 Census and 1976 ECHO-EBA data indicate a net decrease in all housing structures (single and multi-family) of approximately 2,608 dwellings. This represents a decline from 52,366 housing structures in 1970, to 49,758 in 1976.

In spite of the over 3,200 demolition permits issued by Building and Safety Inspection, housing quality continues to decline in the City of Flint. According to the ECHO-EBA, which, measures exterior conditions only, since 1972 (first comprehensive EBA) the percentage of well-maintained structures in the City has fallen by over 10 percent. This decrease is reflected in increases in both the slightly and generally deteriorated categories, 8.3 and 3.2 percent respectively. That the rate of deterioration is increasing is evidenced by the fact that in one year, 1975-76, slightly deteriorated dwellings have increased by 15 percent and generally deteriorated by almost twenty-two percent. The total for the most seriously deteriorated, the dilapidated category, has been reduced from over 600 structures in 1972 to 224 in 1976.

## Program Recommendations

Any demolition program must be evaluated in terms of its impact on the neighborhood or target area in which it is implemented. Vacant dwellings pose many problems to neighbors. They harbor vermin and rodents, presenting a serious health hazard. Unless properly secured, these structures can offer inviting yet dangerous areas for young children to play. Many such dwellings become targets for pranksters and arsonists, threatening the safety of adjacent homes. Too often the vacant dwellings and surrounding property are used as dumping areas.

The condemnation and subsequent razing of an unsafe vacant structure can certainly improve the aesthetics of a neighborhood, but only if other, general improvements are made in concert. A combination of rehabilitation, spot demolition and capital improvements (street improvements, lighting, curb work, etc.) in selected target areas can make a significant impact on the total housing quality and general livability of the area. The demolition program emphasis should be placed in those areas supporting present or proposed rehabilitation programs. Razing of vacant, substandard dwellings should, of course, not be discontinued in other areas of the city, but rather relegated to a secondary status as concentrated neighborhood preservation is implemented in the rehab target areas.

## Zoning

Zoning, a local community police power granted by State statute, ensures the public health, safety, and welfare through controls on the general location and specific physical placement of various land uses. Zoning, as an implementation tool of land use planning, can guide development as it happens, avoiding problems such as overcrowding and conflicting (incompatible) land uses.

Although Flint has had a zoning ordinance since 1927, a great deal of development in the core area of the City took place before that time. The establishment of the Central Business District and major industries dictated the placement of residential areas (for more detail, see Historic Profile section of the Master Plan). By today's standards, central city residential lot sizes, space between dwellings, and access for public services are inadequate.

In both older and newer areas of the City, abuses of the zoning ordinance may have allowed commercial uses to disrupt residential neighborhoods. In addition, absence of zoning or other ordinance control over such things as commercial signage, building design and maintenance features, and placement of parking has caused problems for residential areas abutting commercial strips.

Because the City is already 90% developed, zoning of undeveloped areas will have little effect on future land use patterns. However, zoning regulations and the manner in which they are applied can be effective mechanisms in the preservation and enhancement of residential neighborhoods and in the conversion of older areas to newer and/or mixed uses.

### Present Zoning of Residential Areas

The Flint zoning ordinance specifies four main residential zones and permits residential uses in all but heavy commercial and manufacturing zones. The ordinance is generally "pyramidal" in structure with uses in the most restrictive zone included in the next most restrictive zone, all uses in the first two zones included in the third zone, and so on.

Residential zones and uses permitted include:

| | |
|---|---|
| A-1, Single Family Low Density District | Principally detached housing on large lots; limited institutional and non-commercial recreation. |
| A-2, Single Family Medium Density District | As in A-1, plus hospitals, duplexes, professional offices, home occupations as conditional uses. |

| | |
|---|---|
| B, Two-Family District | As in A-2, plus community development projects, three- or four- family dwellings, rest homes, parking as conditional uses. |
| C-1, Multi-family Walk-up Apartment District | As in B, plus apartments, institutions, boarding houses; professional offices as conditional uses. |
| C-2, Multi-family High Density Apartment District | As in C-1, plus any type multi-family dwelling, non-commercial clubs; hotels, professional offices, clinics, parking lots, funeral homes as conditional uses. |

The structure of the present zoning ordinance offers opportunities for different types of new or rebuilt residential areas, including what are usually termed planned unit developments. If enforced, provisions in the present ordinance should guarantee a sufficient amount of integrity to established residential districts.

Potential Problems with Application of the Zoning Ordinance

In the past, the requirements of the zoning ordinance may have been construed liberally in favor of property owners. The procedure for processing exceptions, or variances, to the zoning ordinance through the Zoning Board of Appeals is necessary to guarantee property owners relief from undue hardship caused by unique zoning situations. In Flint the granting of variances in physical requirements and in the way land is used has resulted in some desirable and physically attractive changes, but has also allowed commercial encroachment in residential neighborhoods and unnecessary, but economically profitable, erosion of land use integrity in some areas of the City.

In addition to the granting of unnecessary variances, problems with non-conforming uses and enforcement of the zoning ordinance may exist. Non-conforming uses, uses of land which are in violation of the zoning ordinance, may have been established before the ordinance took effect or may have been situated in violation of the ordinance. An example of prior non-conformance would be an older subdivision which fails to meet minimum setback and side yard requirements for its zoning classification. An outright ordinance violation in a residentially-zoned area may range from the establishment of a machine shop in a garage to the placement of a large sign advertising a home occupation.

Enforcement of the zoning ordinance in Flint may be difficult due to several factors, including prevailing community attitudes concerning land development and use rights, lack of enforcement man-power and lack of "teeth" in the processing of ordinance violations.

Application of specific residential zoning categories to geographic areas may also need revision. For example, in neighborhoods where few residential lots meet minimum square footage requirements, the areas might be rezoned or a revised zoning category might be developed to enable property owners to make improvements or additions without consistent violation of the ordinance. Areas presently zoned in conflict with actual use (e.g. industrially-zoned areas containing residential uses) should be examined for possible reclassification. Further suggestions for zoning revisions are made in other sections of the comprehensive master plan.

## The Impact of Zoning on Housing Goals

Zoning as it effects the use of land in residential areas can have important impacts on the preservation of existing neighborhoods and on maintenance and enhancement of economic choice of housing within the City of Flint. The use of zoning as a tool in fighting neighborhood deterioration and lack of housing choice may have been devalued in the past due to susceptibility to political influence, negative attitudes toward community restrictions on property rights, and the prevalence of urban renewal and other programs which used such "controls" as large-scale clearance and demolition to effect land use changes. As an older urban area which must make the most of all of its development opportunities, Flint cannot afford to overlook the potential of traditional and strongly established development promotion and control mechanisms such as zoning.

Neighborhood preservation, while ultimately based on the physical livability/structural soundness of dwellings, relies upon a harmonious combination of land uses to provide a desirable environment. While each residential neighborhood in the City has its own unique qualities, common characteristics of desirable neighborhoods might include: 1) protection from disruptive, conflicting land uses (such as heavy manufacturing or "late hours" commercial establishments), 2) safety and ease of pedestrian movement along with adequate but limited automobile access, and 3) a complement of insitutional, service and commercial uses (such as schools, churches, postal stations, and shopping facilities) which serve the resident population.

A strict interpretation of zoning requirements should be based on criteria developed to preserve residential neighborhoods. The interests of the community as a whole and the neighborhood specifically should weigh heavily against proposed rezonings or variances which do not meet neighborhood preservation criteria or enhance the viability of residential areas. Failure to maximize economic gain from a piece of property should not be construed as a hardship. Rather, a balance should be struck between the reasonable rights of the property owner to enjoy the use of his property and the justifiable rights of the community to a desirable environment.

Zoning as a land use control should be made as flexible as possible and then should be strictly interpreted. Flexibility should be reflected

in zoning for neighborhoods which may require special services or facilities to support their resident population. For example, small areas with large concentrations of elderly residents should include provisions for transportation transfer points, medical offices, etc., or areas zoned homogeneously in a residential classification may need to be rezoned to permit small neighborhood commercial facilities. Strict interpretation of flexible zoning policies in these cases would mean enforcing buffering and landscaping requirements, and perhaps even encouraging neighborhood-compatible design features.

With regard to assuring maximum housing choice for present and future residents of Flint, zoning can control density as well as geographic location of housing. Both factors figure in the total market value of dwelling units, which in turn effects individual households' choice. Again, preserving the integrity of a variety of residential neighborhoods assures choice. Zoning in accord with comprehensive master plan policies for housing site location offers another opportunity to maximize housing choices.

## Summary and Recommendations

While the basic text of the Flint zoning ordinance seems adequate to handle present and future housing concerns, both interpretation of the ordinance as it applies on a case by case basis to individual properties and enforcement of the ordinance may be creating problems which tend to frustrate the goals of neighborhood preservation and choice in housing. Therefore, the following recommendations are made:

1) Investigate to what extent the zoning of land against the intent of previous plans and policies has affected residential neighborhoods.

2) Investigate the extent to which the granting of conditional use status and use variances, especially for commercial uses in residential areas, has contributed to the perceivable decline of residential areas.

3) Investigate the actual extent of violations, complaints, enforcement actions and subsequent compliance with regard to zoning (especially use) violations.

4) Examine the existing zoning ordinance for "flexibility," including, but not limited to, the possibility of initiating performance standards for some or all zoning classifications.

5) Study opportunities for establishing or strengthening present ordinance requirements relating to signage, buffering, landscaping and parking, especially when applied to commercial or industrial interfaces with residential land uses.

6) Determine from the above studies what courses of action should be taken to render zoning a more viable tool in the implementation of residential land use plan goals and objectives.

## PUBLIC-PRIVATE HOUSING PRESERVATION STRATEGIES

Local government must enlist the support and active participation of all sectors of the community in order to insure the success of housing plans and programs. Too often, the public sector formulates and promotes a set of policies or an action plan without the knowledge or cooperation of private organizations and individual citizens. This often results in failure and frustration for public officials, who stand around and ask themselves, "What went wrong?" Private sector involvement in housing problems and solutions is necessary from the problem definition stage to the end evaluation of a given program.

Involvement of the private sector requires that local government take the lead in three areas: provision of information, encouragement of active participation, and follow through on recommendations. By concentrating on these activities, the City of Flint can take an active, coordinative role in bringing private sector perceptions, influence, and ideas to bear on housing problems.

### Information Provision

Potentially, the City of Flint has one of the largest and most complete housing information data base in Michigan. Information already collected for each structure in the City is described in Illustration 11. This information could be combined to provide a City-wide profile of housing conditions and costs which would be useful as an official description of conditions in Flint and as a guide for politicians, banks, real estate firms, investors in properties, and homeowners.

The emphasis here is on City-wide data, not on comparisons between specific neighborhoods. It should be strongly stated that this informational profile would be prepared in strictest confidence, especially with regard to use of income tax records. Tax records would be used to provide aggregate data on average household size and average household income only. No names or addresses would be released or used for data aggregation purposes, although area (e.g. census tract) location keys might be appended.

An updated City-wide housing profile would provide a basis for dialogue between public and private institutions and individuals. A complete statistical picture of City housing problems and opportunities would provide the general public and investors in real estate with the same decision-making background information that is used by the City. Using these "official" statistics, housing problems could be identified and alternative approaches to solutions could be agreed upon. A uniform housing data set for the City could be useful to existing entities such as:

All branches of the city and county government
Citizen advisory groups, block clubs and neighborhood organizations
State and regional planning groups

Illustration 11

CITY OF FLINT: HOUSING INFORMATION SOURCES

| INFORMATION | DEPARTMENT | SOURCE | FREQUENCY OF COLLECTION |
|---|---|---|---|
| Overall exterior condition all structures in city | D.C.D. | ECHO (County Health Dept.) survey; U.S. Census Data | Yearly |
| Exterior and interior condition per city code | Building Inspections | Field inspections; file records | Yearly for multiples. On request, on sale, and variable for single family structures |
| Appraisal statistics | Assessment Division | Field inspections; file records | Not less than every five-six years for each structure in City |
| Occupancy status (owner-renter) household income, household size | D.C.D. | ECHO household survey | Yearly |
| | Tax Division | Income tax records | Yearly |
| Subsidized housing; aggregate characteristics of units and occupants | Flint Housing Commission | Files and applications | As necessary |

Private corporations and individual businessmen
Civic groups (Urban League, League of Women Voters, etc.)
Schools and churches

It would be most desirable for the City to encourage information exchange between these public and private organizations. This can best be done by offering what now exists in the way of public information in a more convenient form. The City should take the lead in fostering open information exchange.

Responsibility for keeping and updating housing data may logically rest with one of three public agencies: the City of Flint Department of Community Development (DCD), the City of Flint Housing Commission, or the Genesee-Lapeer-Shiawassee Region V Planning and Development Commission. The Flint DCD presently has the research personnel capabilities to compile and distribute comprehensive housing data for the City. The Housing Commission, however, has a direct concern with the administration of housing programs for the City and already would require the keeping of this information. The Region V organization would be able to combine City information with data for other outlying suburbs and unincorporated areas whose housing configurations have critical influence on housing supply and demand within the City of Flint. In addition to regional analysis, Region V could keep track of the impact of State and Federal housing programs on the entire area.

Accruing, updating, and disseminating the type and volume of housing information listed in Illustration 11 would require approximately 20 hours per week of a technically proficient, planning-oriented person's time. Analysis of such statistical information would require additional work time and would be greatly aided by computerizing the data.

Opportunities for computerizing data collected annually exist through extension of DCD's yearly contract with the Genesee County ECHO operations or through direct timesharing at discount rates with Michigan State or the University of Michigan. The City of Flint's present and proposed computer facilities are operationally-oriented and do not offer the variety of data base software necessary for analysis of multivariate trend data.

Housing data should eventually be combined, or at least be compatible with, City land use data (collected through contract by DCD) and land use inventory and/or DIME systems being constructed by the Genesee County Metropolitan Planning Commission.

Encouragement of Active Participation

In Flint, public and private organizations and individuals are interested in housing for a variety of reasons. Builders, contractors, trade unions, landlords, realtors, bankers and others make a living from the sale of shelter. The City of Flint insures the public health, safety and welfare through regulation and inspection of housing. Civic organizations and private groups aim toward improving neighborhoods.

Individual property owners want to protect their property values and to live in a comfortable and pleasant environment. Each of these groups, while pursuing its own goals, can have an impact on the goals stated in this plan.

## Task Force Approach

A previously successful method of bringing together public and private sectors to talk about housing problems and priorities has been the task force. In recent months, the Mayor's Task Force on Neighborhood Rehabilitation and the Mayor's Task Force on Redlining and Disinvestment have delineated problems in white papers and put forth a number of constructive recommendations. The basic tenets of the Rehabilitation white paper have been incorporated into the objectives of the newly reformed Flint Neighborhood Improvement and Preservation Program, Incorporated (see p. 57). While no direct actions have been taken on the Redlining study, public awareness of issues has been raised. Recommendations in this study include placing emphasis on housing rehabilitation and devising an equitable means of city service provision (see p. 51).

The task forces publicize problems, allow those with specialized expertise to work together, and give City decision-makers valuable input unavailable through normal City government channels. This approach should be continued as necessary in dealing with other major housing problems. It may also be fruitful to organize task forces or monitoring committees on a geographic basis to deal with singular problems in specific areas of the City. Bases for this type of task force already exist in block clubs, neighborhood organizations, citizen boards in designated redevelopment areas, and comprehensive master plan workshop participant groups.

The task force concept relies heavily upon both information availability, described above, and follow-up on recommendations, described below. Any group of persons assembled to study a problem will require a coordinating mechanism to supply information and to make sure that recommendations are pursued. The Citizen Participation Section of the Department of Community Development has provided this coordination in the past and should be given the resources to do so in the future.

## Tax Incentives for Property Maintenance

The City of Flint is empowered, through the recently passed Mathieu-Gast Home Improvement Act of 1976 (Michigan Public Act 293), to give property owners who make necessary, code-related repairs a "break" on their property taxes. Specifically, the legislation states:

> The Assessor (Flint City Assessor), beginning December 31, 1976, shall not consider expenditures for normal repairs and maintenance in determining the true cash value of property for assessment purposes. In no event shall the amount excluded exceed $4,000.00 each year for not to exceed three consecutive years. The following repairs shall be considered normal maintenance if they are not a part of a structural addition:

a. Outside painting
b. Repairing or replacing siding, roof, porches and steps or sidewalks
c. Repainting, repairing or replacing existing masonry
d. Replacement of awnings
e. Add or replace gutters or downspouts
f. Replace storm windows or doors
g. Insulation or weatherstipping
h. Complete rewiring
i. Replacing plumbing and light fixtures
j. New furnace replacing one of the same type or replacing oil or gas burner
k. Plaster repairs, inside painting, or other redecorating
l. New ceiling, wall, or floor surfacing
m. Removing partitions to enlarge rooms
n. Replace automatic hot water heater
o. Replacing dated interior woodwork

Note that the legislation does not cover additions or remodeling, such as finishing a basement.

The various promotions of housing rehabilitation that the City is engaged in now and considering for the future should involve some basic education for homeowners on the content and application of the Mathieu-Gast Act. Those whose incomes are too high to qualify for grants or loans under City programs should be aware that they will not be penalized immediately with higher taxes if needed repairs are accomplished. Building inspectors working in residential areas should have knowledge of the Act and/or should be furnished with a pamphlet that quotes the legislation and interprets it for property owners in Flint. In short, the City should make every effort to ensure that property owners who need repair work done understand the law.

Follow Through on Recommendations

Of public and private groups concerned with housing in the City of Flint, City government, because it represents the interests of all citizens, is in the best position to coordinate and to apply local, state, Federal, and private sector ideas and monies to housing action programs. Coordination and application of funds requires clear identification of public/private goals as well as carefully controlled management and evaluation strategies to meet objectives.

Goal Identification

A set of goals and objectives is identified in this document. For the public sector, these aims are what can reasonably be accomplished given present legal, fiscal, and manpower restraints. The private sector may see these aims as too limited, too ambitious, or not applicable to solving housing problems. As conditions in the community change over the years, and are monitored through the housing information base suggested above, the public and private sectors can work together in

establishing common goals, publicizing them, and devoting their combined resources, monetary and otherwise, toward the achievement of those goals. This is the first step in establishing a "follow through" process.

(The City has some specific restraints in the form of performance on past goals and objectives and satisfaction of Federal and State goals when using Federal and State funds. City performance with regard to the Federal Community Development Block Grant Housing Assistance Plan is particularly important. Basically, the Plan specifies the number of households by type (elderly/handicapped, low-income, large families, etc) to be helped. Fulfillment of Plan objectives is a criterion for further Federal funding.)

The importance of identifying and publicizing goals cannot be overstated. It is difficult to accomplish anything when everyone is pulling in a different direction. For example, the goal of preserving residential neighborhoods may lend support toward allocation of funds or dedication of land for small parks and playlots. It may countermand efforts to promote economic development by preventing the development of a commercial complex in or near a residential area. A balance must be established between land use and economic goals. Residential land use goals/housing needs must weigh heavily in that balance.

The mechanism for establishing and revising housing goals must allow for citizen, business, and City input. A task force or standing committee, with a permanent staff composed of personnel from the Mayor's Office and the Department of Community Development, would be a viable alternative. The group should have input into decisions regarding annual applications for Federal funding and the City of Flint operating and capital improvements budgets. Meetings should be scheduled in advance of these decisions.

### Management of Progress Toward Objectives

Management and monitoring of progress toward objectives is common in private business, especially when production units can be manufactured, quality tested, and marketed by application of common standards. However, management of service provision and concept fulfillment is more difficult. Several management methods may be applied.

For many City activities, policy is budget, and vice versa. In accord with the City Charter, the Mayor formulates an operating budget to be approved by the Council. The Chief Planning Officer formulates an annual capital agenda and capital budget. These two budgets impact on such goals as neighborhood preservation through allocation of funding for public service manpower (police, fire, sanitation) and for physical improvements such as street resurfacing and parks maintenance. Yet often an overall budget goal is "cut back 10% in all departments" or "don't raise taxes" rather than a prioritizing of needed services and funding according to need.

Budgeting and management tools such as zero-based budgeting, management by objectives, and the cost center accounting system are readily available to administrators within City Hall. Because the achievement of housing goals requires concerted effort through many different City departments and private bodies, it is recommended that each entity develop a management system suited to its own operations, but which meets the following common criteria:

1) Objectives (including programs, services, provision of housing units, etc.) should relate directly to achievement of goals (see process described above).

2) Objectives should be costed out before programs start, with multiple-year funding sources clearly identified.

3) Programs should be monitored and reports issued no less than quarterly to see if goals and objectives are being met and if expenditures are being made according to budget.

4) Accountability for the meeting of objectives should be clearly identified. Individual responsibility for program and service management should be stressed.

5) Objectives should be revised when goals are changed or when conditions warrant the discontinuation of old programs or the opportunity for starting new ones.

The above guidelines, with their emphasis on advance financial planning, monitoring, and flexibility should insure adequate follow-through on housing recommendations and avoid past administrative mistakes which have hampered both the City and the private sector in alleviating Flint's housing problems.

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# APPENDICES

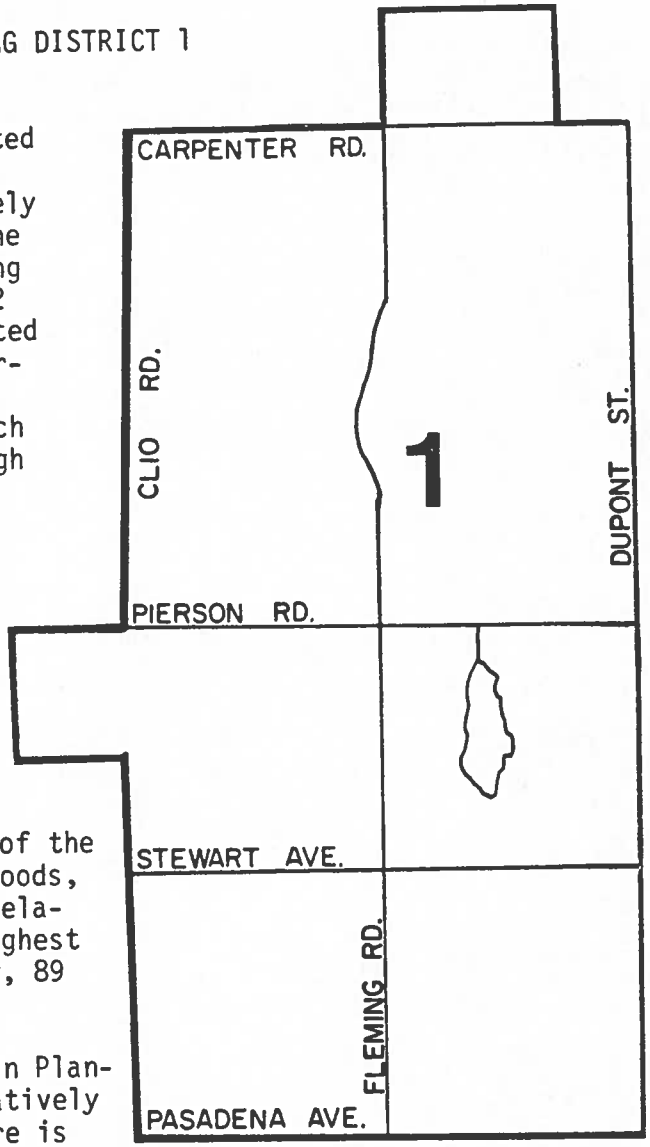
Appendix A

## PLANNING DISTRICT HOUSING PROFILES

For purposes of data aggregation and analysis, the Department of Community Development has divided the City of Flint into twelve planning districts, containing an average of about 15,000 people each. Planning district boundaries are determined by natural barriers, such as the Flint River, and by such man-made features as transportation routes and outdoor recreation facilities.

Each planning district contains areas of distinct housing characteristics and land use patterns. The following profiles offer descriptions by geographic area.

## PLANNING DISTRICT 1




Planning District 1 is located in the northwest corner of the City, and consists of predominately residential neighborhoods. Of the two square mile area that Planning District 1 encompasses, nearly 62 percent of the land area is devoted to residential uses. Over 90 percent of these residential structures were built after 1940, which accounts a great deal for the high percentage of well-maintained structures, 90 percent.

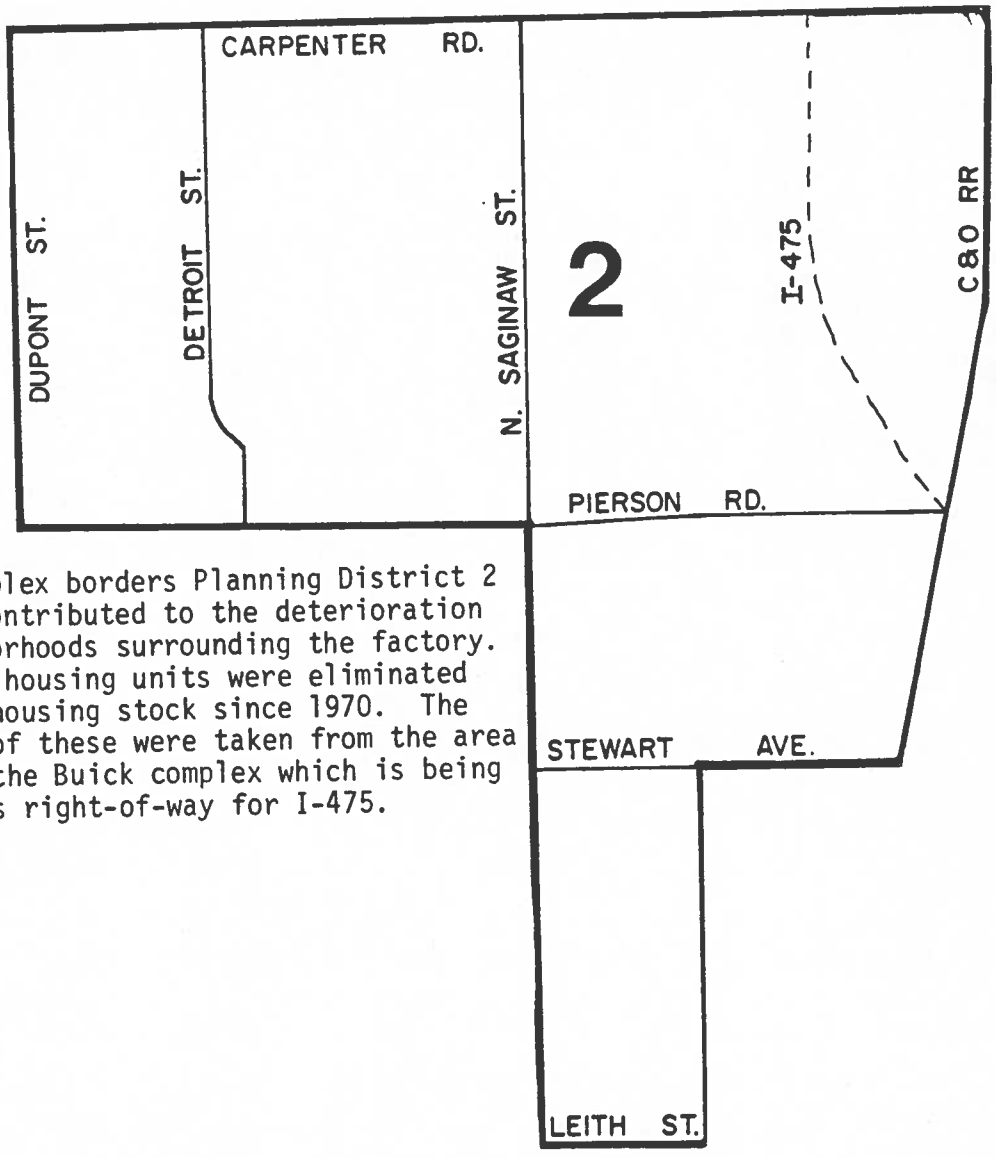
Planning District 1 is the only area within the City to show any sizeable growth since the beginning of this decade. Nearly 300 housing units were added to the existing housing stock since 1970, which helped to support an additional 2800 residents in the area. Because of the newness of most of the neighborhoods, duration at present address is relatively low despite the second highest owner occupancy rate in the city, 89 percent.

Non-residential land uses in Planning District 1 have had comparatively little impact on the area. There is no major industrial development, and commercial uses are limited to the Northwest Shopping Center and strip development along Clio Road from Dayton Street north to the city limits. The majority of the non-residential area, nearly one-quarter, is devoted to parks, schools, and churches.

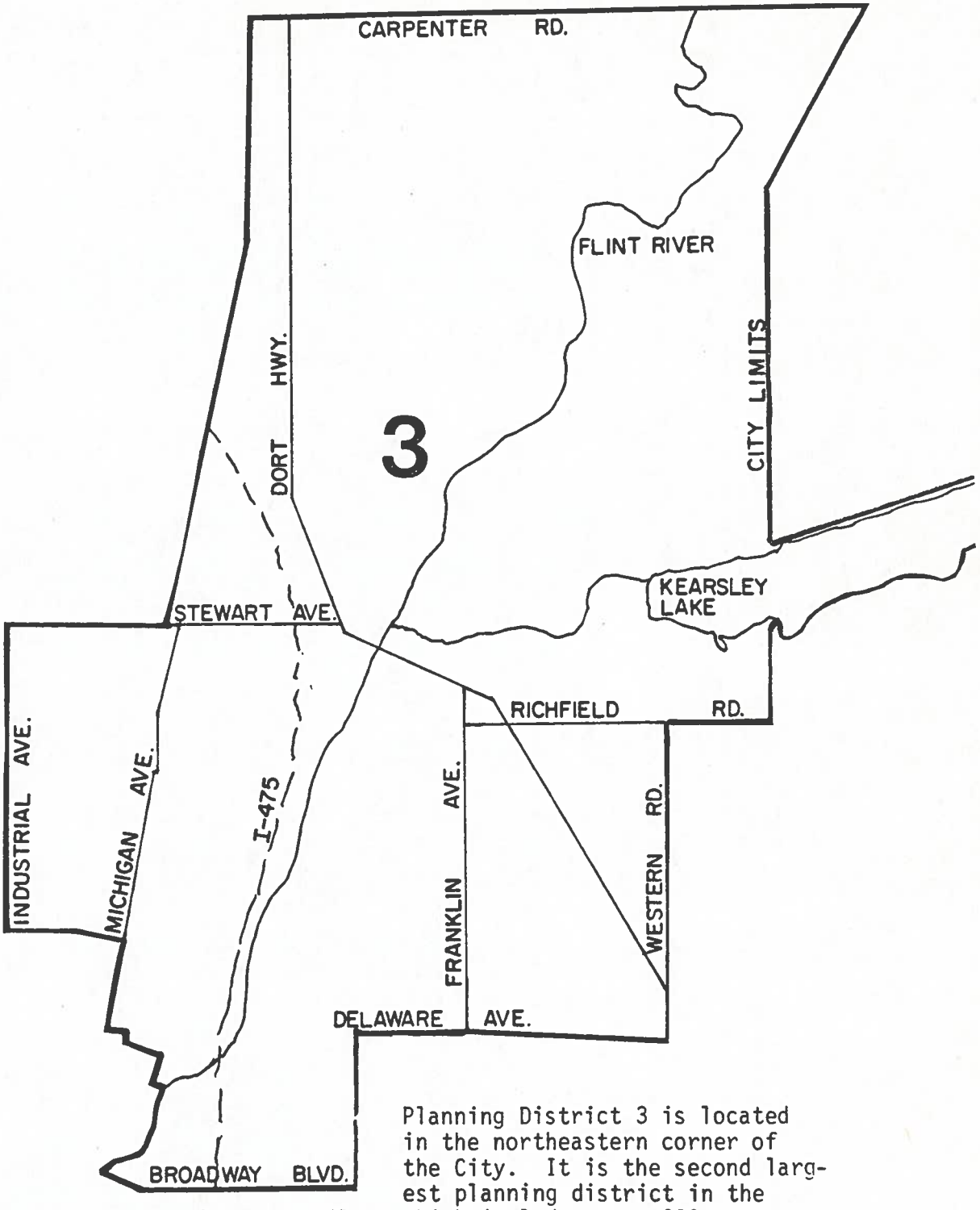
## PLANNING DISTRICT 2

Planning District 2 comprises the north central section of the City. Consisting of about 2-1/2 square miles, this district has 42 percent of its land area committed to residential uses. The general housing types are dominated by single-family structures, which account for over 11 percent of the City's single-family units. Accompanying this large number of units, however, is a vacancy rate over 12 percent, the second highest in the City.

An indicator of neighborhood stability shows that 60 percent of the households have remained at the same address for 5 or more years, despite a lower than city average owner/renter breakdown, 65 and 35 percent respectively. The high vacancy rate and the large number of rental units may account for the generally deteriorating housing maintenance of the area. Only 51 percent of the housing units are well-maintained, even though only 40 percent of the housing was built prior to 1940. Among non-residential land uses, only the northern section of Buick Motor Division, about 43 acres, is within the district. However, the remainder of the Buick complex borders Planning District 2 and has contributed to the deterioration of neighborhoods surrounding the factory. About 500 housing units were eliminated from the housing stock since 1970. The majority of these were taken from the area north of the Buick complex which is being cleared as right-of-way for I-475.



PLANNING DISTRICT 3




Planning District 3 is located in the northeastern corner of the City. It is the second largest planning district in the City covering over 4 square miles, which includes over 300 acres for Kearsley Lake Reservoir. In spite of its size, Planning District 3 has one of the lowest number of housing units in the City. Only 26 percent of the land area is developed for residential uses, the lowest in the City.

Two-thirds of the housing stock is comprised of single-family residences, while another 11 percent of the total housing units are in mobile homes. Even though the majority of the housing was built after 1940, with two large subdivisions in the northeast section not being built until the 1950's, the housing conditions are relatively poor; just over half of the units are well-maintained, while 4 percent are dilapidated. The stability of the neighborhoods, as shown by the number of owner occupants and the duration at the present address, is about average.

Around 700 units were eliminated between 1970-75 from the clearance of the St. John area, an area slated for the development of an industrial park. Some additional units were acquired south of the St. John Urban Renewal Area for the I-475 expressway right-of-way.

The majority of land area in Planning District 3 is devoted to non-residential uses. Twenty percent of the total area is set aside for open space and recreation uses. Buick, the next largest land holder, covers nearly 5 percent of the land area. However, 28 percent of the land within the planning district still remains undeveloped.

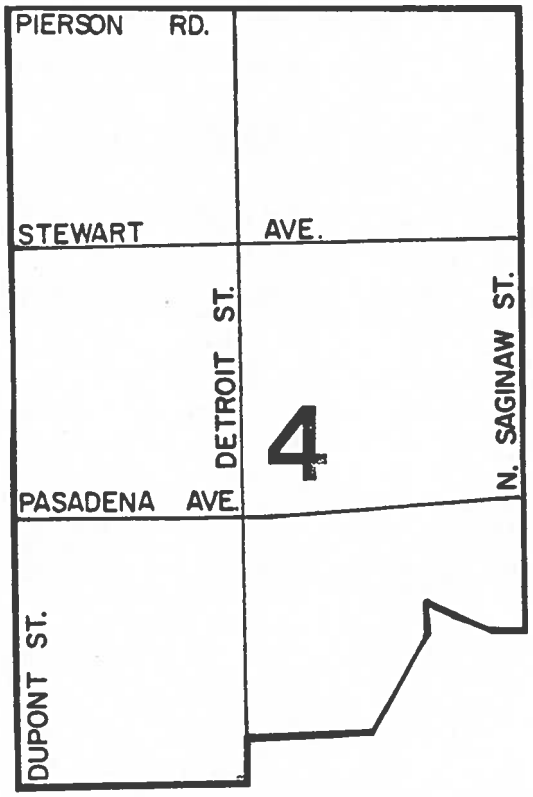
## PLANNING DISTRICT 4

Planning District 4, located west of the Buick Complex, is the smallest of all planning districts. Of its less than 1-1/2 square miles, 66 percent is covered by residential land uses. Single-family and duplex structures comprise 95 percent of the residential housing in the district.

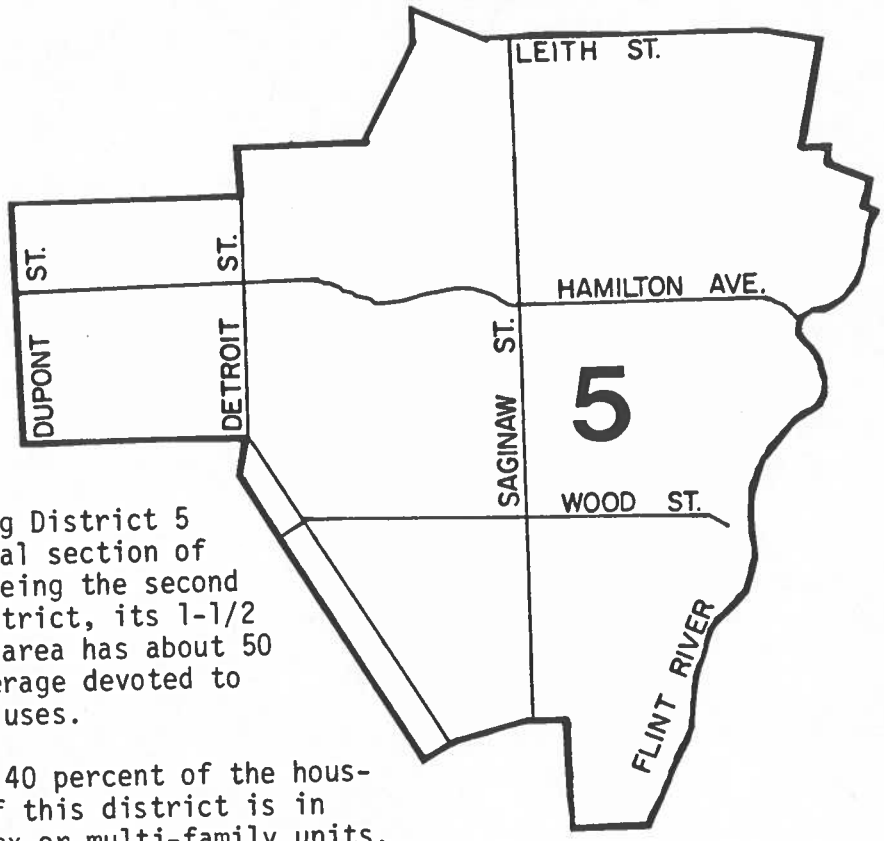
This area has shown some signs of deterioration over the past six years, despite relatively stable neighborhoods. Both the number of owner occupants and the long duration at present address are above-average for the City. However, the vacancy rate is also slightly above that for the City.

There are no major industrial or commercial uses within Planning District 4. Commercial establishments are limited to Saginaw Street and some scattered sites along Detroit Street. The Buick Complex to the east in Planning Districts 2, 3, and 5 does create an impact that is felt in Planning District 4. Several of the residential streets of Planning District 4 are heavily traveled, being used by workers commuting to and from the factory.

The major non-residential land uses in Planning District 4 are areas used by local residents. Two-thirds of the remaining area is devoted to park lands, schools, and churches.



## PLANNING DISTRICT 5




Planning District 5 is the central section of the City. Being the second smallest district, its 1-1/2 square mile area has about 50 percent coverage devoted to residential uses.

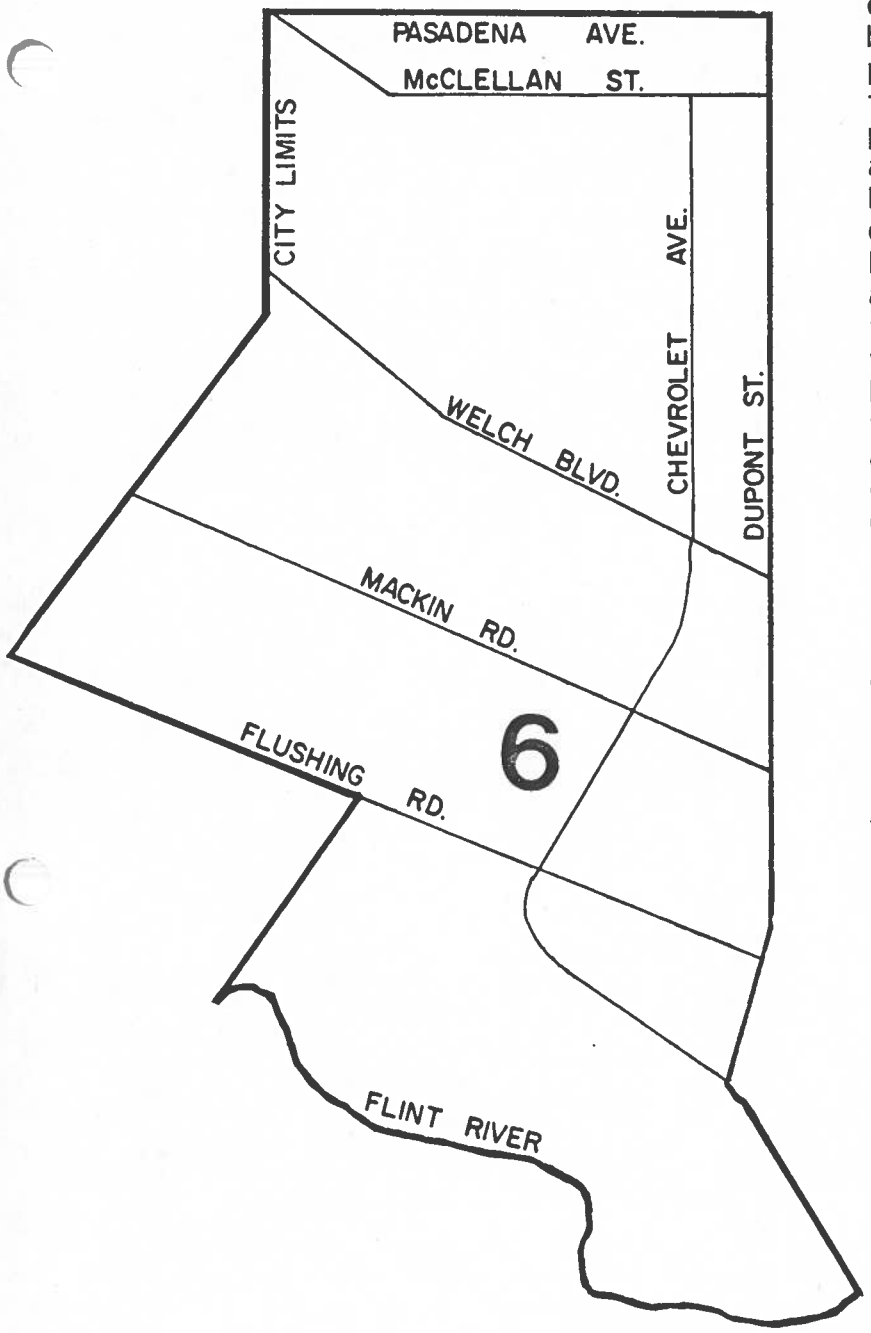
Nearly 40 percent of the housing stock of this district is in either duplex or multi-family units. Planning District 5 has only 5 percent of all single-family structures in the entire City, while containing 18.9 percent of the duplexes (the second highest percentage in the city) and 8.6 percent of the multi-units.

Planning District 5 is made up of relatively older neighborhoods. Over 70 percent of the units were built prior to 1940, with the majority being constructed in the early 1900's, as the automobile industry began to flourish. Because of this early development, lot sizes were fairly small. The average residential lot size in this area is around 4,800 square feet, the smallest average for any planning district.

With the abundance of multi-unit structures, the neighborhoods are somewhat unstable. The owner/renter breakdown is about 50/50, while 30 percent of the households were at their present address less than 2 years. Because of the large number of absentee-landlords and the age of the structures, the quality of housing has been decreasing over the years. Currently only 36 percent of the units are well-maintained, with 1.2 percent dilapidated. This percentage of dilapidated units has been cut in half since 1970, due to the removal of structures in the Doyle Urban Renewal Area. Clearance of this area containing some of the worst housing in the city, will make room for a new multi-unit housing development.

Major non-residential uses include over 100 acres of Buick manufacturing and another 50 acres of surface auto parking, of which the majority serves Buick.

# PLANNING DISTRICT 6




Planning District 6, located on the City's western boundary, contains the highest proportion of land area devoted to residential use. Over 75 percent of the two square mile area contains housing. Planning District 6 has high levels of ownership and well-maintained housing (both above the City average) in spite of the fact that more than one-half of the residential structures were built prior to 1940. Single-family housing units predominate, accounting for 98 percent of the district's housing stock and over 13 percent of the city total.

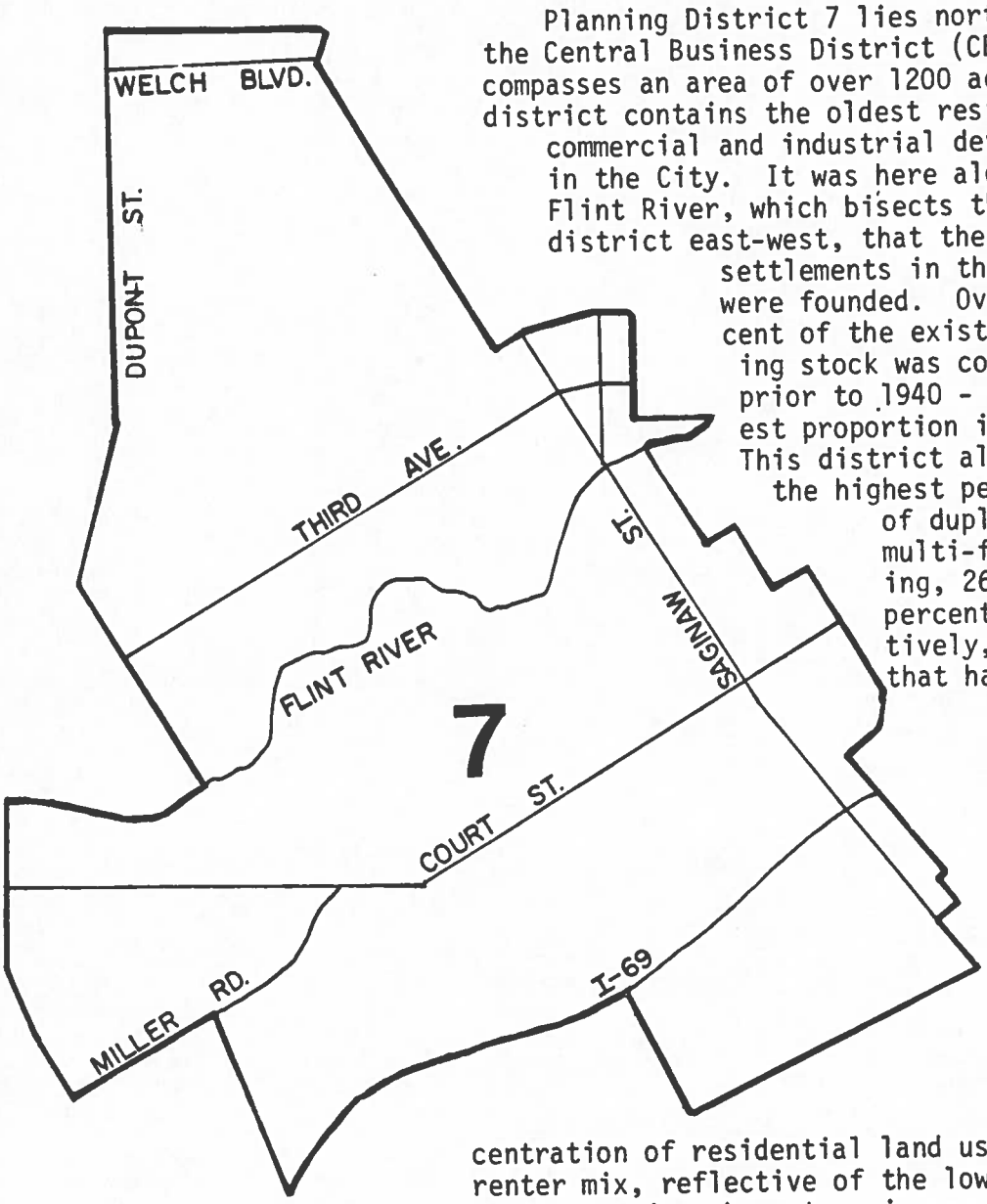
Two key indicators of stability, high percentage of ownership and long duration at present address are present here also. Both indicators have changed little over the last six years and represent levels above the average for the City.

Non-residential uses have shown little impact on the area. Industrial development is absent, and what little commercial use present is concentrated in small neighborhood shopping clusters in strip development along the city limits at Clio and Flushing Roads.

The predominance of pre-1940 housing in Planning District 6 is largely a result of two major subdivision activities that occurred in the 20's. These activities offer an opportunity to further divide the district into 3 smaller neighborhoods.

The area from Pasadena Avenue to Welch Blvd. encompasses most of the Civic Park subdivision and is characterized by small two-story and three bedroom homes on small lots, generally less than 6,000 sq. ft. Another contiguous neighborhood can be said to exist south of Welch Blvd. to Flushing Road. The residential development here is somewhat newer, on slightly larger lots containing mostly cottage-style homes. The homes from Flushing Road to the river are a mixture of the Civic Park style and some larger, more expensive three and four bedroom varieties.

# PLANNING DISTRICT 7




Planning District 7 lies north and west of the Central Business District (CBD) and encompasses an area of over 1200 acres. This district contains the oldest residential, commercial and industrial development in the City. It was here along the Flint River, which bisects the planning district east-west, that the earliest white settlements in the county were founded. Over 70 percent of the existing housing stock was constructed prior to 1940 - the highest proportion in the city. This district also contains the highest percentage of duplex and multi-family housing, 26 and 20 percent respectively, in an area that has a low concentration of residential land use. Owner-renter mix, reflective of the low single-family housing character, is approximately 50/50. Non-residential land uses have a significant impact on the residential characteristics of the district. The CBD, located in the eastern sector, predominates. The Chevrolet Manufacturing Complex adjacent to the Flint River, effectively divides the district into two separate areas on the north and south sides. Duplex-type housing is concentrated near the complex and southward. The recent construction of the I-69 expressway further isolates a group of homes located at the extreme south end of the district.

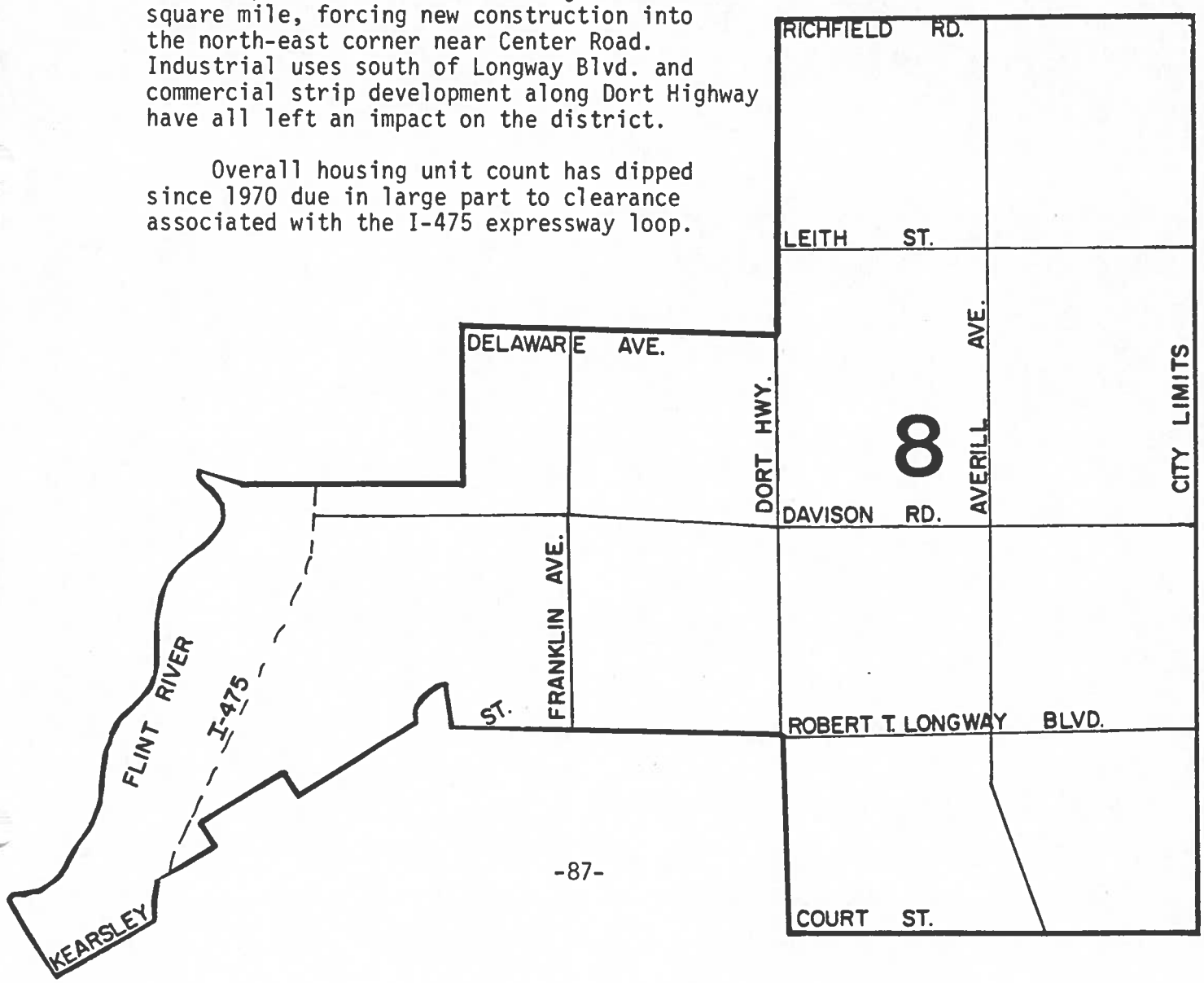
Except for the extreme north and west ends of the district, housing quality is generally poor owing to its age and a preponderance of absentee landlords.

## PLANNING DISTRICT 8

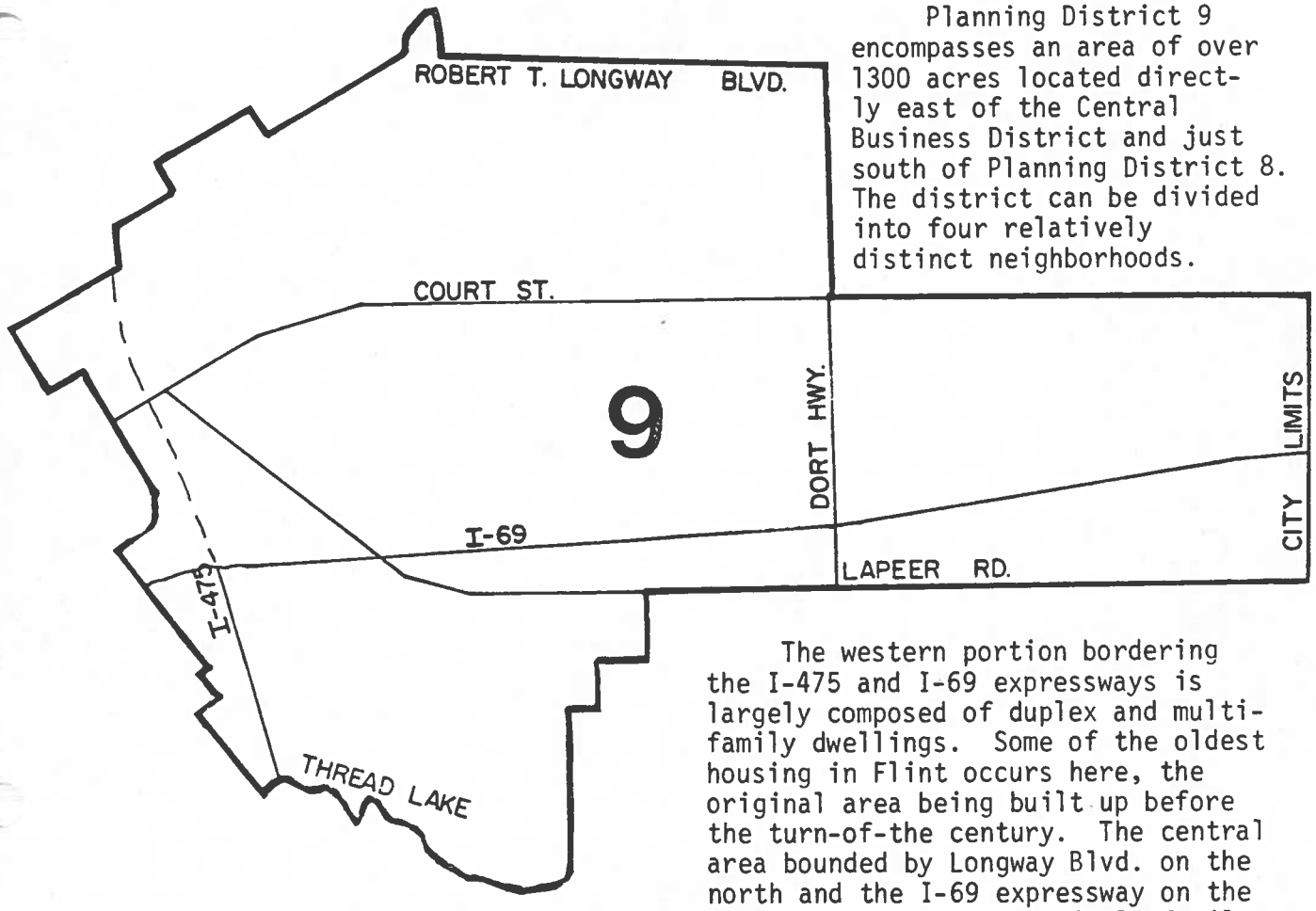
Housing in Planning District 8 represents some interesting contrasts relating to age and general conditions. Although residential development accounts for less than 50 percent of the area, it is predominately single-family owner occupied. The western segment of the district from the river to Dort Highway is older, having been developed in the 20's and 30's in response to the growth of the Buick Motor Division nearby in Planning District 3. Major duplex utilization occurs here. The dwellings are in generally poorer condition, marked by some severely deteriorated areas near the river and the I-475 right-of-way. The portion of Planning District 8 to the east side of Dort Highway represents newer, single-family cottage-style housing largely constructed during the 40's and 50's.

Residential lot sizes tend to be small in this district, averaging less than 6000 square feet. Commercial and residential uses dictated growth and expansion of the housing stocks within the area. As already noted, Buick Motor Division's growth in the first three decades of this century largely impacted the western portion of Planning District 8. Residential development east of Dort Highway was mediated by the vast A.C. Complex, which covers a large area of almost one-half square mile, forcing new construction into the north-east corner near Center Road. Industrial uses south of Longway Blvd. and commercial strip development along Dort Highway have all left an impact on the district.

Overall housing unit count has dipped since 1970 due in large part to clearance associated with the I-475 expressway loop.



## PLANNING DISTRICT 9



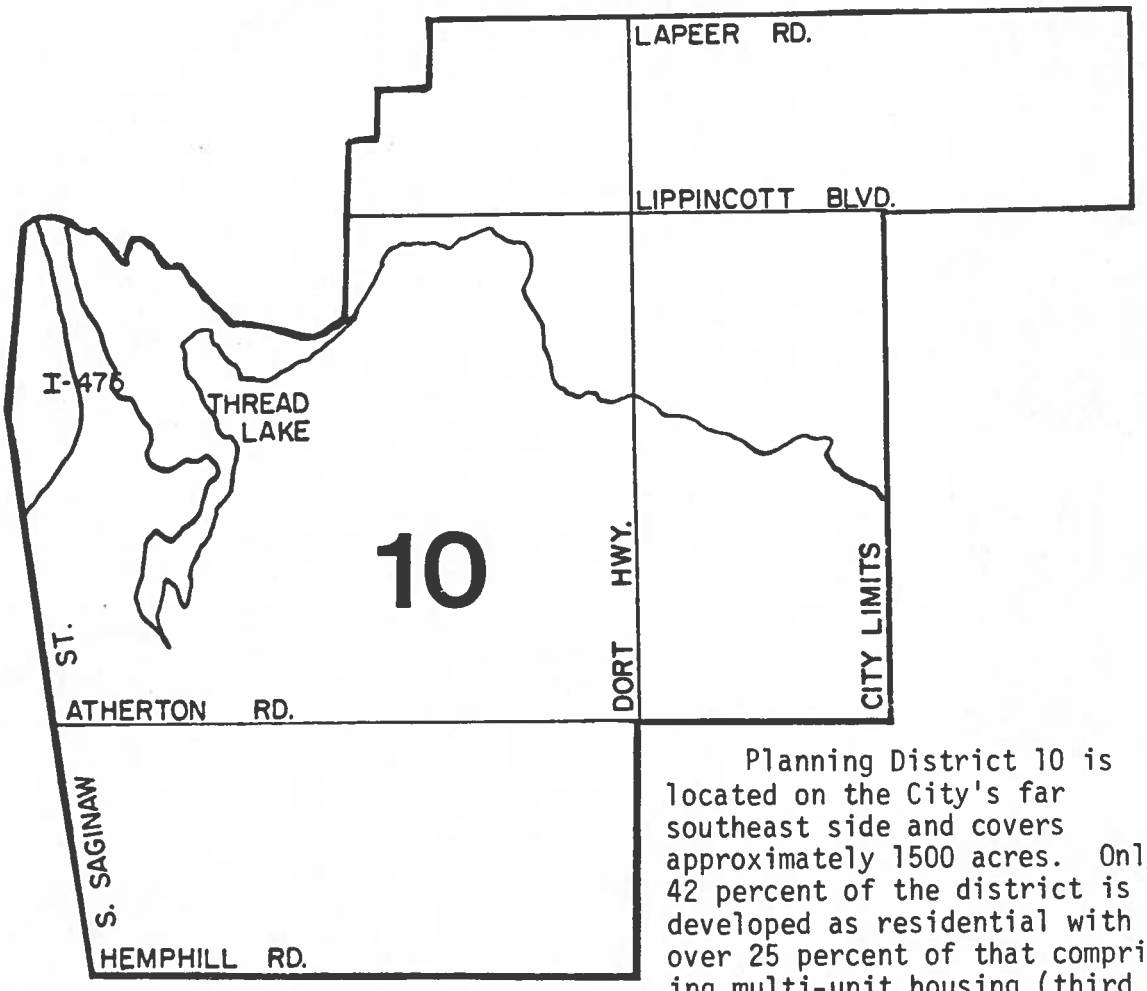

Planning District 9 encompasses an area of over 1300 acres located directly east of the Central Business District and just south of Planning District 8. The district can be divided into four relatively distinct neighborhoods.

The western portion bordering the I-475 and I-69 expressways is largely composed of duplex and multi-family dwellings. Some of the oldest housing in Flint occurs here, the original area being built up before the turn-of-the century. The central area bounded by Longway Blvd. on the north and the I-69 expressway on the south presents some of the City's best housing. Most are single-family, owner occupied structures of 2 to 3 stories. Large lots predominate in the area near the College and Cultural Center. A southern neighborhood is located at the extreme southerly corner of the district just below the I-69 expressway. This section is composed largely of medium-sized single family dwellings constructed prior to the Second World War. The average housing quality here is below the city average and far below the average for the planning district. Renters make up approximately 50 percent of the households due in large part to a Public Housing Development located on Lapeer Road at Twelfth Street. The fourth neighborhood, located adjacent to Center Road on the east end of the district, is composed almost exclusively of well-maintained, owner-occupant dwellings on large one-quarter acre parcels. Ninety-seven percent of these dwellings have been constructed since 1965.

The district exhibits two major non-residential uses. The College and Cultural Center is situated in the northwestern corner of the planning district, covering over 150 acres. Major industrial and commercial-strip uses are found the length of Dort Highway from Court Street to Lapeer Road.

Much of the less desirable housing stock has been removed from the planning district for the I-69/I-475 interchange.

# PLANNING DISTRICT 10

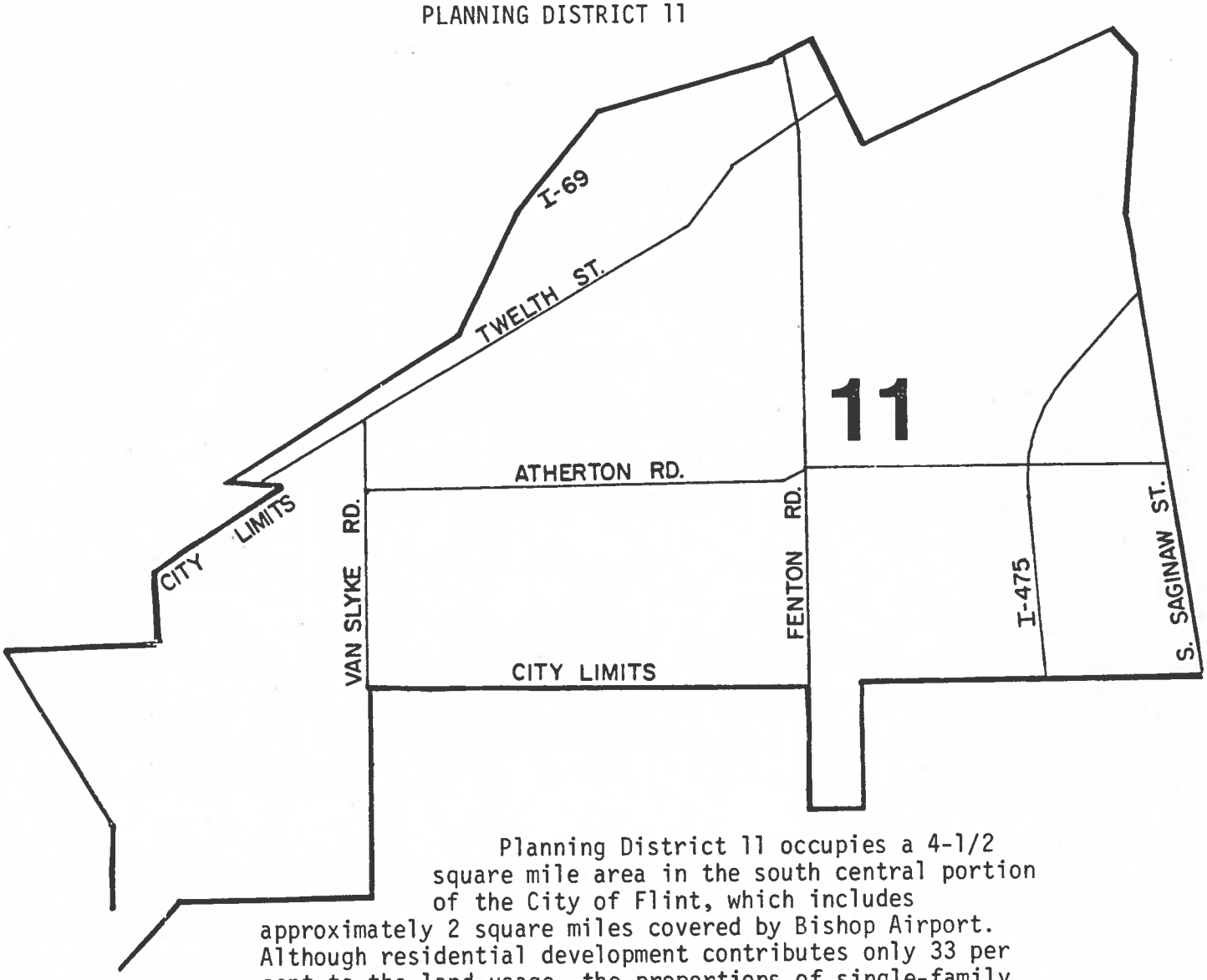



Planning District 10 is located on the City's far southeast side and covers approximately 1500 acres. Only 42 percent of the district is developed as residential with over 25 percent of that comprising multi-unit housing (third largest total in the city). Additionally, Planning District 10 contains almost 700 mobile home sites near Dort Highway and, along with Planning District 3, comprises the bulk of the trailer stock in Flint.

The housing stock is almost exclusively (84%) post-1940 in vintage, most of it being constructed along the west side of Dort Highway from Lippincott south to the city limits. A large group of apartment structures has been added also, in the area bounded by Lapeer, Lippincott, and Center Road, in the last 10-15 years. Dwelling units are of generally good quality throughout the district, in particular the area around Thread Lake near Circle Drive which is one of three areas in the city zoned for low-density residential development. Lot sizes average over 9000 square feet in Planning District 10.

Non-residential land uses are limited primarily to two. The Flint Golf Club occupies 125 acres in the west central portion of the district southeast of Thread Lake. Industrial-commercial strip development is concentrated along the full length of Dort Highway and eastward to the C&O railroad line.

PLANNING DISTRICT 11



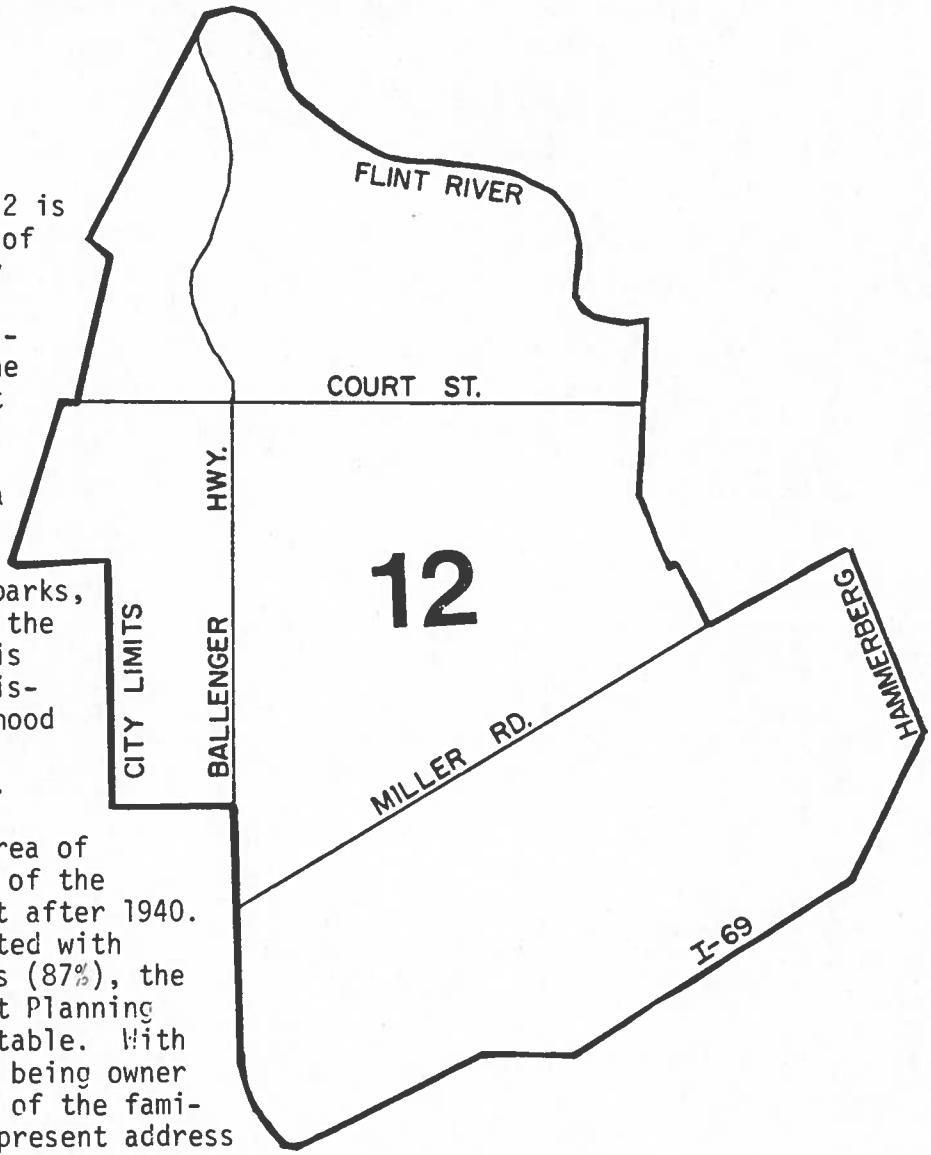

Planning District 11 occupies a 4-1/2 square mile area in the south central portion of the City of Flint, which includes approximately 2 square miles covered by Bishop Airport. Although residential development contributes only 33 per cent to the land usage, the proportions of single-family, duplex and multi-family are nearly equal. Generally, housing condition in better than the average for the City, but a small pocket of deterioration does exist in the northeast corner of the district near Saginaw and Twelfth Streets. This pocket also contains the majority of duplex-type structures. Post-1940 housing represents over 60 percent of the stock, weighted somewhat by large, post-war subdivision developments near Van Slyke and the city limits.

Both ownership and long duration at present address remain at high levels throughout the district indicating generally more stable neighborhood characteristics.

Two large industrial complexes and one school-park area dominate the peripheral regions of Planning District 11; Chevrolet V-8 Engine and Metal Fabricating Plants occupy the extreme southwest portion of the district, a Fisher Body Plant is located between Saginaw Street and I-475 on the southeast corner, and Southwestern High School and Lincoln Park abut the I-69 expressway to the north.

Some 100 units have been eliminated from the housing stock in Planning District 11 due to clearance of nine blocks for the I-475 expressway.

PLANNING DISTRICT 12




Planning District 12 is in the southwest corner of the City. Although only 51 percent of its 2-1/2 square mile area is residential developments, the remaining acreage is not devoted to incompatible uses. Thirty-four percent of the land area is taken up by schools, churches, synagogues, hospitals, cemeteries, parks, and golf courses, while the balance of the acreage is spread throughout the district in small neighborhood commercial and service-oriented establishments.

A relatively new area of development, 65 percent of the housing units were built after 1940. Predominately concentrated with single-family structures (87%), the neighborhoods throughout Planning District 12 are quite stable. With 83 percent of the homes being owner occupied and 74 percent of the families residing at their present address for 2 or more years, this has created very well-maintained neighborhoods.

There are two distinct types of residential developments here. The area north of Miller Road to Mott Golf Course consists mainly of one- and two-story, two and three bedroom houses, with average lot sizes of 6,500 square feet. The development south of Miller Road has average residential lot sizes of nearly one-half acre. The houses are mainly two- and three-story structures with four or more bedrooms.

## APPENDIX B

## SUBSIDIZED HOUSING PROGRAMS

Subsidized housing programs were developed to aid low- and moderate-income families in obtaining safe and decent housing in a suitable living environment. Since the mid 1960's, several federal government housing assistance programs have evolved in the Flint area. These programs included both single- and multi-unit developments, with some being purchase subsidies, while others are rental assistance.

### Section 235

The 235 program was designed to allow a family to purchase a new or substantially rehabilitated home, with a minimum down payment. These homes are single-family residences scattered throughout the City, whose mortgages were insured by the Federal Housing Administration (FHA), providing that the family and the home met the requirements established by HUD. This homeownership assistance program made it possible for low- and moderate-income families to get away from the project type developments, which most prior government programs operated through. Over 1,000 homes were built in Flint under this program between 1969 and 1972.

### Section 236

The 236 program was established to provide rental housing for lower income families. This program includes multi-family subsidized rental and cooperative housing developments where periodic subsidy payments are made to the sponsor of these developments. The amount of the subsidy depends on the family's ability to pay, which is determined by the income of the family and the number of children living at home. Three 236 developments were built in the City, for a total of 344 units.

Both the 235 and the 236 programs were established under Sections 235 and 236 of the Housing and Urban Development Act of 1968.

### Section 221 (d) (3)

Another federally subsidized program created by the Housing Act of 1968, was Section 221 (d) (3), Mortgage Insurance for Low- and Moderate-Income Housing Projects. The purpose of this act was to finance the construction or rehabilitation of rental or cooperative single- or multi-unit structures for families, the elderly or handicapped persons with low- or moderate-income. In Flint, the five projects sponsored under the 221 (d) (3) program, are all multi-unit cooperatives, containing a total of 514 units.

### Section 202

A program that originated out of the United States Housing Act of 1937, as amended (most recently by the 1974 Housing and Community

Development Act) was the 202 Program for Elderly and Handicapped. This program was designed to provide direct loans to finance the construction of rental housing developments to serve elderly and handicapped persons of either low- or moderate-incomes.

Flint has only one 202 project, which is for the elderly and contains 110 units.

Section 8

This program is authorized by Section 8 of the United States Housing Act of 1937, as amended by the Housing and Community Development Act of 1974. Section 8 is a federal program providing direct cash assistance, in the form of rent subsidies, to sponsors of these rental units for low- and moderate-income residents.

The objective of this program is to aid lower income families in obtaining decent, safe and sanitary housing through participating sponsors. Eligible sponsors include public housing agencies for existing housing, and private non-profit organizations and public agencies for substantial rehabilitation and new construction.

Currently no units have been built in the Flint area under this program, however, construction is scheduled to begin in the fall of 1977 on 235 units (200 of which are for the elderly), with an additional 39 family units proposed for the fall of 1979, all in the Doyle Area.

Section 265

Section 265 was designed to reestablish the homeownership subsidy program, the old 235 program, with some important revisions. The revised program will be limited to new and rehabilitated single-family homes and condominium units. It provides assistance payments that will reduce monthly homeowner payments. The revised program also includes a number of other modifications, increased mortgage limits on eligible units and limitations on the concentration of subsidized units, all of which are designed to avoid or minimize problems which developed under the old 235 program.

No units are currently sponsored under this new homeownership program, however, some residences could be built in Flint in early 1978.

Flint Housing Commission

The City of Flint also has a local public housing agency, the Flint Housing Commission, which is delegated its authority and duties under Act 18 of the Extra Session of 1933, as amended, State of Michigan. The Flint Housing Commission was created by the City Council in 1964, to work with the Department of Housing and Urban Development as the local housing authority to construct, subsidize and administer the low-rent housing program.

The Flint Housing Commission functions as the developer and landlord of the low-rent housing program. As the developer, the Commission

has the responsibility for the planning, financing and construction of new units. As landlord, its responsibility lies in the general management of the properties, which would include leasing units, collecting rent and maintaining the properties under its jurisdiction.

The operating income for the housing program is derived from the rent income received from the tenants, plus funds provided by the Annual Contributions Contract with the Housing Assistance Administration Office of HUD. The Annual Contributions Contract provides the local housing authority with additional revenues needed to effectively maintain and operate properties, while keeping the rent levels low.

The Commission operates three multi-unit family projects consisting of 468 units, with an additional 445 units of elderly housing are spread throughout the City in five multi-unit projects. As an alternative to the "project type" concentrated public housing, the Commission owns and operates 133 scattered site single-family homes.

## APPENDIX C

## A PROPOSED CAPITAL IMPROVEMENTS BUDGETING AND PROGRAMMING PROCESS

The Capital Improvement Budgeting process is the way the City of Flint allocates resources toward major, non-recurring, physical facility expenditures. The process is important not only because of the sums of money involved, but because it links together several City departments and impacts upon the direction of major projects undertaken by the City. Major capital investments are physical expressions of City policy and visible results of tax dollars spent.

In addition to a Capital Improvements Budget, Michigan Public Act 285 of 1931 mandates preparation of a six year Capital Improvements Program. This short-range schedule of projects, estimated costs, and estimated funding sources enables decision-makers to see the fiscal impacts of multi-year project funding and to prioritize on the basis of funding by fiscal year.

The Flint City Charter specifies that the Chief Planning Officer shall prepare proposals related to all development matters, including the "capital agenca and capital budget." The following discussion proposes a general capital programming and budgeting process which can be followed annually. The process offers a flexible framework for decision-making, while providing specific time periods during which decisions must be made. The role of the Chief Planning Officer is to initiate the process, to make sure all actors understand their responsibilities, to resolve problems with the workings of the process, to monitor the meeting of deadlines, and to report to the Mayor concerning progress in completing the annual cycle.

### I. Setting Goals and Objectives

The Capital Improvement Budget (CIB), which can be considered the first year of the Capital Improvement Program (CIP), should be incorporated into an annual cycle based on a determination of desirable goals and objectives by the citizens of Flint and their elected and appointed representatives. Goal-setting is a continuous process and, in the case of physical development, should be within the purview of:

1. The Mayor, who translates the citizens' wishes into administrative programs.

2. The Council, where members vote for programs and projects desired by their constituents.

3. The Mayor's City-Wide Advisory Committee, where members influence the way Federal dollars will be spent.

I. Other entities, such as Federal and state agencies (through establishment of new requirements or more strengent standards), citizen interest groups, and business groups, may influence the setting of goals.

An example of the type of goals which might be set in the first step of a CIB cycle can be taken from the recently published 701 Master Planning Workshop Report. Problems identified by citizens included (ranked by priority):

1. Transportation Problems (congestion, speeding, circulation)

2. Residential Deterioration )property maintenance, rehabilitation needed)

3. Capital Improvement Deficiencies (street, sidewalks, sewer and flooding problems)

4. Parks and Recreation Deficiencies

The allocation of funds for capital improvements has a direct bearing on problems 1, 3, and 4, and a vital supportive relationship to the stabilization of residential neighborhoods.

Setting concrete objectives for meeting goals is the job of department professionals, directed by the Mayor. For example, on priority problem number three above, the Director of Public Works (DPW) and the City Engineer, working with consultants, have determined that sewer back-up problems can probably be minimized by increasing the number of relief sewers and retention facilities. The construction of these physical facilities would be the objective. In dealing with the problem of park deficiencies, the Parks Board and its staff, using professional standards, may determine that a reasonable objective would be to provide 10-minute walking distance access to open play fields for all city residents. Acquiring enough suitable land would be the objective.

II. Establishing Measures, Collecting and Analyzing Data

While setting goals and objectives are the most critical <u>cenceptual</u> parts of the capital budgeting process, the establishment of measures of need and the collection and analysis of hard, measurable data provide the <u>factual</u> basis for allocation of dollars. The Responsive Municipal Services Program (RMSP), which the Department of Community Development proposes to initiate as part of the capital budgeting process, furnishes a framework for measurement of effectiveness of and deficiencies in service provisions.

The RMSP enables department professionals in association with Department of Community Development (DCD) research analysts, to set up measurements of how effectively services are being provided to each of the city census tracts. For example, in the case

of sewer back-ups, the measurement of number of reported back-ups per 1,000 housing units can be calculated by census tracts from DPW records. By application of statistical methods for determining the City norm for these incidences of back-ups and how far each planning district deviates from that norm, geographic priorities for the installation of capital improvements can be set.

Anyone familiar with sewer and water problems in Flint would be able to state that the Northwest area has a flooding and back-up problem, but the RMSP factually identifies the comparative magnitude of the problem and isolates specific areas with service deficiencies. In the parks example, above, service deficiency areas may not be readily identifiable to "lay" citizens. While some may be of the opinion that, "the east side needs more parks," the RMSP would be able to factually determine specific problem areas by assessing, for example, what percentage of the population in each census tract is not within walking distance of a playfield. The information generated by the RMSP is very helpful in explaining capital budgeting priorities to citizens.

In establishing measures or capital investment deficiencies, the RMSP is not limited to data already on file in the various departments, Measurements meaningfully related to judging the effectiveness of service provision are not always available or kept up to date due to departmental lack of record-keeping manpower or overemphasis on "operations" and underemphasis on monitoring the effectiveness of those operations. New forms of measurement -- visual surveys, or random sample surveys of service users, for example--may be initiated and carried out by department staff and research analysts in DCD.

(Note: The RMSP is very adaptable to measurement of the efficiency of most city services--crime prevention and protection, fire protection, housing and commercial code enforcement, among others. These areas can be added to the RMSP process as soon as the capital budget areas are "up and running.")

III. Forming the Capital Improvements Program: Targeting, Costing, Funding

The RMSP provides data for setting service "targets" for minimizing deficiency ratings. In the case of the sewer back-up problem, the target might be to bring a census tract 1 to within two standard deviations of the City norm, to within one standard deviation of the City norm, or to the City norm. With other types of problems the target may be an overall effort to lower or raise the City norm. Targets chosen will vary depending on the type of measurement used and the opinions of those involved

in this activity (Mayor, Department Heads, Research Analysts, and Planning Commission) as to whether alternative targets seem practically feasible. A time frame for meeting targets should also be constructed.

Once a target or "desirable score" has been established, the alternatives available for achieving this score must be costed out and determinations as to the likelihood of available funding must be made. Alternatives will be judged as to 1) their impact on conditions in their respective census tracts, that is, on how much the census tract deficiency score will be lowered, and 2) their impact on the City norm.

The process of targeting, costing and funding should result in a list of projects specifically designed to meet the most pressing capital improvement needs in the City. Organization of the list by fiscal year start-up date provides automatic prioritization and the beginnings of a Capital Improvements Program. The program is reprioritized as projects are completed, as the results of each fiscal year's RMSP measurement and data analysis become available, and, gradually, as goals and objectives change. In this way, a continuous, prioritized listing of all capital improvements projects is kept for reference.

Funding of capital improvements is accomplished by tapping many sources, including the Public Improvements Fund, the Community Development Block Grant, and private sector monies. These funding sources must be identified and incorporated into the Capital Improvements Budget.

IV. Finalizing and Presenting the Budget for Approval

Expenditures for capital improvements, because they are distinct from both normal City operating expenses and other cost (maintenance, for example), should be integrated with, but published separately from, the Mayor's annual budget. Elected or appointed representatives and the general public should be able to identify expenditures for major improvements without being forced to sift through the Public Improvements Fund, the General Fund, and special departmental listings to get a complete picture. A separately published document with spending clearly related to goals and objectives will be easier for decision-makers to comprehend. This should speed up the whole budgeting process, and enable officials to make more informed decisions on the allocation of City monetary resources.

V. Monitoring for Efficiency

While the RMSP monitors the effectiveness of Capital Improvements in remedying service deficiences, the cost center accounting function in the Finance Department can play an important role in

monitoring efficiency of spending for each capital project. Quarterly cost center reports for each project will enable the Mayor and Department Heads to be aware of over- or under-expenditures affecting the fiscal year completion date for each project. For example, construction of certain relief sewers may be scheduled for FY 78 and FY 79; work is initialed in FY 78 but problems with contractors and exceptionally bad weather conditions may delay completion until FY 80. Cost center reports on amount being spent on this project, coupled with department head judgment on how long completion is expected to take and how much over or under budget the project will be, should allow reprioritization of the project in the annual revision of the Capital Improvement Program.

## PROPOSED BUDGET CYCLE FOR CAPITAL IMPROVEMENTS

| Activity | Description | Principal Actors | Fiscal Year Time Frame |
|---|---|---|---|
| Goal Definition | A continuous process of defining City goals; accomplished through the City Charter, 701 Master Plan, State of the City Address, Mayoral Policies | Mayor, Council, Citizens | Continuous |
| Determination of Objectives | Delineation of specific courses of action through which goals may be achieved. A yearly statement of capital improvements programming objectives is issued through the Mayor's office. | Mayor, Chief Planning Officer, Department Heads, Planning Commission, Council | July |
| Establish Performance Measures | Formulate work plans for the execution of the Responsive Municipal Services program; collect data; perform data analysis. | Chief Planning Officer, Dept. Heads, Dept. Staffs, DCD Research Analysts | August-November |
| Establish Funding Availability | Inventory all sources of funding quarterly to determine amount of money available for capital projects in upcoming FY and through next five FYs. | Finance Director, Finance Staff, Chief Planning Officer, Mayor | January<br>April<br>July<br>October |
| Determine Capital Project Cost Efficiency | Issue quarterly cost center reports reflecting dollar amounts spent for ongoing capital projects to determine cost efficiency and money required for completion. | Budget Officer, Dept. Heads, Project Managers, Chief Planning Officer, Mayor | January<br>April<br>July<br>October |
| Set Targets for Upcoming FYs | From the RMSP document and other materials, determine specific performance targets which can be reached through capital budgeting for upcoming fiscal years. | Chief Planning Officer, Mayor, Planning Commission, CAC, Department Heads, Finance Director, Budget Officer | December |
| Establish Costs | Formulation, by department heads and staffs, of specific proposals to meet targets set in 6.0. Prioritization of these proposals by FY results in a six-year capital improvement program. | Chief Planning Officer, Budget Officer, Finance Director, Mayor, Department Heads, Department Staffs | January-February |
| Produce Upcoming FY Capital Budget | Determine exact costs and funding sources for first year of capital improvements program; budget and illustrative materials are reviewed by all principal actors in activities 1.0 through 7.0. Final budget document is produced. | Chief Planning office, Budget Officer, Finance Director, Mayor | February-March |
| Incorporate Capital Budget into Mayor's Budget | | Mayor, Budget Officer | March-April |

# 3

# COMMERCIAL

PREPARED BY THE DEPARTMENT OF COMMUNITY DEVELOPMENT, CITY OF FLINT, MICHIGAN

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# ABSTRACT

TITLE: COMMERCIAL ELEMENT

PREPARED BY: CITY OF FLINT DEPARTMENT OF COMMUNITY DEVELOPMENT, DIVISION OF PLANNING AND PROGRAM DEVELOPMENT

SUBJECT: COMMERCIAL DEVELOPMENT IN THE CITY OF FLINT

DATE: NOVEMBER, 1978

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ABSTRACT: THIS ELEMENT IS CONCERNED WITH COMMERCIAL LAND USE IN THE CITY OF FLINT. IT STATES THE GOALS, OBJECTIVES, CONDITIONS AND RECOMMENDATIONS FOR ADOPTION IN THE CITY'S COMPREHENSIVE MASTER PLAN. IN AN INCREASINGLY COMPETITIVE MARKET, BUSINESS PEOPLE MUST PROVIDE PLEASING CONVENIENT SPACES AND OFFER DESIRABLE GOODS AND SERVICES TO ENCOURAGE PEOPLE TO SPEND MORE OF THEIR INCOME IN THE COMMUNITY. THE PHYSICAL PLAN DEVELOPS THE ORGANIZATION AND COMPOSITION OF COMMERCIAL AREAS IN THE CITY BALANCING THE CITY'S NEEDS AND THE REQUIREMENTS OF BUSINESSES. THE CENTRAL BUSINESS DISTRICT IS EMPHASIZED SINCE IT IS THE LARGEST AND MOST DIVERSIFIED CONCENTRATION OF COMMERCIAL ACTIVITY.

THE PREPARATION OF THIS REPORT WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT; CPA-MI-05-28-0386.

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# SUMMARY


o Introduction

Commercial activity (the sale of goods and services) can be differentiated on the basis of its function(s), service area and physical form. Commercial firms are located in:

- o Linear Commercial Districts
- o Neighborhood Shopping Centers
- o Community and Regional Shopping Centers
- o Scattered Sites
- o Downtown

o Goal

The goal of the commercial element is to provide for an increase in the scale of commercial activity in Flint.

o Policies

The five policies put forth in this element are:

1. Promote the under-developed sectors of the local economy.
2. Encourage the adaptive reuse of vacant commercial buildings and consolidate mutually supportive commercial uses.
3. Promote the downtown as the center of commercial activity.
4. Minimize land use conflicts involving commercial property.
5. Provide for efficient transportation to and from commercial areas.

o Objectives

1. City government should, through its development strategies and resource allocation, lever private capital to strengthen the commercial sector.
2. Expand the Commercial Revitalization Program, now operating as a pilot project in the N. Saginaw Street area.
   - Coordinate the Commercial Revitalization Program with a capital improvement program in the area.
   - Use the tax abatement provisions of P.A. 255 of 1978 in conjunction with the Commercial Revitalization Program.

- Offer the maximum tax abatement period (twelve years) to firms that reuse commercial structures and a lesser period for new commercial buildings.

3. Improve the variety of functions in the downtown.

   - Increase housing opportunities in the downtown.

   - Support legislation to provide tax abatement for downtown apartment buildings.

   - Encourage and assist the Downtown Development Authority's projects, including Riverfront Center and Center City Plaza.

4. Limit the scale and nature of new businesses locating in linear commercial districts and neighborhood shopping centers.

   - When possible, relocate inappropriate businesses out of residential areas.

   - Where possible, cluster intensive commercial uses together.

   - Require screening, hedging and berming to minimize visual impacts where commercial uses abut neighborhoods.

5. Ease pedestrian/vehicular conflict within commercial centers.

   - Make commercial centers accessible to the handicapped, pursuant to P.A. 8 of 1973, by constructing sidewalk ramps.

   - When possible, the City should ease parking problems at commercial centers.

   - Continue to upgrade the Mass Transit Authority (MTA) service, retaining downtown as the central point of transfer.

o Trends and Conditions

A. Economic Overview

The number of commercial firms in the City of Flint has declined 12.7% from 1975 to 1978. Local employment in the commercial sector is about 7% below the statewide average due to the dominance of manufacturing industries in the area.

The vacancy rate for commercial and manufacturing units is 19.77%.

When local retail sales are divided by local disposable income (on a per capita basis), the Flint market "captures" only 52.69% of local disposable income. This capture rate is the lowest among comparable Michigan markets such as Lansing, Grand Rapids and Saginaw.

B. Linear Commercial Districts

Many commercial buildings in linear commercial districts are economically or structurally obsolete. These units have a detrimental influence on surrounding residential property. Rehabilitation and reuse of these structures is encouraged.

C. Neighborhood Commercial Centers

Property maintenance is a problem at some neighborhood commercial centers. Through city code enforcement and monitoring by neighborhood residents, this problem can be minimized.

Future land use conflicts involving neighborhood commercial centers can be reduced by ensuring that only firms of an appropriate scale and nature are allowed to abut residential property.

D. Community and Regional Shopping Centers

The principal problem facing shopping centers in Flint is the relative decline in business volume due to changing shopping habits and buying patterns. In-city shopping centers have not remained competitive with the outlying centers. Local centers must stress their advantages (such as close proximity to dense populations of city residents) and develop new marketing concepts.

E. Scattered Sites

An unknown amount of commercial activity is located on various scattered sites throughout the city. In some cases, these businesses are existing non-conforming uses, conditional uses or use variances granted under the zoning code. Scattered site commercial use can have a negative impact on adjoining land uses, especially residential areas.

F. Downtown

The Downtown Land Use Plan relates existing and proposed functions to a geographical area. Riverfront Center, Autoworld, Center City Plaza and expanded housing opportunities are four proposed land uses for the downtown.

Downtown development is emphasized in this element because a dynamic downtown can have many positive ramifications for the entire city and metropolitan region. A good example of this is the development strategy used in the Riverfront Center Project. The Mott Foundation's equity investment in the name of Flint Neighborhood Improvement and Preservation Project (NIPP) will enable NIPP to rehabilitate Flint neighborhoods for years to come.

## I. INTRODUCTION

Commercial activity is the sale of goods and services by private individuals and groups. This includes wholesale and retail trade as well as the service industry.

Commercial activity can be differentiated on the basis of its function(s), service area and physical form. Commercial firms are located in:

- o Neighborhood Shopping Centers
- o Community and Regional Shopping Centers
- o Linear Commercial Districts
- o Downtown
- o Scattered Sites

Neighborhood shopping centers are commercial facilities (usually a grocery store, drug store or laundry) located in residential areas. These centers are usually less than five acres in size and have a service area radius of one-half mile.[1]

Community and regional shopping centers offer a variety of goods and services for comparison shopping. They usually are of a unified design, provide off-street parking and have a service area radius of four miles.[2]

Linear commercial districts are lines of separate commercial establishments fronting major thoroughfares. Each business usually has its own entrances from the street and its own parking lot. Most are retail and service businesses. Automotive activities (including gasoline stations), retail food stores and eating and drinking establishments are the most common types of businesses in linear districts.

The Downtown supplies a variety of goods and services for the metropolitan area. Although it is a regional shopping center, downtown is discussed separately in Section IV.

An unknown amount of commercial activity occurs on various scattered sites throughout the city. In some cases, these businesses are existing non-conforming uses, conditional uses or use variances granted under the zoning code.

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[1] Urban Planning and Design Criteria; Joseph Dechiara/Lee Koppleman

[2] Ibid

## II. GOALS AND OBJECTIVES

### A. Goal

The goal of the commercial element is to provide for an increase in the scale of commercial activity in Flint. The business community is encouraged to provide desirable goods and services in aesthetically pleasing and appropriate locations in order to capture a greater share of local disposable income.

### B. 1.) Policy

1. The City should promote the under-developed sectors of the local economy.

   The economy of the Flint area is dominated by manufacturing industries. The entire commercial sector is under-developed in Flint when compared to state-wide levels.

   Objectives

   + City government should, through its development strategies and resource allocation, lever private capital to strengthen the commercial sector.

   Recommendations

   o The City should encourage the Riverfront Center Project, Center City Plaza and other complementary developments such as Autoworld, that would benefit the commercial sector.

   o A data gathering and monitoring system should be implemented that will indicate changes in the occupancy of commercial buildings and the number and location of commercial firms in Flint. This information is essential for sound economic planning purposes.

   o Promote a joint government-business information dissemination program to supply timely data for sound market analysis to the public.

     Unwise business decisions often result in vacant, blighted commercial structures.

   o Identify areas that are suitable for commercial redevelopment.

   o Initiate a program for the land banking of prime commercial development property.

- o Assist the Flint Area Convention and Tourist Council, the Chamber of Commerce, the Center City Association and other business-oriented groups.

2.) Policy

It shall be the policy of the City to encourage the reuse of structurally sound vacant commercial buildings and the consolidation of mutually supportive commercial uses.

The reuse of vacant commercial structures can be less expensive than new construction. Achievement of this policy would facilitate the diversification and renewal of shopping centers and linear commercial districts, instead of the further expansion of strip development. A program of reuse would increase the viability of existing commercial areas while minimizing the potential negative land use impacts of new development.

Objectives

- + Expand the Commercial Revitalization Program, now operating as a pilot project in the N. Saginaw Street area.
- + Coordinate the Commercial Revitalization Program with a capital improvement program in the area.
- + Use the tax abatement provisions of P.A. 255 of 1978 in conjunction with the Commercial Revitalization Program.
- + Offer the maximum tax abatement period (twelve years) to firms that reuse commercial structures and a lesser period for new commercial buildings.

Recommendations

- o Study the feasibility of adopting a commercial rehabilitation ordinance for Commercial Revitalization Target Areas.
- o Increase the inspection of commercial buildings and determine the cost of rehabilitation or demolition of vacant commercial buildings.
- o Identify future target areas for the Commercial Revitalization Program.
- o Assess the long-term impact of commercial tax abatement programs.

- o Assist small business people in securing low-interest loans to remodel commercial establishments.

- o When a Commercial Redevelopment District (CRD) is proposed for tax abatement purposes insure that:

  a. The existing zoning is appropriate for the new use and no CRD is created as a non-conforming or conditional use.

  b. The property and/or proposed use conforms to the Master Plan and Neighborhood Development Plan.

  c. No CRD includes property that adversely affects surrounding land uses unless the expressed intent of the project is, in part, to mitigate such objectionable influences.

  d. When appropriate, reasonable special conditions are attached to the issuance of a CRD that these special conditions be agreed to in writing by the applicant(s) prior to creation of the CRD.

3.) Policy

It should be the policy of the City to promote the downtown as the center of commercial activity for the area and capitalize on its unique character and amenities. A dynamic downtown offers many positive economic, social and pyschological benefits to the entire city and metropolitan region. Downtown development can increase community pride and reverse the spread of core-area blight because blight and population instability reflect people's perceptions of their city. A full-service downtown can also provide shorter travel distances (an increasingly important factor as energy costs rise) for the majority of city residents. The Downtown is discussed in greater detail in Section IV.

Objectives

+ Improve the variety of functions in the downtown.

+ Increase housing opportunities in the downtown.

+ Support legislation to provide tax abatement for downtown apartment buildings.

+ Encourage and assist the Downtown Development Authority's projects, including Riverfront Center and Center City Plaza.

+ Ensure that future public/private developments offer adequate off-street parking and ease of access.

+ Implement the Annual Downtown Data System (ADDS) to record the impact of new developments on the economic health of downtown.

Recommendations

o Protect the close-in residential neighborhoods of downtown.

o Encourage projects that will complement other downtown developments.

o Encourage the Center City Association to undertake activities such as group advertising, promotion, maintenance standards and similar business hours.

o Encourage the use of vacant storefronts for advertising space by nearby merchants.

o Maintain downtown security.

o Promote the downtown as a twenty-four hour multi-functional activity center.

o Support the river beautification program as the major open space amenity in the downtown.

4. Policy

It shall be the policy of the City to minimize land use conflicts between commercial property and residential property. The City should strive to optimize the use of all property. Land use conflicts harm neighborhoods and threaten the long-term viability of the business(es) and the city. By encouraging the predominant or optimum use of an area, land use conflicts can be minimized. Where intensive commercial use restricts the residential environment, commercial firms should be clustered together. When commercial uses abut viable residential neighborhoods, firms of an appropriate scale and nature should be encouraged.

This objective can be accomplished by adopting a more suitable zoning code and by offering economic incentives, such as tax abatements, tax increment financing, low-interest capital through the sale of Economic Development Corporation bonds, land write-downs and development packaging. Opportunities for government intervention are greatest when: 1) redevelopment projects change the land use in an area, 2) when businesses consider the reuse of a structure, the relocation to another structure, or the expansion of an existing structure, and 3) when new commercial developments are planned.

Objectives

+ Limit the scale and nature of new businesses locating in linear commercial districts and neighborhood shopping centers.

+ When possible, relocate inappropriate businesses out of residential areas.

+ Where possible, cluster intensive commercial uses together.

+ Require screening, hedging and berming to minimize visual impacts where commercial uses abut neighborhoods.

Recommendations

o Identify areas that are appropriate for commercial clustering and redevelopment.

o The City must actively pursue partnerships with the private sector. By offering economic incentives, the City can better influence land use decisions.

o Neighborhood groups should be encouraged to inform the Department of Community Development of serious land use conflicts within their areas. The conflict could be resolved through cooperation between the residents, the business(es) and the City.

o Regulate new commercial development along service roads.

o Restrain the expansion of commercial enterprises into residential areas.

o Assist the Planning Commission and Zoning Board of Appeals in making sound long-term land use decisions.

o Formulate a land development manual to guide the public through the development process. Also establish a procedure for handling all permits, licenses and zoning matters from a single office.

o Support the formation of neighborhood groups and encourage their participation in land use actions affecting the community.

o Adopt an ordinance on the scale and character of new commercial development to insure compatibility with the surrounding area. Include better sign ordinance standards.

- o Strengthen the buffering requirements of the ordinance to visually screen the impact of commercial development from an abutting residential use.

- o Clarify site plan review authority over commercial sites which change uses.

- o Consider the adoption of zoning code improvements.

- o Improve coordination between the Department of Community Development and the Economic Development Corporation so that the City can exert a greater influence on select land use decisions.

5.) Policy

The fifth policy is to provide efficient transportation to and from commercial areas. Viable commercial enterprizes must be accessible and the level of accessiblity must be tied to the intended use and the area. Neighborhood centers need the easiest pedestrian accessibility while shopping centers and linear commercial districts need the easiest vehicular accessibility. Transportation and parking requirements should be evaluated in terms of the intended service area. The business concerns of sales and services must be balanced with the overall impact on the community.

A lack of sufficient off-street parking and ingress and egress problems bother many commercial centers. Off-street parking may be increased at many commercial centers by businesses jointly buying vacant lots or deteriorating buildings for this purpose. If not adjacent, this lot would be only a short walk from a number of businesses. This off-street parking could then be buffered from adjacent non-commercial property.

Objectives

- + Ease pedestrian/vehicular conflict within commercial centers.

- + Make commercial centers accessible to the handicapped pursuant to Public Act 8, of 1973, by constructing sidewalk ramps.

- + When possible, the city should ease parking problems at commercial centers.

- + Continue to upgrade the Mass Transit Authority (MTA) service, retaining Downtown as the central point of transfer.

Recommendations

- o Support the development of pedestrian malls and a skywalk system between activity centers in the downtown.
- o Increase efforts to eliminate barriers to pedestrian and bicycle movement to neighborhood centers. Promote: sidewalk improvement, sidewalk ramp construction, crosswalk definition and bicycle lanes.
- o Study the feasibility of extending the hours of operation of the MTA. Investigate a public transit system that would connect activity centers such as the City/County Government Center, U of M, Doyle area, retail core, parking areas and other developments as they are built.
- o Determine the feasibility of providing MTA shuttle service for people who park at "commuter" lots located on the perimeter of downtown.
- o Ensure that new commercial developments provide sufficient off-street parking, and completely revise parking requirements of the ordinance.

C. Policy Summary

The five policies put forth in the commercial element are:

1) Diversify the local economy.

2) Reuse vacant commercial buildings and consolidate mutually supportive commercial uses.

3) Promote the downtown.

4) Minimize land use conflicts involving commercial property.

5) Provide efficient transportation to and from commercial areas.

## III. Present Trends and Conditions

### A. Economic Overview

The number of commercial firms in the City of Flint declined 12.7% between 1975 and 1978. The following table represents data collected by R.L. Polk and Company as of March, 1978.

Commercial Firms in the City of Flint

| Category | 1975 | 1978 | Percentage Change |
|---|---|---|---|
| Total | 3978 | 3474 | -12.7% |
| - Wholesale | 130 | 138 | + 6.2% |
| - Retail | 1191 | 1031 | -13.4% |
| - FIRE[1] | 529 | 373 | -29.5% |
| - Service and Professional | 1854 | 1696 | - 8.5% |
| - Other | 274 | 236 | -13.9% |

A map showing the percentage change in commercial firms for 1975-1978 by census tracts is attached.

The Polk data also indicates that the vacancy rate for commercial and manufacturing units is 19.77%.

Commercial employment is overshadowed by manufacturing employment in Flint compared to statewide 1978 Michigan Employment Security Commission figures.

Employment by Sector:

| | Michigan 45.17% | Flint 38.44% |
|---|---|---|
| Commercial | | |
| -FIRE | 4.01 | 2.78 |
| -TCU[2] | 4.22 | 3.03 |
| -Services | 16.10 | 13.30 |
| -Retail | 16.04 | 15.43 |
| -Wholesale | 4.8 | 3.9 |
| Manufacturing | 32.3 | 43.70 |

The City has the opportunity to diversify the local economy by creating favorable business conditions. The public/private investment in the University of Michigan-Flint, Riverfront Center, the Citizen's Bank Office Building and

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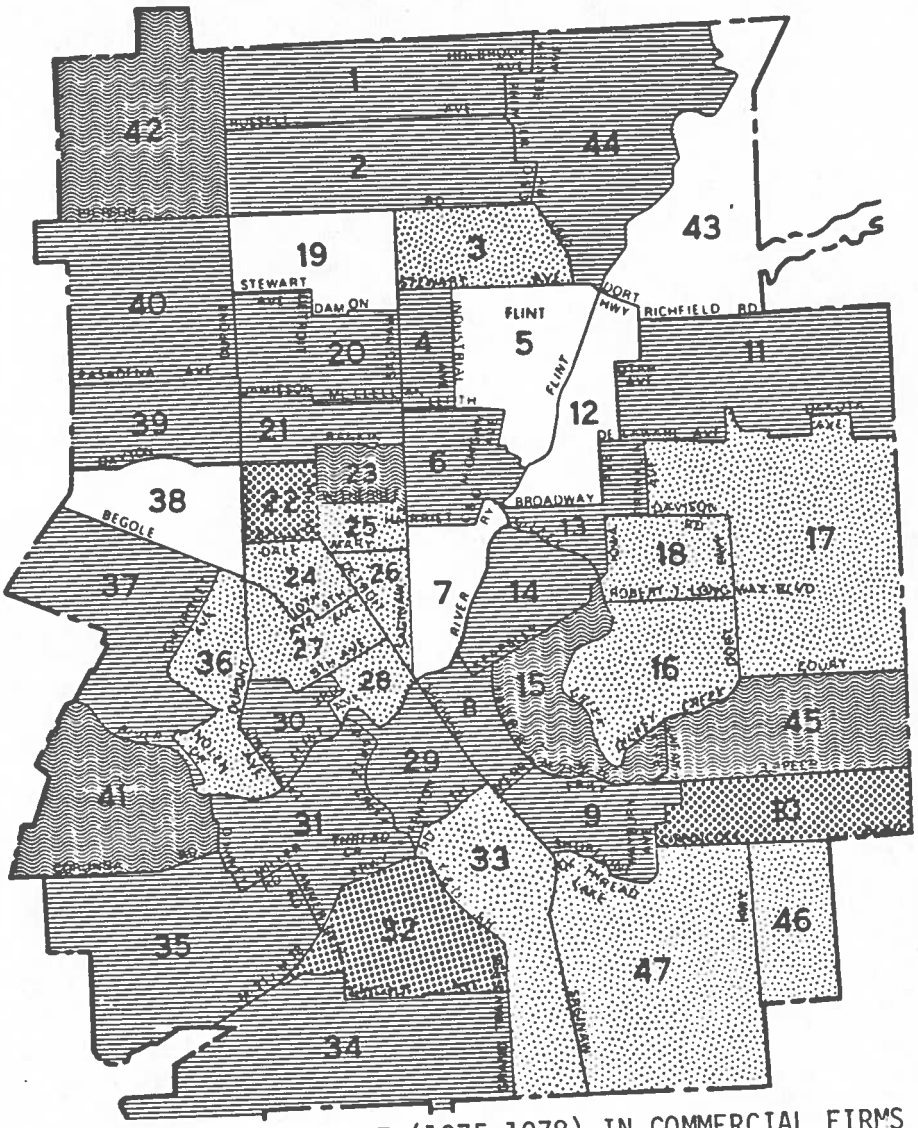
[1] FIRE - Finance, Insurance, and Real Estate

[2] TCU - Transportation, Communications, and Utilities

Center City Plaza will have a good influence on retail, service and office employment. Other government action, including economic and community development, can be used to encourage growth in other commercial sectors. An Economic Development Corporation bond sale could raise low-interest capital for an air freight warehouse at Bishop Airpark, or a Community Development Block Grant could be used to create an appropriate environment for commercial use.

The Flint market does not capture as large a percentage of local disposable income as do other metro areas in the state. Sales and Marketing Management's Survey of Buying Power, 1977, indicates that when local retail sales are divided by local disposable income (on a per capita basis) the Flint market "captures" only 52.69% of local disposable income. This capture rate is the lowest among comparable Michigan markets such as Lansing, Grand Rapids, and Saginaw.

Sales and Marketing Management's Survey of Buying Power ranks Flint as the eighth most affluent market in the nation and projects a 66.5% increase in average household disposable income for 1981 and a 49.8% increase in retail sales by that time.




PERCENTAGE CHANGE (1975-1978) IN COMMERCIAL FIRMS

- Census Tracts That Gained Firms
- Census Tracts With No Net Change
- Census Tracts With a 10% or Less Decrease
- Census Tracts With a 10-25% Decrease
- Census Tracts With a Greater Than 25% Decrease[1]

[1] Census Tracts 5 and 7 were greatly impacted by urban renewal relocations.

B. Linear Commercial Districts

The physical condition of linear commercial districts is generally poor. The most efficient way to increase the scale of commercial activity, while minimizing the negative impacts of new development, is by encouraging the reuse of structurally sound vacant commercial buildings.

Many commercial buildings are economically and/or structurally obsolete. This situation has arisen due to the following factors: 1) old age, 2) a decline in the population density in the surrounding area, 3) competition from out-lying commercial centers and 4) out-dated marketing practices.

Vacant and poorly maintained commercial buildings have a detrimental influence on surrounding residential property.

Linear commercial districts that do not have enough off-street parking can alleviate this problem by clearing obsolete buildings and constructing screened parking lots.

The following data was derived from a 1977 Department of Community Development field survey. It indicates the poor structural condition of some of the linear commercial districts in the City of Flint.

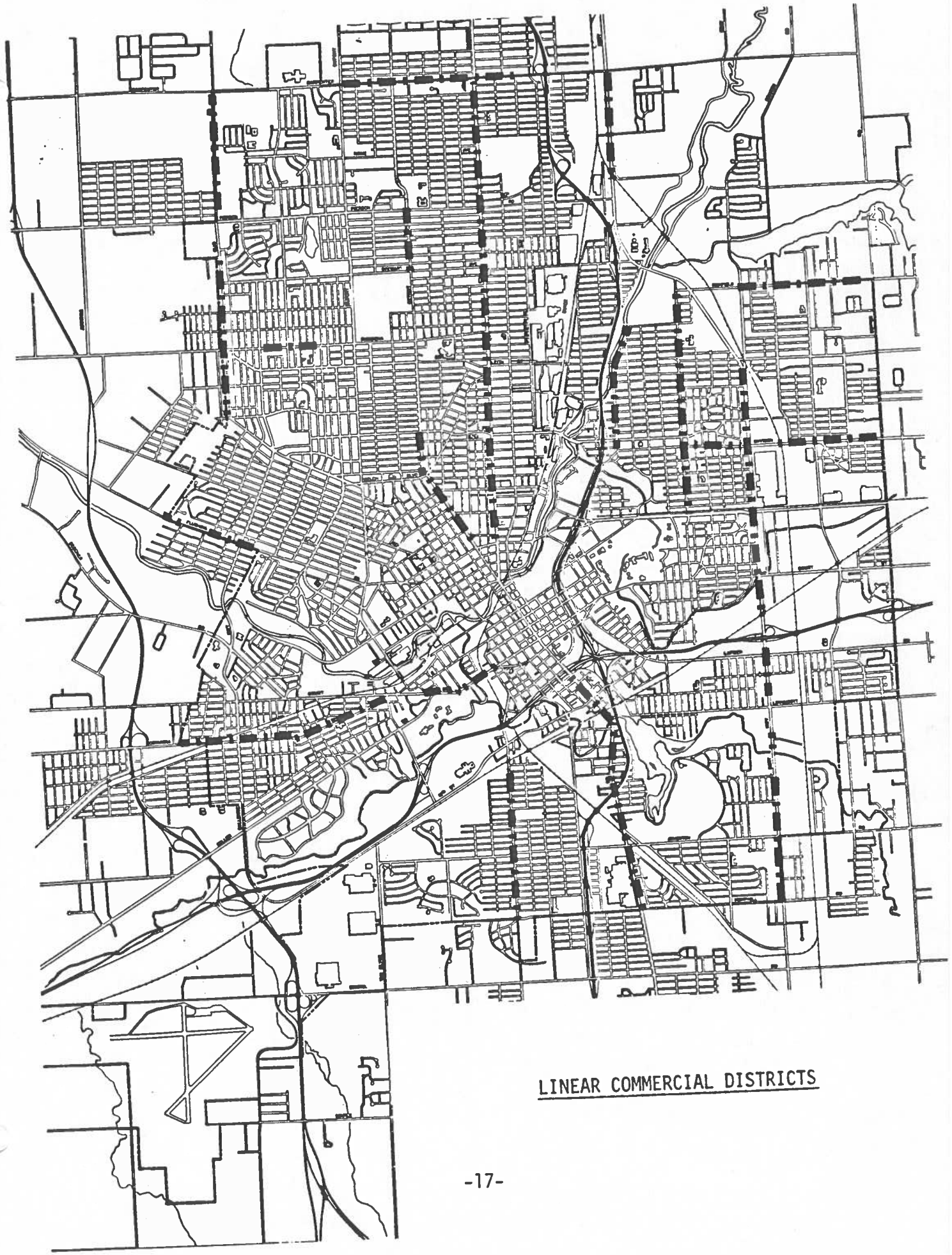
A map showing the location of linear commercial districts is attached as illustration 3.

Illustration 2

## Structural Condition of Linear Commercial Districts

| Street | Total Units | % Needing Rehabilitation or Demolition | % Vacant | % in Good Condition |
|---|---|---|---|---|
| 1. Lewis | 32 | 69 | 25 | 31 |
| 2. N. Saginaw (First Ave. to Carpenter Rd.) | 240 | 44 | 19 | 56 |
| 3. S. Saginaw (Seventh St. to Hemphill Rd.) | 106 | 40 | 16 | 60 |
| 4. Detroit | 42 | 38 | 14 | 62 |
| 5. Franklin | 72 | 31 | 18 | 69 |
| 6. N. Dort (Longway to Carpenter Rd.) | 105 | 29 | 11 | 71 |
| 7. Carpenter | 8 | 25 | 13 | 75 |
| 8. Fenton | 49 | 16 | 4 | 84 |
| 9. Davison | 101 | 13 | 4 | 87 |
| 10. Pasadena | 11 | 9 | 0 | 91 |
| 11. W. Court | 27 | 6 | 4 | 94 |
| 12. S. Dort (Longway to Hemphill) | 130 | 5 | 4 | 95 |
| 13. Corunna | 82 | 5 | 2 | 95 |
| 14. Richfield | 37 | 3 | 0 | 97 |
| 15. Clio | 104 | 2 | 10 | 98 |
| 16. Flushing | 32 | 0 | 3 | 100 |

Illustration 3



LINEAR COMMERCIAL DISTRICTS

C. Neighborhood Commercial Centers

Neighborhood commercial centers provide goods and services primarily to nearby residents. The most common businesses in neighborhood centers are grocery stores and drug stores. Their service area is generally a one-half mile radius.[1]

The neighborhood commercial centers are listed on the following page. For the purpose of this plan they are defined as being five acres or less in size.

Property maintenance is a problem at some neighborhood commercial centers. Through city code enforcement and monitoring by neighborhood residents, this problem can be minimized.

Future land use conflicts involving neighborhood commercial centers can be minimized by ensuring that only firms of an appropriate scale and nature are allowed to abut residential property and by providing adequate screening and buffering.

A map showing the location of the neighborhood commercial centers is attached as illustration 5.

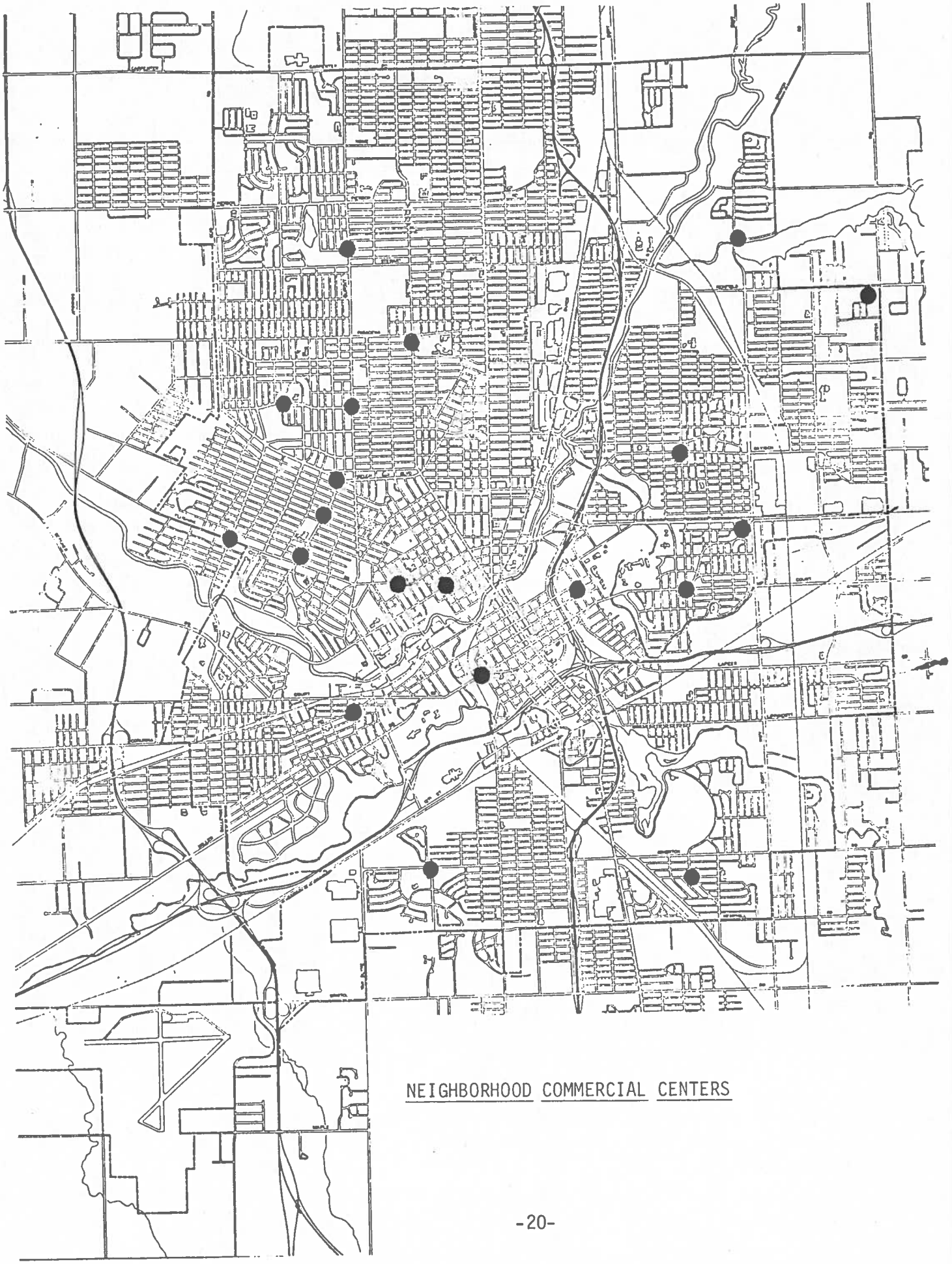
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[1]Source: Urban Planning and Design Criteria; Joseph Dechiara/Lee Koppelman

Illustration 4

| Neighborhood Commercial Centers Location | Site in Acres |
|---|---|
| 1. Dupont at Flint Park Blvd. | 4.20 |
| 2. Western and Layton Blvd. | 1.29 |
| 3. Detroit and Dewey Sts. | 2.82 |
| 4. Dupont and Dayton Sts. | 1.82 |
| 5. Chevrolet and Welch Blvd. | .65 |
| 6. Chevrolet between Flushing Road and Sloan Street | .46 |
| 7. Chevrolet and Mackin Rd. | .61 |
| 8. Dayton and Delmar Sts. | 1.39 |
| 9. Ballenger and Flushing Rd. | 1.81 |
| 10. Fifth Avenue and Stevenson St. | 1.92 |
| 11. Third Avenue and Grand Traverse St. | 3.43 |
| 12. Corunna and Durand St. | 1.08 |
| 13. Davison and Franklin Ave. | 1.80 |
| 14. Richfield and Center Rds. | 4.45 |
| 15. Court and Ann Arbor Sts. | 1.78 |
| 16. S. Dort and R.T. Longway Blvd. | 4.20 |
| 17. Thomson and Second St. | 1.80 |
| 18. Court and Franklin Ave. | .61 |
| 19. Circle and Leta St. | .64 |
| 20. Atherton and Hammerberg Rds. | 4.88 |

Illustration 5



NEIGHBORHOOD COMMERCIAL CENTERS

## D. Community and Regional Shopping Centers

Community and regional shopping centers attract customers from a much wider area than do neighborhood commercial areas. The radius of the service area for shopping centers can extend four miles or more.[1]

Unlike some of the older linear commercial districts, physical obsolescence is not the primary problem with community and regional shopping centers. These centers were generally constructed in the 1960's and are in good structural condition. The principal problem facing the shopping centers in Flint is the relative decline in business volume due to changing shopping habits and buying patterns.[2] Newer suburban shopping centers offer conveniences such as ample free parking, climate-controlled mall environments and a large number of quality stores.

The shopping centers in the city have not remained competitive with the outlying centers. To improve their competitive position, local shopping centers must emphasize their advantages over suburban centers and develop new marketing concepts. One advantage of the in-city shopping centers is their proximity to dense populations of city residents. With ever-increasing transportation costs, this factor could again benefit in-city centers as it did before the days of high-speed expressway transportation. Shopping centers must also launch new, vigorous marketing campaigns designed to capture a greater share of local sales.

A good example of this is the case of the Dort/Small Mall on S. Dort Highway. Built in the mid-sixties, the Dort Mall was one of the first enclosed malls in the area. As the "art" of shopping center development progressed, the Dort Mall suffered from the competition of newer, bigger malls that have two or three "anchor" stores that "pull" a large number of shoppers. The Dort Mall, through an innovative marketing campaign, turned its biggest disadvantage (its small size and lack of "anchor" type stores) into a positive advertising theme. The Small Mall has improved its appearance, increased the number of small, specialty-type stores and upgraded the quality of its merchandise, and business has never been better.

Although the downtown is a regional shopping center, it is discussed separately in Section IV.

A map showing the location of the area's shopping centers and a list of the centers are included on the following pages.

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[1] Source: Urban Planning and Design Criteria; Joseph Dechiara/Lee Koppelman.

[2] The U.S. Census of Business: Retail Trade Statistics for 1967-1972 show that the sales in the SMSA (Genesee & Shiawassee Counties) increased 58.2% while sales in the City of Flint grew only 23.5%.

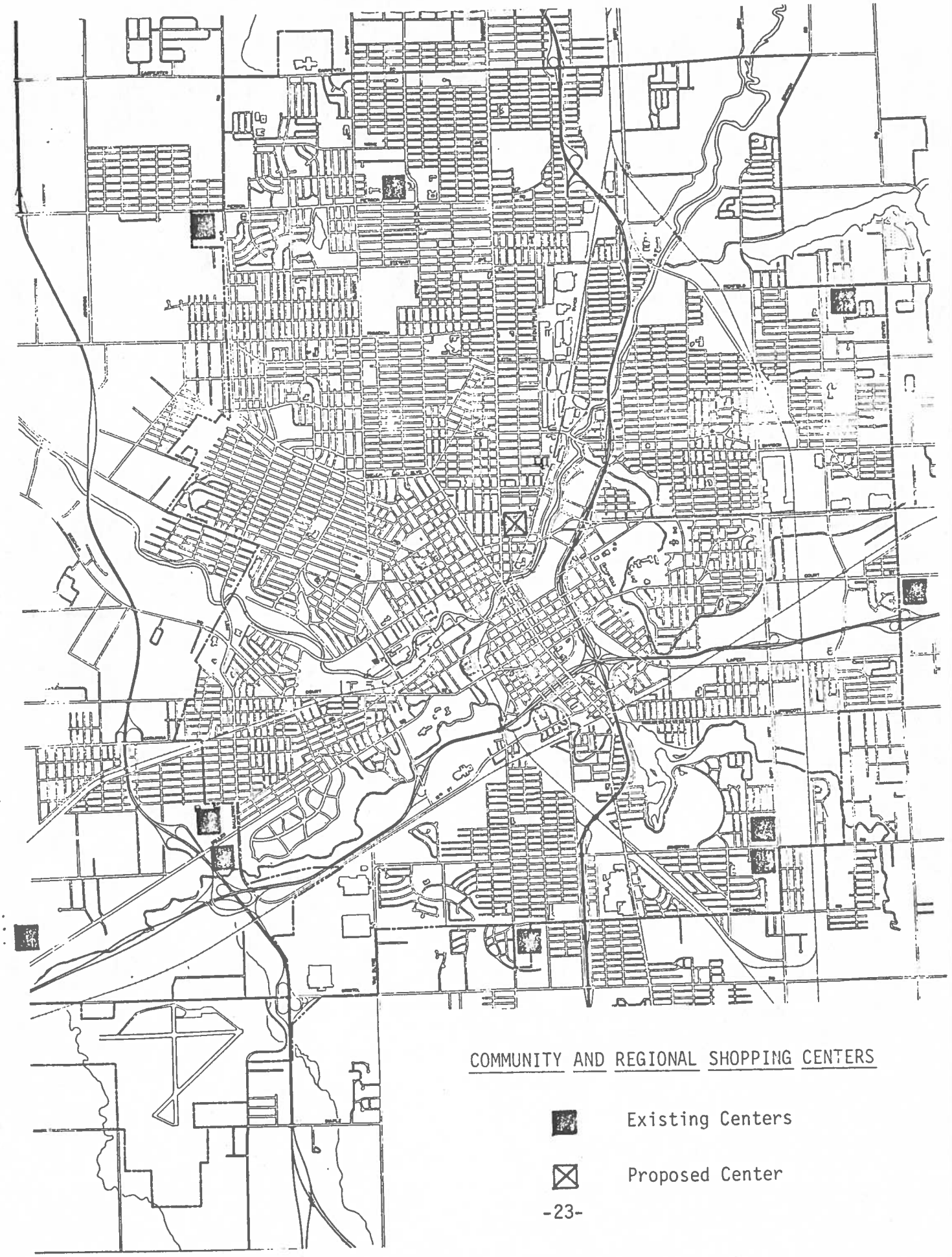
Illustration 6

## Community and Regional Shopping Centers

| Location | Site Coverage (Acres) |
|---|---|
| Clio and Pierson Rds. (Northwest Shopping Center) | 31.25 |
| Detroit and Pierson Rds. (North Flint Plaza) | 6.0 |
| Fifth Ave. and Saginaw (Proposed Doyle Center) | 5.9 |
| Richfield and Term St. (Thompson's) | 5.9 |
| *Court and Center Rd. (Eastland Mall) | 55.1 |
| S. Dort and Atherton Rd. (Small Mall) | 22.3 |
| S. Dort and Atherton Rd. (K-Mart Plaza South) | 12.3 |
| Fenton and Hemphill Rds. (South Flint Plaza) | 28.0 |
| *Miller and Linden Rds. (Genesee Valley) | 83.0 |
| *Miller and Ballenger Hwy. (K-Mart Plaza - West) | 11.9 |
| *Ballenger and Miller Rd. (Westgate Plaza) | 6.7 |

*Located outside of Flint's City limit

Illustration 7



COMMUNITY AND REGIONAL SHOPPING CENTERS

Existing Centers

Proposed Center

## IV. DOWNTOWN LAND USE PLAN

### A. Introduction

Downtown Flint is the geographical and functional center of the metropolitan area.

### B. Functions

1. One function of the downtown is that of a retail center. Although retail sales in the CBD declined 32% from 1967-1972[1], merchants have reported substantial increases in sales in recent years as re-investment projects, such as the University of Michigan-Flint, generate more activity in the downtown.

   Future downtown developments should have additional benefits to retail trade. Center City Plaza, a four block, two-story enclosed shopping concourse is being planned. Its center will be the intersection of First and Saginaw Streets. This project would increase the competitiveness of downtown retailers. It would improve the working, shopping and business environment of downtown.

   The retail core area (see map 1) contains the majority of the retail establishments and office space in the downtown including the main offices of the major banks in the area. Both retail and office use are appropriate for this area.

2. Just north of the retail core area is the city's redevelopment site. Current plans call for the construction of a multi-use complex known as Riverfront Center. It would include a hotel, convention center, State of Michigan Office Building, retail department store, private office building and two parking decks. Market demand studies were performed on the various components of the project and are included in Appendix 1.

   Riverfront Center should have a major effect on the local tourism and service industries and on the economy of the entire area as well. The Riverfront Center project (see map 1) hinges on the acceptance of Flint's 6.5 million dollar Urban Development Action Grant application to the Department of Housing and Urban Development.

3. Downtown is also the government center of Genesee County. The City of Flint Municipal Center and Genesee County's Administration and Courts buildings are located at the southern edge of downtown along Saginaw Street. Nearby is the Social Security Office. The nine-story State of

---

[1] U.S. Census of Business: Retail Trade, 1972

Michigan Office building, to be located in Riverfront Center, will consolidate separate state offices that are currently scattered throughout the metropolitan area. Government land use is shown on map 1.

4. Downtown also functions as a commercial and service area (see map 1). A variety of services including professional, personal, financial and business firms are located around the retail core. The service industry accounts for more than 50% of all businesses in the downtown.[2]

5. Many institutional uses are located in the downtown area. Among these are the University of Michigan-Flint, the Industrial Mutual Association Auditorium, YMCA and YWCA, several churches, schools, the Walter P. Reuther Center and the Masonic Temple. The largest of these is the U of M-Flint campus. Since being relocated from the Court Street site, the University has constructed a classroom-office building and a power generating facility. It has also broken ground for a science building and a student center. The Mott Foundation has recently awarded the school a 6 million dollar grant for construction of an athletic facility. Enrollment is expected to reach 10,000 students. Plans are being made for the conversion of the IMA Auditorium into an exhibition hall and automotive museum known as Autoworld. Should this private development occur, it would complement other developments and add to local tourism. Other institutional land uses are located on map 2.

6. Riverbank Park, now under construction, will become the major open space amenity in downtown. It will contain an amphitheatre, water fountains, sculpture, ice skating canal and walking and bike paths. The downtown stretch of the Flint River will become an activity center and a source of pride for all the residents of the Flint area. All of the park use in downtown is shown on map 2.

7. One function that needs to be expanded in downtown is that of a residential area. Increasing the number of people who live in and near the downtown will increase the twenty-four hour a day vitality of the area. The Doyle redevelopment area will contain 458 new residential units designed to attract a mix of income groups and races to this unique urban environment.

   The residential character of the close-in neighborhoods should be maintained. The neighborhoods north of First Avenue and west of Garland Street and west of Grand Traverse and south of the river are treatment areas of the Neighborhood Improvement and Preservation Project.

---

[2]Genesee County Land Use Consultation Report. Genesee County Metropolitan Planning Commission, 1970.

For many years the need for high-density private apartments in the downtown has been recognized. Two areas that are well-suited for apartment buildings are the eastern fringe of downtown south of the University of Michigan-Flint campus and the Water Street site, which is destined to be redeveloped for a more intensive use. High density housing would also be appropriate in the commercial/ service area shown on map 1.

Potential high-density residential areas (including the Doyle site) are outlined on map 2.

8. The blocks surrounding the the Government Complex (see Map 2) are in a transitional period. Market pressures are forcing the conversion of many low-density residential properties into commercial use, particularly law offices.

   As the land use in this area changes, the Planning Commission and Zoning Board of Appeals should ensure that the impacts of the new commercial use on nearby residential property are minimized.

9. Inappropriate manufacturing firms should be relocated out of the downtown when opportunities arise for relocation and when appropriate sites are available. The City should use its powers of economic and community development to minimize land use conflicts in the downtown.

C. Transportation

An important component in the revitalization of the downtown is the transportation system that serves the central city. Downtown's accessibility should be improved by:

1. Completing the system of paired couplets designed to move traffic to and around the downtown.

2. Maintaining the downtown as the central point of transfer of the Mass Transportation Authority.

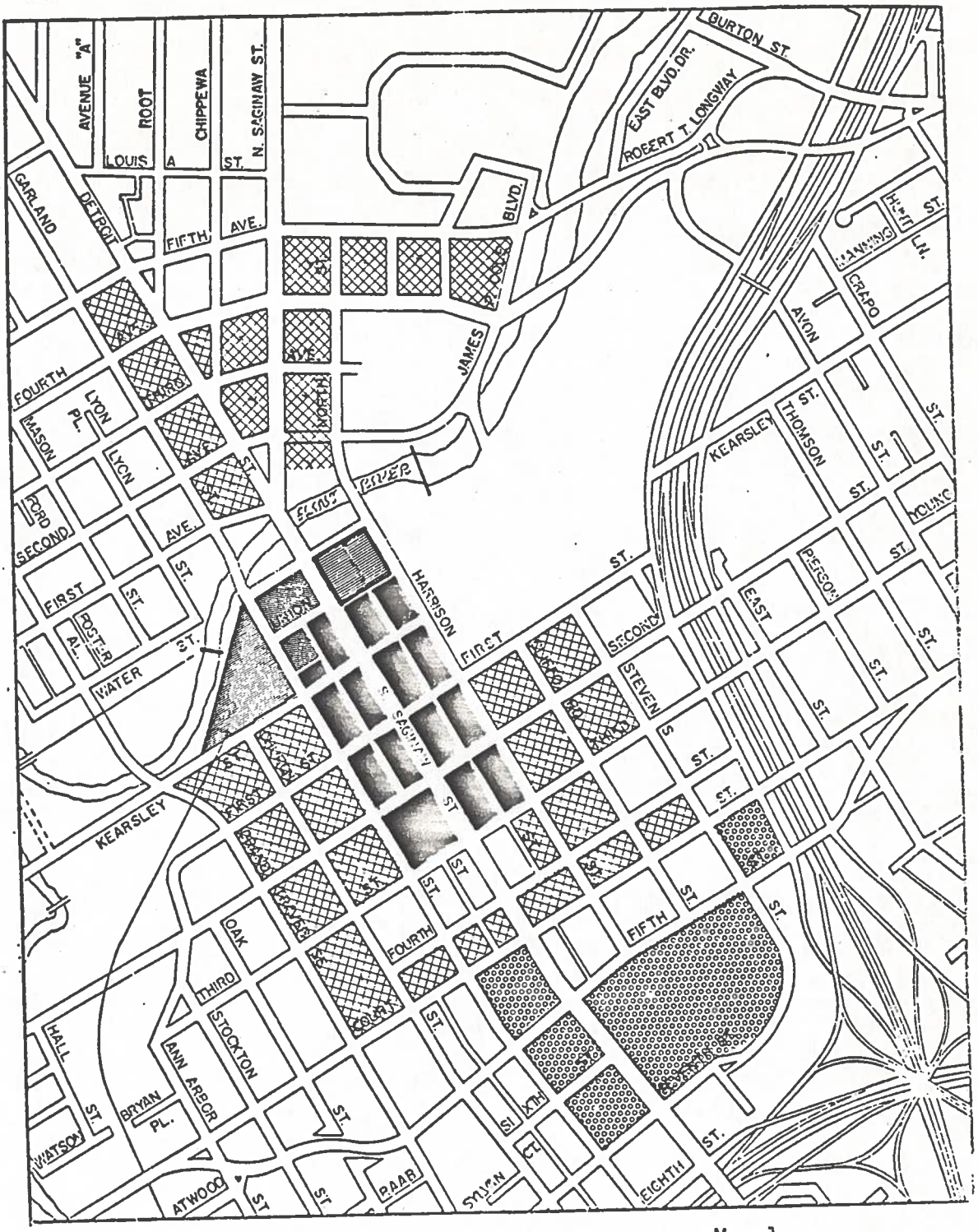
3. Easing pedestrian/vehicular conflicts by promoting a skywalk system connecting activity centers.

4. Supporting the policy, objectives and recommendations of the transportation section (II. B. 5.) of the commercial element and the transportation element.

The proposed traffic circulation pattern with Riverfront Center and Center City Plaza in place, is shown on map 3.

D. Conclusion

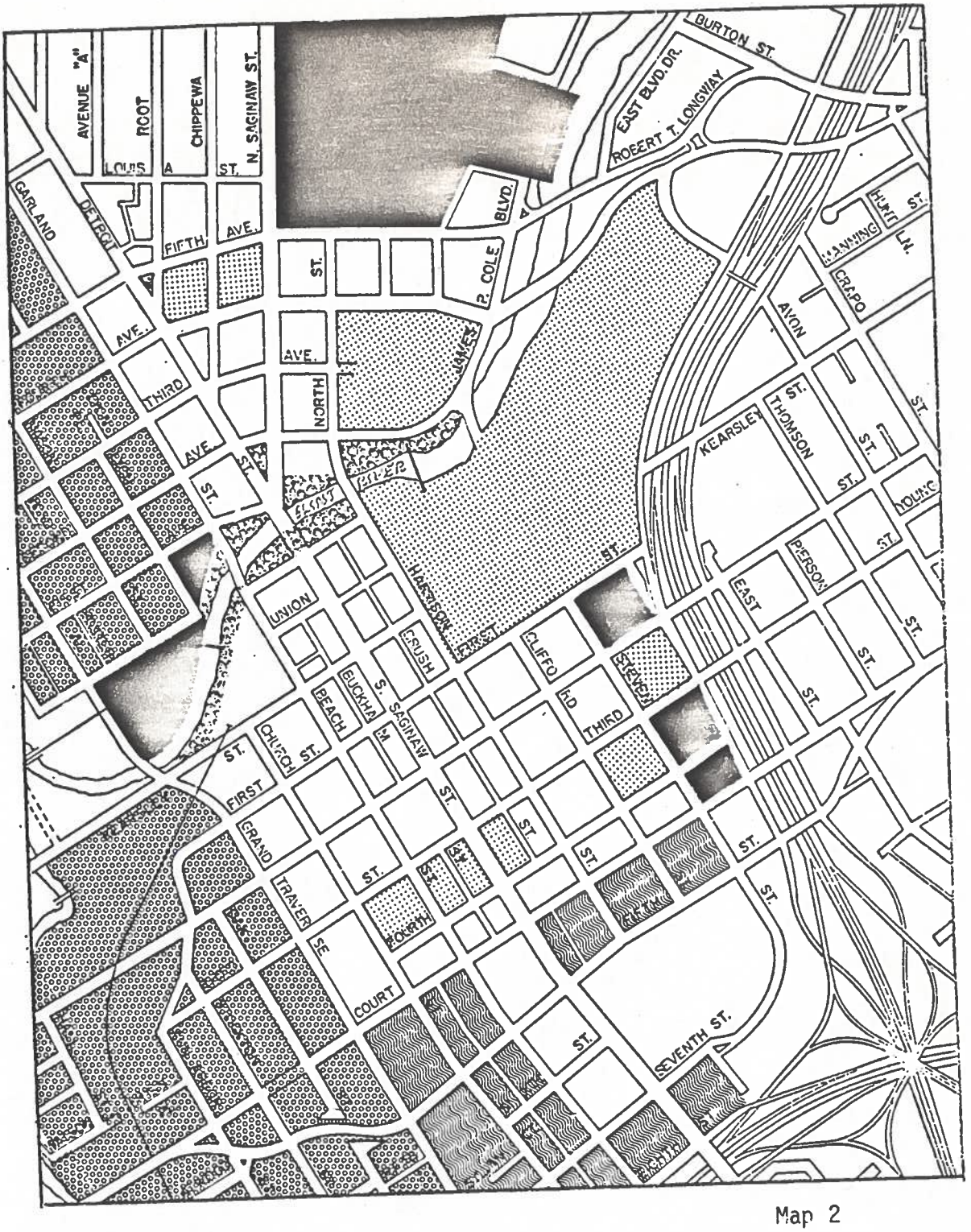
The City of Flint has development mechanisms such as the Downtown Development Authority and commercial tax abatement powers, to bring about a dramatic improvement in the physical condition of downtown. Downtown development can have positive ramifications for the entire city. A good example of this is the development strategy used in the Riverfront Center project. The Mott Foundation's equity investment in the name of Flint Neighborhood Improvement and Preservation Project will enable NIPP to rehabilitate Flint neighborhoods for years to come.




Map 1

## DOWNTOWN LAND USE

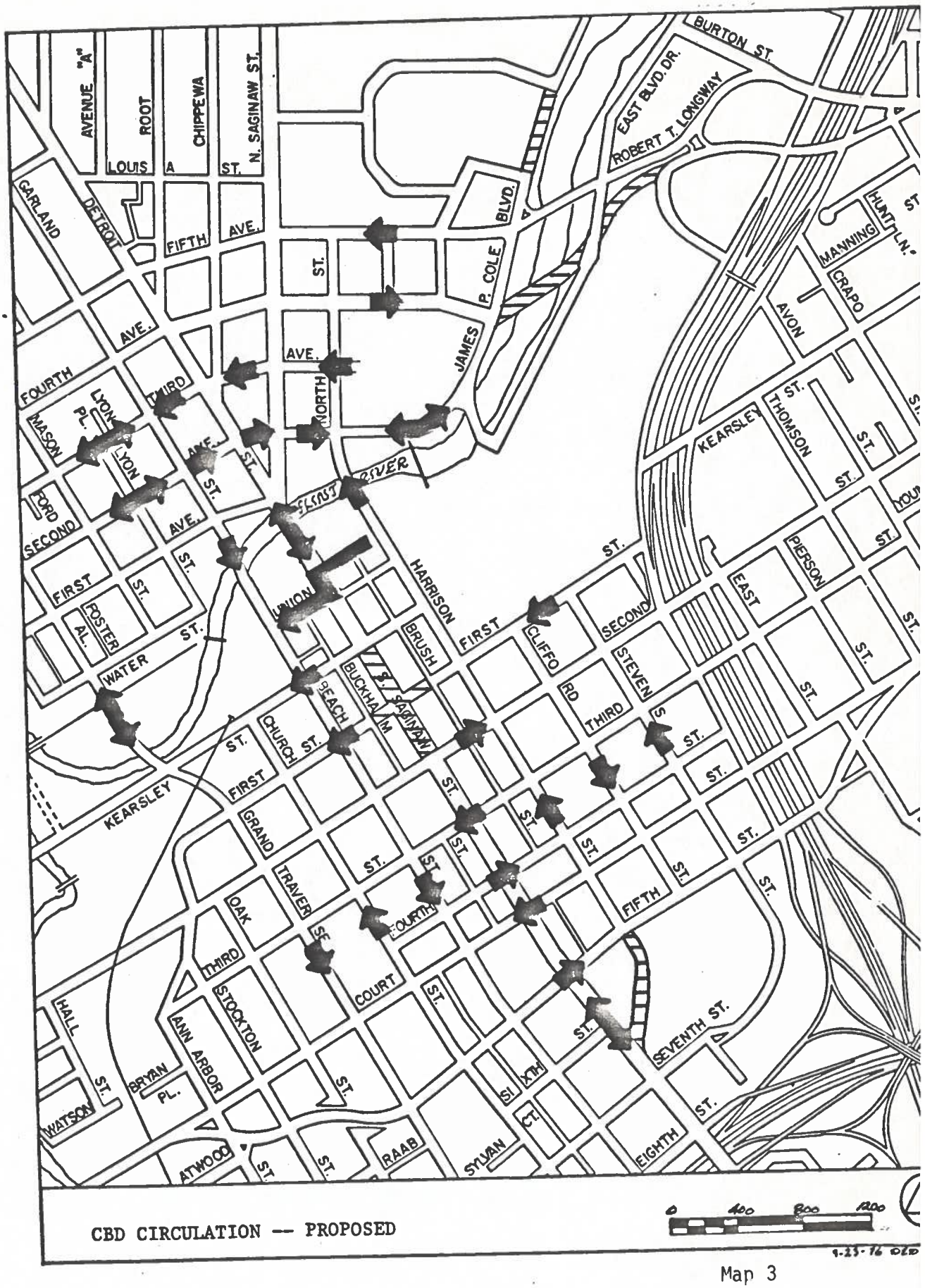
- Retail Core
- Riverfront Center
- Government Complex
- Commercial/Service




Map 2

## DOWNTOWN LAND USE

- Institutional
- Park/Open Space
- Potential High-Density Residential
- Neighborhood Preservation Target Areas
- Transitional




Map 3

Proposed

# APPENDIX 1

1. Laventhal & Horwath's "Market Analysis for a Proposed Convention Center in Flint, Michigan" dated February, 1978, states "We recommend a 60,000 square foot convention center consisting of the following facilities: ... a main exhibit area, adaptable for meeting and banquet use, of 30,000 square feet, complemented by approximately 30,000 square feet of office space, smaller meeting rooms and storage area as detailed in the report."

   The study also projects 101,000 attendee days in the first year of operation. This level of use should increase to 128,000 attendee-days by the fifth year of operation.

2. Morton Hoffman and Company's 1975 study indicated that for the period of 1975-1985, 465,400 square feet of new or replacement downtown office space was supportable.

3. The Hoffman study also reported the new space potential for shoppers goods at 266,000 square feet by 1985 in downtown.

4. Hoffman projects the potential lodging requirements for downtown at 595 additional rooms by 1985.

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12/4/78

# 4

# INDUSTRIAL

PREPARED BY THE DEPARTMENT OF COMMUNITY DEVELOPMENT, CITY OF FLINT, MICHIGAN

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# ELEMENT SUMMARY

Introduction:

This industrial element will have the purpose of describing the existing conditions surrounding industrial land uses and industrial activity in the City. Attention is given to the economic role of industry, and to real or likely problems impinging upon, or created by, industry. Appropriate objectives for industrial activity and development are presented along with recommendations for specific actions in support of those objectives. The element ends with a set of coordinated policies that will guide actions and decisions regarding industry and industrial development.

It is sometimes difficult, and especially so in land use matters, to define "industry." It is difficult to decide where the line between heavy commercial and light industry is to fall. This document will include as industry any business that involves the manufacturing, processing, reprocessing, fabricating, or alteration through chemical or electrical treatment of a product, or products, intended for sale off the premises. A business producing goods or products primarily for sale on the premises will be considered a commercial, rather than industrial, activity.

The role that industry plays in a local economy is a central one. In the Flint area that role is totally dominant. The concentration of employment in heavy industry means that most of the personal income of the area stems from this source. Commercial activity, via expenditures of personal income, is at least indirectly dependent on industry. Governmental functions are economically dependent upon both.

General Goals and Objectives:

Because industry is the backbone of the Flint economy, its welfare and development are vitally important to the area. A general goal of the City should be to increase the industrial base through the expansion of existing businesses and the encouragement of new industry. A full explanation of why, how, and how much industrial expansion should occur appears in the text. There are, of course, constraining factors that limit such expansion. These center on considerations of other land uses in the City, and competing demands and needs.

What follows below is a delineation of the major problems connected with the City's industries. These are stated briefly here and discussed more fully in the text of the element. Each is followed by a set of objectives or short term actions that might be appropriate for the City to undertake.

I. The dominance of the automobile industry in the local economy has created problems for both that industry and the area. These include cyclical unemployment inherent in the industry, high wage rates that discourage smaller businesses, and an unhealthy dependence on automotive equipment that is a burden to the industry and a potential threat to the economy.

Objective:

A. Non-automotive industries should be encouraged to develop in the City. Positive steps that could be taken to promote this objective might include:

1. Making tax incentives available to businesses that develop or expand employment in non-automotive industry

2. Providing capital as incentive to development . . .

a. through EDC and Act 62 revenue bonds
b. through local revolving loan funds or loan leveraging
c. through utilization of State and Federal loan programs such as the SBA and MJDA
d. through encouraging involvement of local lending institutions in economic development

3. Maintaining an active industrial recruitment program targeted on non-automotive industry

4. Providing land for development at reasonable cost. This is discussed separately, below.

B. Wage rates for non-automotive industries must be kept competitive with other areas of the country. Action might include...

1. Labor force training plans through CETA and other programs coordinated to needs of specific employers

2. Encouraging active participation of local unions in economic development programs

C. Other business costs should be reduced. This is discussed separately, below.

II. There are frequent communication problems and a lack of coordination between private industry and government. In the past, the conflicting objectives of government and business have caused delays, headaches and hard feelings on many development projects. This should not happen since the goals of government and business do not really conflict and can be easily coordinated with cooperative effort.

Objectives:

A. Communication between the City and private business must increase so that cooperation can develop.

1. Attempts should be made to involve private businessmen in the governmental planning process in an advisory role.

2. Annual meetings with industrial leaders and top level City officials could be instituted.

3. No decisions regarding industry, such as changes in regulations or land use controls, should be instituted without the opportunity for review and input by the industrial community.

B. Regulations and various governmental requirements should be reviewed regularly and simplified and streamlined wherever possible.

1. A staff position within City government should be designated to function as a business representative or contact person to assist industries in dealing with the City and vice versa.

2. Internal procedures on zoning, building inspections, site plan reviews, and other similar City functions could be simplified and a single entry point into the system should be established.

3. All regulations imposed by the City should be thoroughly reviewed at intervals of no more than five years and judged for need, effectiveness, and appropriateness. Unnecessary regulations should be removed. Ineffectual regulations should be promptly revised.

4. An annual report of problems encountered with existing regulations should be instituted together with procedures for revising standards.

C. Attempts at educating business community to value of certain kinds of regulations must occur. This may include publication of reports or the use of conferences on zoning, building codes, site plan review procedures, licensing, etc., aimed at explicating value of these regulations to business and industry.

III. The costs associated with doing business in the Flint area are very high and the general position of the State in this regard is 48th out of 50.

Objectives:

A. Reduce the extent feasible the costs imposed by the City

1. Utilize property tax abatements available through P.A. 198

2. Explore possibilities of other cost reductions at local level

B. Work with State government to reduce State imposed costs wherever possible

IV. The amount of space available for industrial growth and expansion in the City is very limited. Many major industries are land locked.

Objectives:

A. The City should take steps to increase the amount of land that can be utilized for industrial purposes, where appropriate.

1. The City should practice land banking so that larger and more useful parcels of land can be assembled in industrial areas.

2. A complete reassessment of land bordering existing industrial areas should be done to determine if any parcels might be better utilized as industrial land.

B. The City should make maximum use of existing industrial park land, and other vacant industrial land.

1. Some industry currently land locked should be encouraged, however possible, to relocate to existing parks where growth and expansion would be possible.

2. Vacant scattered industrial sites should be developed and the City should cooperate with and assist private developers.

3. A program of "outreach" and marketing should be maintained by the City at least for the foreseeable future.

V. Several of the larger industrial complexes of the City are aging and many smaller manufacturing enterprises have obsolescent plants and equipment. When equipment becomes obsolete, competition with more modern plants becomes difficult. When buildings become obsolete, it affects production and impacts on surrounding property.

Objectives:

A. Industry should be encouraged to modernize their plants and equipment through capital investment.

1. Abatements for modernization should be utilized under State Act 198.

2. Financing for modernization should be made available through revenue bonds - under P.A. 388 or P.A. 62.

3. Rehabilitation districts should be established.

B. Industry should be required to meet reasonable standards of plant maintenance to prevent unnecessary deterioration.

1. Standards for exterior maintenance should be formulated, with cooperation and input from industry, along with appropriate enforcement procedures.

2. Use of maintenance "districts" should be explored and feasibility assessed.

3. Basic code standards of City should be enforced with annual inspections of industrial property.

C. Plant maintenance should be promoted as an area of mutual concern between government and industry, and as a primary area of cooperative effort.

1. A cooperative "position report" on plant maintenance should be developed by City and industry working together.

2. Mutually agreeable goals ahould be set, preferably on an annual basis.

VI. Capital investment money is in short supply which makes it unavailable to most new or small businesses and very costly to all businesses. Recent anti-inflation measures will have the effect of driving interest costs even higher and further reduce investment in plants and equipment.

Objectives:

A. The City should provide access to revenue bond capacity to industry and promote its use.

B. Assistance should be provided to industry seeking SBA or other governmental assistance with financing.

C. City should develop new kinds of financing capacity to promote industrial development.

1. The feasibility of creating a revolving loan fund under the Economic Development Corporation should be explored.

2. Joint venture projects should not be ruled out and their feasibility explored carefully as a way for government and industry to join together in financing development.

3. The City should consider undertaking the construction of industrial facilities on a lease or turn-key arrangement.

4. City-owned land could be used as equity to leverage private development funds through the EDC.

D. The City should work in close cooperation with local lending institutions to promote and coordinate the funding of industrial development through private investment whenever possible.

VII. Very high energy costs, possible energy shortages and even stricter controls on the environmental impacts of industrial activity will act to curb industrial expansion in the future.

Objectives:

A. The City should undertake a serious study of energy alternatives and the possibility of energy regulation.

1. The City should act to promote the development of an energy production facility utilizing:

a. solid wastes as fuel
b. solar energy
c. wind conversion, or
d. some combination of the above

2. The City should work cooperatively with utility companies to maximize energy supply.

3. The City should develop a comprehensive energy policy and energy management plan as specified in the environmental element of the Master Plan.

B. The City must act to create a regulatory mechanism to control and utilize air quality off-sets to be created by energy conservation, etc.

Policies

Industry provides the employment base for the entire metropolitan area. The City recognizes the vital position of industry in the local economy and that the success of existing industry and the development of new industry is a legitimate concern of the City and related directly to the welfare of its citizens.

The problems confronting industrial land uses are many and complex. The solution of some of these problems must involve the active participation of government. In order for the government to participate effectively on behalf of its citizens, a firm, explicit statement of public policy is necessary. Such policy will serve as the framework and guide under which economic plans and strategies can be formulated and carried out.

1. The City will do everything practicable to promote the development and growth of industry and the increase of industrial employment as legitimated and made necessary by the pursuit of the public welfare.

2. The City will act to increase the coordination between municipal government and private industry as a means of increasing mutually supportive actions.

3. The City will act to stimulate private industrial capitalization by providing economic incentives but will limit the direct involvement of municipal funds.

4. The City will act to establish an industrial land bank for the purpose of assembling larger developable parcels in and adjacent to industrial areas.

5. The City will institute an annual review of all City procedures for the purpose of reducing and simplifying the requirements imposed upon corporate and individual residents to the extent possible.

6. The City will take no action on behalf of industry that will violate Federal or State laws or municipal ordinance, or which will create unnecessary hardship upon any person or corporate body.

# INDUSTRIAL ELEMENT

## I. Introduction

### The Importance Of Industry

The half-page advertisements in the Wall Street Journal promoting Arkansas, San Antonio, Baltimore and dozens of other states and cities as "ideal locations" for developing industries merely serve to highlight the fierce competition now being waged for industrial plant locations. You will never see such ads competing for commercial or service businesses and the explanation is simple, industrial jobs are the backbone of any local economy. Export base industries produce goods for use outside the local area, that is they "export" goods to other areas and that produces an influx of dollars to this area. This money will go to pay wages, to purchase supplies, to pay local taxes, and into capital improvements. In turn, the money will be reused, changing hands many times in the local economy, and thereby produce secondary and tertiary employment in wholesale, retail and service areas. These spin-off benefits of basic or "export" industries make them extremely important to local economies. Currently the Flint area has roughly a half-dozen types of "export" industries, the largest being automotive.

Industries that do not produce "export" goods also are important to local economics. Their goods are produced for local consumption and examples might include concrete and brick products, small dairies, etc. Their economic impact is to reduce the amount of goods "imported" to the area and thus to reduce the number of dollars going elsewhere. The activities of these industries tend to recycle dollars locally. The more of these industries an area has, the more benefit will be derived locally from every dollar that enters the economic system. The Flint area has relatively few of these kinds of industries, and could benefit from more.

Retail and other commercial activities do not produce the same degree of economic benefit as do industries. Most retail goods, shoes for example, are produced outside the local area. For every dollar spent on shoes, only 30¢ on the average remains in the local economy as gross profit. The remaining 70¢ goes to the producer and wholesaler in other parts of the country. Moreover, if the retail shoe store is not locally owned, a sizable portion of the gross profit may also leave the local economy. Thus the money left to be "turned over" locally is substantially reduced as are the subsequent "spin off" benefits. Service businesses do better at local turn over, but no commercial activity has the impact of a strong industry.

## Local Industrial Base

There are decided economic advantages, then, for an area with an extensive industrial base. Flint has such a base, which is reflected in the proportion of the labor force employed in manufacturing, currently over 42 per cent. However, a large proportion of this areas manufacturing jobs are concentrated in the automobile industry. Its development and subsequent dominance of the local economy is explained in the historical introduction to this document. Its presence here can only be considered an economic blessing, but it is a mixed blessing.

The failure of the Flint area to develop significant secondary manufacturing businesses has led to an unseemly economic dependence upon its main export industry, automobiles. Such dependence is unhealthy both for the area and for the automotive industry in the long run. Social and economic forces beyond the control of local government can be pointed to as the cause of this condition. Still, the solution to the problem, perhaps by default, has become the responsibility of the City. At least it is incumbent upon the City, having recognized a potential for economic adversity, to define the problem and to take the initiative in proposing solutions. Any action taken in this enterprise is fully justified as being in the interest of the public welfare. Nothing else the City could do to promote the public interest would have the impact of the assurance of a sound local economy and stable employment prospectives.

## Defining Industrial Activity

Before proceeding to describe the industrial base of the City and to analyze its problems, and clear definition of industrial activities would be appropriate. Usually the term "industrial" is synonymous with "manufacturing". In this section a liberal interpretation of the term will be employed that includes not only manufacturing, fabricating and processing operations, but also some wholesale businesses involved in assembly and packaging of previously processed goods. The following list provides examples:

(1) Extractive Industries:
Industries extracting raw materials from the ground. (In the Flint area that currently involves only sand and gravel).

(2) Refining, Fabrication and Assembly Industries:
Industries which refine natural resources or raw materials into a finished or semi-finished product; which use mostly previously processed materials in fabrication, assembly and/or packaging. Examples are:

- smelting, forging, etc.*
- oil refineries*
- concrete and brick products*
- saw mills and lumber mills
- construction yards and railroad service yards*

- bottling plants*
- dairy product preparation*
- electrical, electronic manuf.
- aircraft, automobile parts and related industries*
- printing (except newspaper) and publication plants*
- baking, laundry and dry cleaning plants*
- meat packing and poultry dressing plants*
- tanneries
- fertilizers and fat reducing plants
- textile, dye and clothing manufacturing plants
- assembly plants*
- paint and varnish manufacturing*
- tobacco redrying and cigarette manufacturing plants
- rolling mills and fabrication plants
- tool and die works*, machine shops*
- blacksmith, tinsmith and metal working plants (except auto repair and body works)
- chemical plants and paper mills*
- lumber, brick, coal, etc. supply yards*
- accessory parking and loading areas*
- plastics and plastic manuf.*
- chemical processing, coating, plating, etc.*

(3) Wholesale Business:
Industrial wholesalers; wholesale assemblers; cargo sheds; junk assemblers; wholesale storage area; trucking terminals and service buildings, storage yards, and parking loading and accessories to the above structures fall into this category.

## II. Existing Conditions

### Current Industrial Base

Presently there are 109 businesses in the City of Flint that can be considered industrial activities. In the entire metropolitan area there are approximately 350 industrial concerns. Most of these are relatively small firms supplying parts and materials to the auto factories. The following table indicates the types and number of industries to be found in the City as of Spring, 1977.

* Those that exist in Flint

| | Type of Industry | No. of Firms | Employment | Acreage |
|---|---|---|---|---|
| Export Industries | Meat Products | 4 | 99 | 6.4 |
| | Dairy " | 4 | 377 | 3.1 |
| | Beverage | 4 | 326 | 14.8 |
| | Converted paper prod. | 3 | N.A. | 19.5 |
| | Chemicals | 2 | 512 | 9.6 |
| | Motor Vehicle Bodies | | | |
| | " " Assembly | | | |
| | " " Accessories | G.M. | 63,000 | 942.5 |
| | " " Parts | | | |
| | Engines & Turbines | 1 | N.A. | .2 |
| | Truck Terminals | 6 | 325 | 19.6 |
| | " Garages | 2 | N.A. | 7.2 |
| | Junk Yards | 18 | N.A. | 73.4 |
| | Other Expt. | 1 | N.A. | 6.8 |
| Local Base Industries | Misc. Food Products | 2 | 138 | 6.5 |
| | Lumber & Wood | 3 | N.A. | 8.0 |
| | Furniture | 2 | 21 | 5.4 |
| | Printing & Publishing | 8 | N.A. | 6.9 |
| | Apparel | 4 | N.A. | 3.2 |
| | Petroleum Refining | 1 | 40 | 2.3 |
| | Rubber & Plastic | 2 | N.A. | .8 |
| | Stone, Clay & Glass | 2 | N.A. | .4 |
| | Other Non-metal | 3 | N.A. | 9.4 |
| | Foundaries | 11 | N.A. | 20.9 |
| | Smelting & Refining | 3 | N.A. | 25.7 |
| | Farm Equipment | 1 | N.A. | 1.2 |
| | Construction Machinery | 1 | N.A. | 1.1 |
| | Special Machinery | 2 | N.A. | 3.4 |
| | Industrial Heating | 1 | N.A. | 5.5 |
| | Tools & Parts | 9 | N.A. | 10.4 |
| | Wrought Iron | 1 | N.A. | .2 |
| | Other Misc. | 2 | N.A. | 3.3 |

The inventory is based on land use surveys and other secondary data and breaks industry into export or local based upon the predominant destination of the firms product.

The long-term trend for the area is for the number of industrial firms to increase. Recent short-term trends, however, are more difficult to access. The Flint area lost 3 medium-sized manufacturers between 1975 and 1977, a foundary, a PVC pipe firm and a computer control manufacturer. Together they accounted for 450 jobs and 2 of the 3 were export industries. In the same period the area gained about 7 new industries employing about 115. None of the new firms are export base industries.

Current Employment Patterns

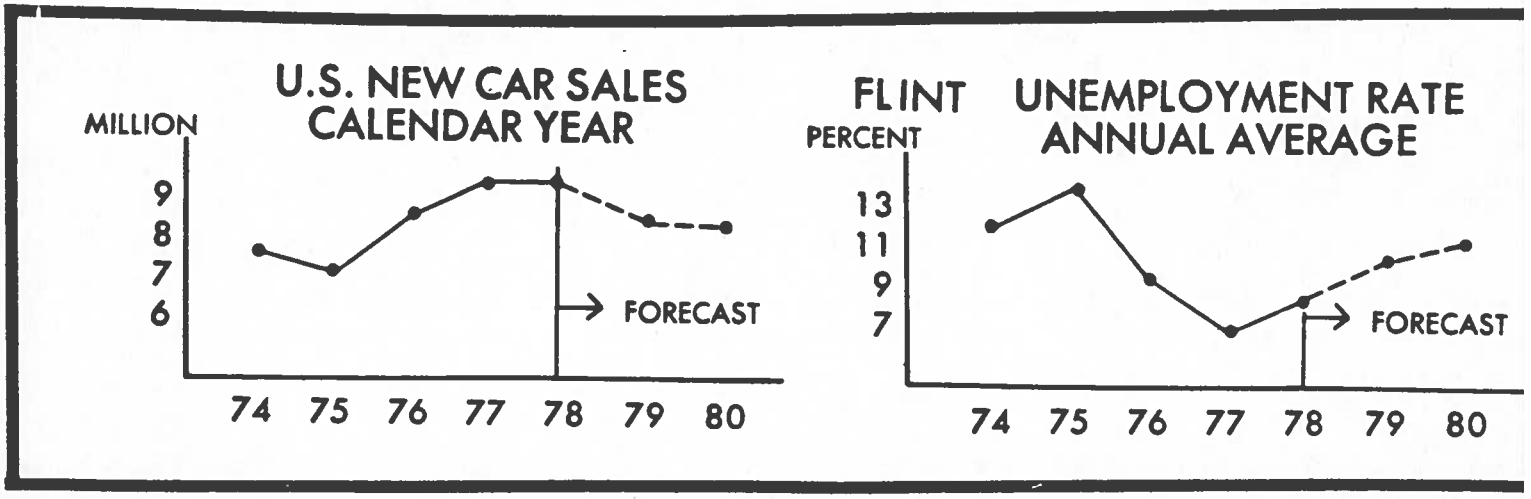
The City remains as the primary area of employment for the metropolitan environs. A local survey completed in 1976 indicated

that over 68 per cent of the out-county labor force is employed within the City. Overall, 76 per cent of the total county labor force works in the City, and this has increased from 67.8 per cent in 1970. This pattern continues despite considerable development in, and some relocation of businesses into, the urban fringe, due mainly to the location of G.M. plants in the city.

Location of Work Patterns
% Working in City and Out-county

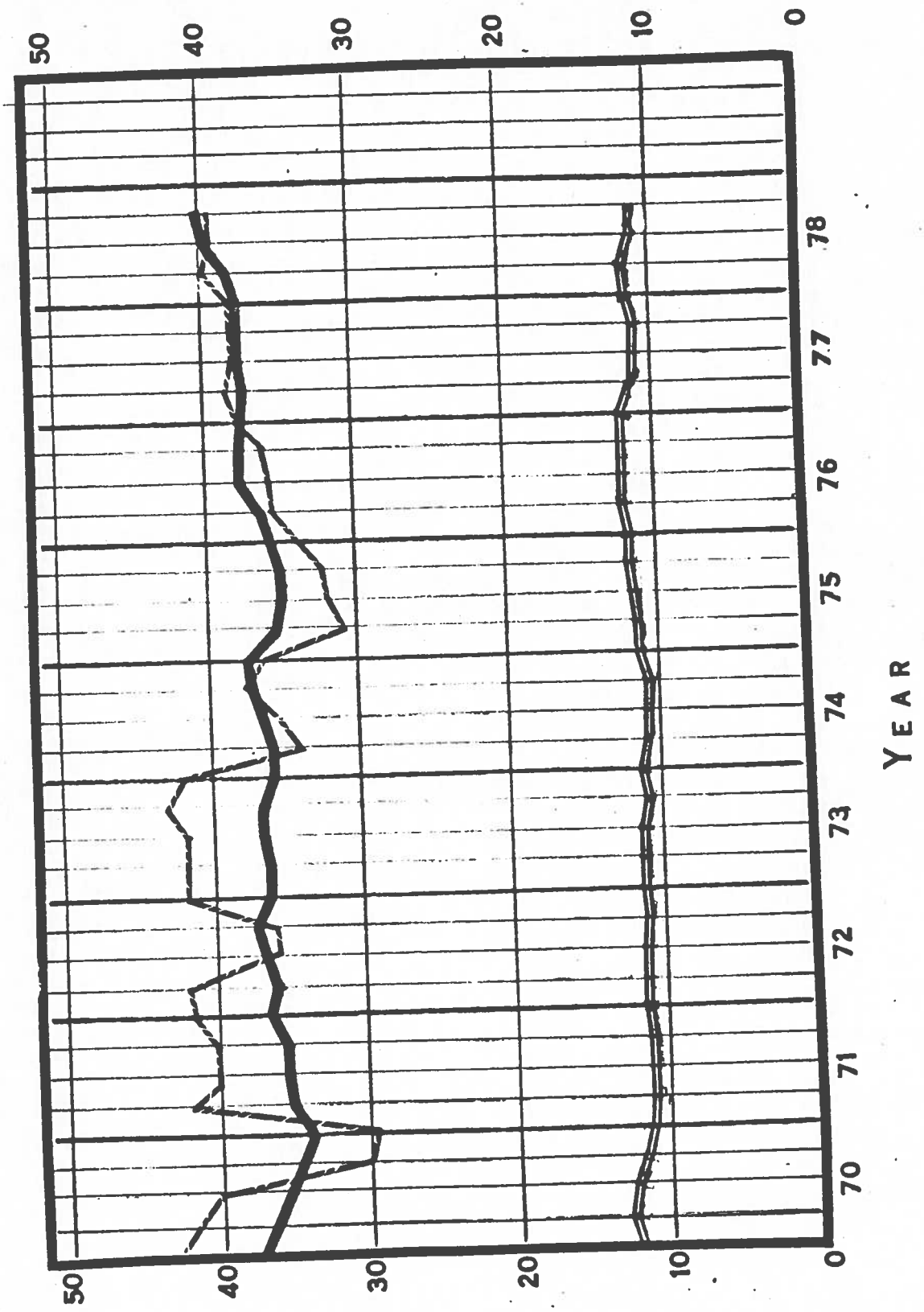
| | Work Location | 1970 Census | 1976 ECHO |
|---|---|---|---|
| Flint Labor Force | In City | 78.9% | 83.3% |
| | Out-County | 20.1% | 9.0% |
| Out-County L.F. | In City | 58.7% | 68.4% |
| | Out-County | 40.8% | 26.7% |
| Total County L.F. | In City | 67.8% | 76.1% |
| | Out-County | 23.0% | 18.0% |

The dominant position of the automotive industry has other effects upon the local employment picture. Manufacturing employment has occupied over half the total labor force at periods in the past and only in very recent years has it dropped below 40% of the work force. Interestingly, recent changes have pushed non-manufacturing employment above manufacturing for the first time since the early 1900's, (see illustration 1). Still upwards of 80 per cent of the manufacturing employment is provided directly by G.M. plants. As a result, whenever there is a downturn in auto sales the entire Flint economy is affected.




Source: Flint Marketing Journal, November, 1978

The close correspondance between auto sales and area unemployment is a pattern familiar to Flint.




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One other effect of the intrinsic control over local economics exerted by the auto industry is reflected in area wage rates and standard of living. Current average weekly production pay for area workers is $425.00. Even though that represents a slight decline from 1977 when inflation is taken into account, it still keeps the Flint area near the top of national averages for per capita income. Moreover, in addition to pay, the local auto labor contracts provide numerous fringe benefits such as paid-up health and dental insurance. Smaller concerns find it very difficult to keep pace with those wage rates or with the fringe costs. This may partially explain why the Flint area has not developed as much secondary industry as might have been expected, although it would be inadequate as a singular explanation.

With the exception of some periods of severe recession, the industry of the area has maintained a strong position in the national economy. An annual survey conducted by Sales and Marketing Management, a marketing trade journal, lists Genesee County as number one in the nation in 1977 in terms of the dollar value of shipments of goods. Again, this is mostly due to General Motors operations. It is the main reason that the high incomes of the area can be maintained.

Extremely large amounts of money flow into this area as a result of local production. The problem, from an economic point-of-view, is that the money that comes to the Flint area tends to leave quite rapidly. Almost all retail goods other than cars are brought into the area rather than being produced here. Moreover, as was mentioned in the commercial element, many purchases are made directly outside the area resulting in an unusually large difference between local income and local purchases.

Current Issues, Problems And Physical Conditions. There are a number of different issues associated with the physical needs of industry that will be itemized and discussed here. The first of these is the approaching obsolescense of a good portion of the industrial capacity of the area. Most of the industrial plants in the area were completed by the mid-1940s and a few date back to the first World War. Machinery in some of these plants, while still functional and productive, is not designed with new production technologies in mind and is at a competitive disadvantage.

Physical obsolescense affects approximately 50 per cent of the industrial plants of the area. That is not to say that they are unusable, but major renovations would be needed before these structures could compete effectively under new market technologies. In one or two cases, total replacement would be needed. Within the several G.M. complexes in the area, only two have sizeable new facilities. The Turnstedt, or Coldwater Road, plant is the newest major production facility and it was built to produce jet aircraft engines during the Korean war. It is approaching 30 years of use.

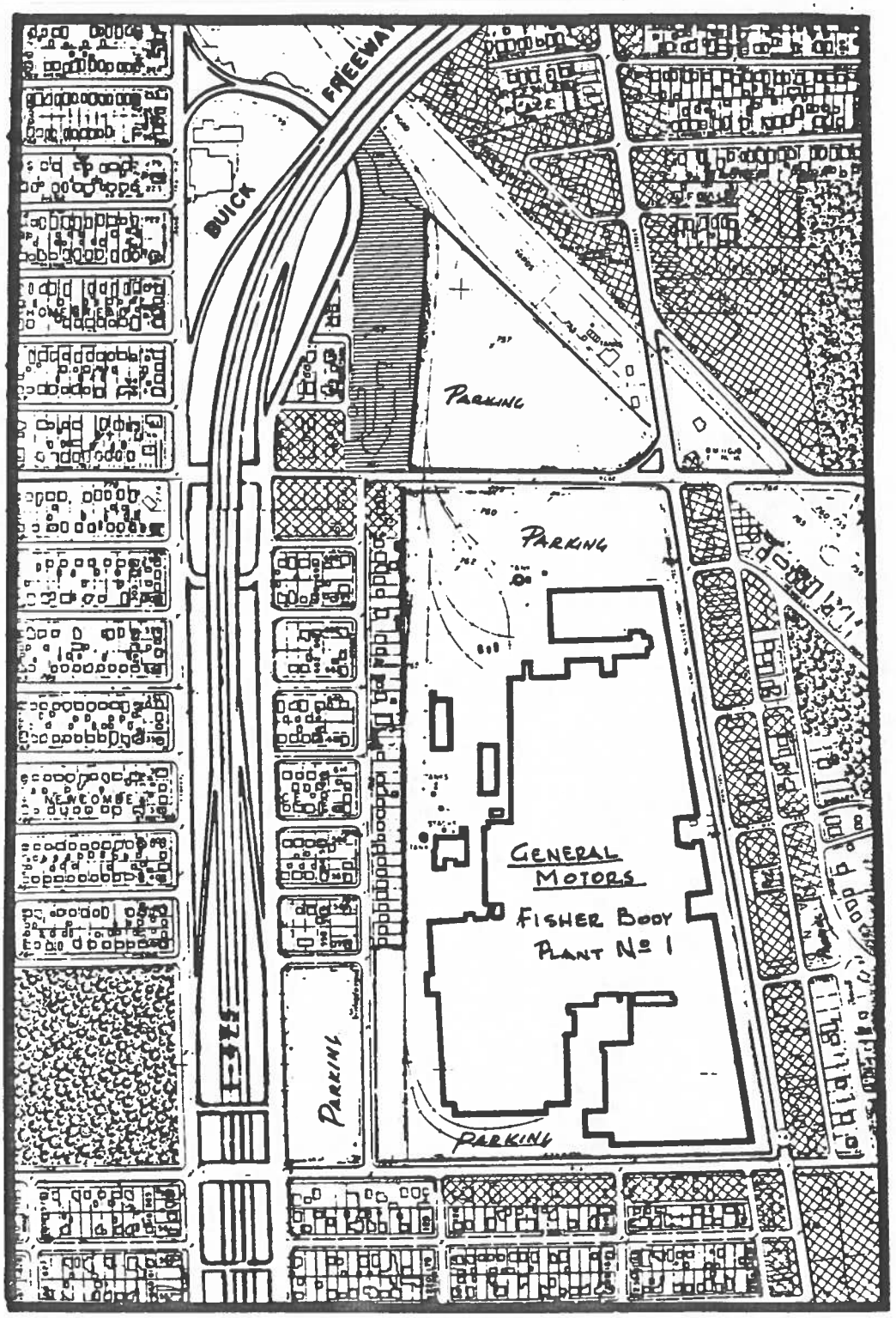
Many other G.M. plants, along with the bulk of development in the Dort Highway industrial corridor, came into being before or during World War II. They were built for the production of war materials and are over 35 years old.

The fact that these plants, some over 50 years old, are still being used exemplifies the adaptability of industrial structures. Mechanical obsolescence, the out-dating of the machinery of production, occurs much more rapidly. In recent years it has been considerably accelerated by technological change and governmental edicts. The Federally imposed standards for air quality and gasoline mileage have necessitated the replacement of a good portion of production equipment. The State imposed "bottle bill" has made the existing facilities of local beverage bottlers obsolete. (Two of whom have located new facilities outside the City). Technological breakthroughs in paints and plastic car parts have necessitated replacing entire production lines in order for local firms to remain competitive. Such mechanical obsolescence can be expected to continue at this accelerated pace.

A second problem for industry in the City is a shortage of room for expansion. There is some vacant developable land in the City, but it is scattered and most industrial plants are land locked by surrounding residential and commercial uses. It is a situation common to most urban settings, but it represents a serious disincentive to in-town development. A survey of businesses that had moved from the City to the out-county was recently completed by the Genesee County Metropolitan Planning Commission.[+] The primary reason for leaving the City cited by these businesses was that available sites were too small for expansion. Fully 60 per cent of all businesses, and 100 per cent of all industrial relocatees interviewed, listed a lack of room for expansion as a problem.

The high concentration of land use in the urban area is the primary cause of physical impaction. In many instances the industrial uses were built years ago in areas where open space was available. Subsequently, the areas surrounding the industrial sites began to infill with residential and commercial uses (see Illustration 2). Allowing this to happen can be seen as a lack of foresight on the part of both industry and the City. The result today is that a large number of land use conflicts have been created. In many areas of the City residential and industrial uses abut one another with no attempt at screening or softening of the impacts. The effect is that housing in those areas has deteriorated and the blight in the residential area has affected the value of the industrial property. Parking, truck traffic, congestion, smoke and fumes, noise and similar aspects of industrial activity are all points of conflict between the residents and businesses under the

[+] GCMPC, the 1976 Business Relocation Survey, pg. 14.




TYPICAL GM FACILITY

LEGEND

RESIDENTIAL
COMMERCIAL
PUBLIC
INSTITUTIONAL

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present situation. These are discussed more fully in the land use section, but are brought up here from the industrial viewpoint. From this perspective, these conflicts represent further disincentives to industrial development.

A possible solution, the purchase of additional land by industry to alleviate the physical impaction, brings up a fourth problem, namely high land costs in the City. This impacts not only on existing industry, but on the ability of the City to attract new industry. As a general rule-of-thumb, land costs in the urban center are 3 to 4 times that of land in the urban fringe. The St. John Industrial Park project is an example of this. A study of competing land in the area led the consulting firm of Coopers and Lybrand to recommend a market price of $5,000 to $10,000 per acre on Park land.[+] The cost recovery price on this land is over $32,000 per acre. Because of these high costs, the City is disadvantaged in competing with outlying areas for industrial development. In the City, land costs must be viewed as another disincentive to industrial investment and growth.

To summarize, the industry of Flint faces 4 major types of physical problems. These are:

1. Obsolescence of structures and equipment
2. Little opportunity for expansion
3. Land use conflicts
4. High development costs

Each represents a problem for the City as well, if increased and diversified industrial employment is ever to be achieved.

Financial Conditions. Industry in Flint, as everywhere else, is dependent on market conditions. It is apparent that current market conditions for our prime export industry are still very strong. Although located on the northern boundary of the manufacturing belt, necessary supplies can be brought in and a finished product shipped out rather economically. However, two long-term market conditions figure prominantly in the industrial prospects of the Flint area. The first of these centers on the relationship between auto production and the national economy. In periods of economic downturn, people postpone new car purchases and auto production drops resulting in lay-offs and unemployment locally. The area economy is extremely sensitive to any recessionary trends.

Moreover, regardless of recessionary movements of the national economy, the automotive market is saturated. The bulk of production is for "demand" rather than "necessity" sales. The average American household already has 2 or more cars. Large increases in the market are not expected and transportation equipment is no longer considered a "growth" industry.

[+] Coopers & Lybrand, St. John Industrial Park Preliminary Definition of Marketing Parameters, 1976, pg. 35.

The second aspect of market that affects local industrial development centers on the ease of transportation of goods into the area. An earlier study of economic conditions in the county made the following observation:

> "Currently, using U.S. Route 23 (note: I-75), Genesee County manufacturers have access to cities such as New York, Chicago and Louisville in less than 24 hours, and this without encountering urban traffic or traffic signals." and "By virtue of Genesee County's location on the periphery of the Manufacturing Belt, almost every part or component conceivable may be obtained at the most competitive prices and within 24 hours. The same is true of most chemicals and materials such as steel, plastic, rubber and copper."+

From one perspective this can be viewed as an asset for the area. However, the case of supply from outside areas has been a detriment to the development of many kinds of supply firms locally. This extends to consumer goods as well. Of course, no area of the nation can hope to produce all of the goods it needs locally, but the easy penetration of outside suppliers into the Flint market has served to stifle almost all development of local supply. Such is the nature of the trade that the total amount of inbound freight far exceeds outbound freight. Most of these goods travel by truck and, to eliminate some of the empty back hauls, a "piggy back" program exists between the railroads and local trucking firms. This sizable trade imbalance is the primary explanation for the lack of significant economic growth despite the extremely high local incomes.

Market problems for Flint industry, then, are two-fold. The market for our major export industry is basically a demand market and particularly sensitive to economic downturns. The markets for other manufactured goods are particularly susceptible to sales penetration from other industry in the state and country, which owing to regional specialization operate at a comparative advantage to local producers.

In addition to market conditions, local industry must be sensitive to costs. These are reflected in the wages paid for labor, the prices paid for materials, energy and transportation, financing charges, and taxes and related costs. The first of these, area labor costs, are relatively high in the Flint area. The high productivity of the auto industry allows a high level of wage and associated fringe. The costs of the auto workers fringe packages now make it less costly to work the existing labor force overtime than to hire additional workers. Because of its dominance in the local employment picture, the labor notes in all other economic activities tend to be relatively high. Typically, other industry in the area is forced to offer some comparability in their

+ Battelle Memorial Institute, Genesee County Economic Condition Conclusion Report, 1969, pg. 3-27.

wage and fringe structure or lose employees whenever G.M. is hiring. In some instances this forces area manufacturers into a disadvantaged position with their competition.

For the most part the prices paid for materials in the Flint area are comparable to other regions of the country, the effects of regional specialization not withstanding. What is a competitive disadvantage for the Flint area in terms of procurement, are the costs of transportation. The peninsular location of the City at the northern edge of the manufacturing belt means that the major transportation routes of goods and supplies do not pass through here. Trucks and trains do not routinely stop in Flint on their way to somewhere else. Moreover, the only raw materials produced in the immediate area are gravel and salt brines. Everything else must be brought in from elsewhere and the transportation costs added to the purchase price. The existing rate structures, the cost of motor fuel, ect. all operate to make it economically more efficient to ship a finished product to Flint rather than to ship materials and produce locally.

Energy costs, currently in a very unstable state, have not yet proven a serious detriment to the Flint area. There was a shortage of natural gas locally between 1975 and 1977 and a moratorium on a new commercial and industrial permits was imposed. That situation has abated and current supplies are adequate. Motor fuel prices, predicated upon supply, have been rising steadily and affect local industry two ways. They affect the auto industry by requiring redesigned, better mileage, vehicles thus increasing design costs and simultaneously deflating sales. They affect <u>all</u> area industry by driving up the cost of transportation of goods into and out of the area.

What the future holds regarding energy supplies remains unclear. In the long run traditional sources are, after all, finite and it will be necessary to develop and utilize alternative sources. Consideration of this, and of the changes in industry and economy that will be generated, should be under active consideration at this time.

A final cost to business worth consideration are those imposed by government. These include taxes, fees, and required costs such as mandatory insurances. In Flint, taxes and charges imposed by the City do not appear to be a serious problem. The survey of relocated businesses cited earlier substantiates this. Of all businesses that relocated out of the City between 1970 and 1976, less than 7 per cent were influenced by tax or City costs, and none of those were industrial concerns. On the contrary, 27.8 per cent of the respondents indicated that taxes were not important in their decision to relocate.

The City imposes costs on business a number of ways. An ad valorem property tax of $8.55 per $1,000 of assessed valuation is levied and is one of the lowest in the state. A one (1%) per cent

tax on net corporate profits is also levied. Water and sewer use charges are made and the fee structure is favorable to large volume users. Water rates run from .8¢ to .31¢ per cubic foot in the City. Sewer rates begin a .135¢ per cubic foot if nothing requiring special treatment is introduced into the system. The City also imposes a schedule of fees for such services as building permits and site plan review processing. They are generally low and do not cover costs for these services.

It is only when costs imposed by the City are combined with those of the State that they appear burdensome. The single business tax of the State, while an attempt to simplify the tax structure, did little to reduce costs. For many kinds of businesses, it resulted in a tax increase. Workmens compensation payments and unemployment insurance are major costs also regulated by the State. When all costs of these types are combined, Michigan ranks 48th out of 50 in terms of its business climate.

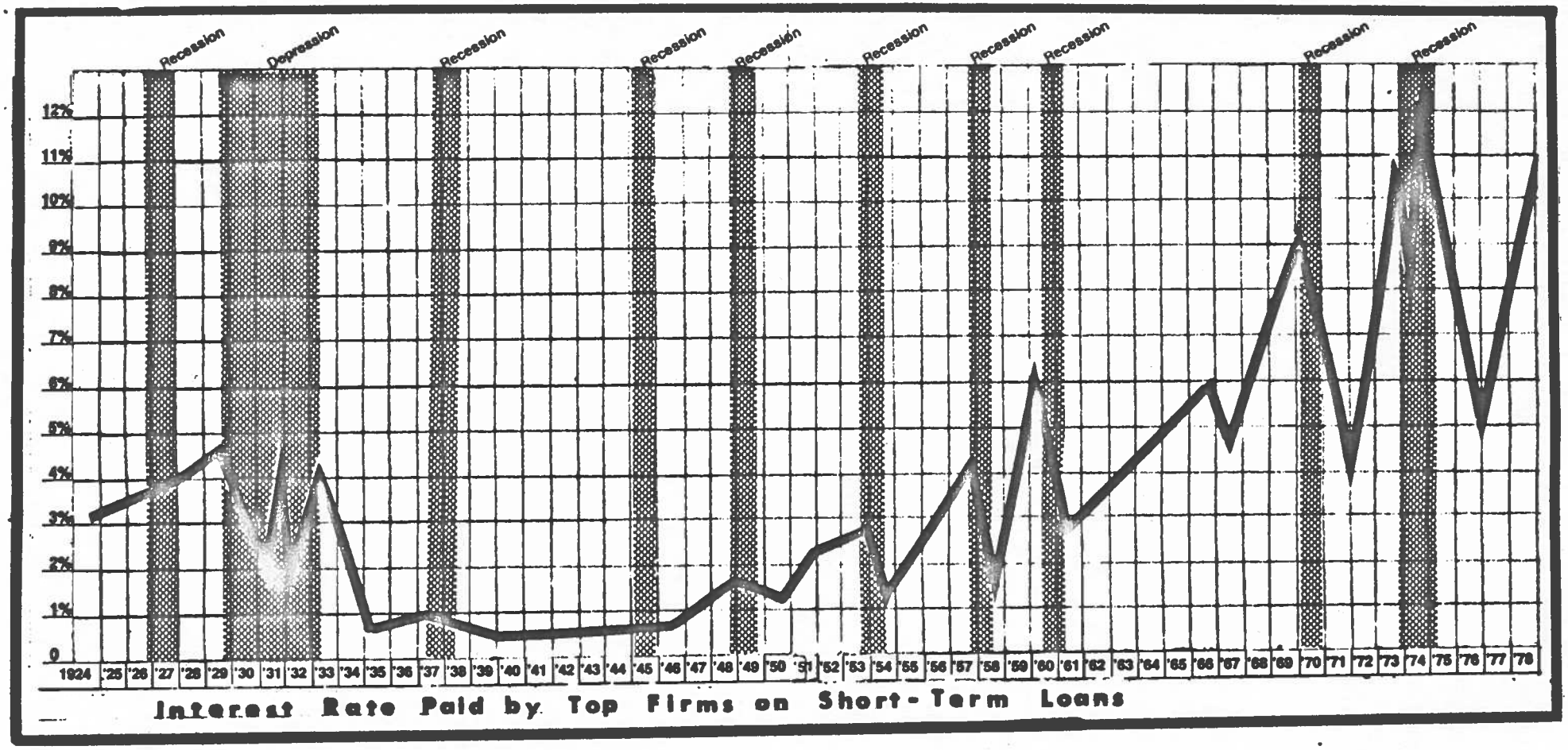
Recently, a company manufacturing plastic pipe and plumbing supplies has closed its local operation, even though the company started here, and relocated out of state. Over 200 jobs were permanently lost. In a presentation to a local business development group, the vice-president cited government and other costs as the reason for leaving and gave the following statistics:

Comparative Costs - December 1976

| | Michigan | Pennsylvania | Minnesota |
|---|---|---|---|
| Workman's Comp Rate per $100 of payroll | $6.10 | $3.98 | $2.57 |
| Unemployment | 4.6% of first $5,400 | 3.2% of first $4,200 | 1.8% of $4,800 |
| Health Insurance | | | |
| Single | $37.89 | $23.45 | $14.37 |
| Family | $92.05 | $59.85 | $56.24 |
| Average Hourly Wage | $ 5.43 | $ 3.92 | $ 4.90 |

These, of course, represent only a portion of all costs born by an industry but serve to indicate the pattern in Michigan and the Flint area. From the standpoint of imposed costs, this is not competitive.

A third and final aspect of the financial conditions faced by industry is the adequacy of supply and the cost of capital. Generally, these are determined by economic forces at the national level. Currently, the national money market is very tight, that is, interest rates are very high to discourage excessive borrowing. Should this continue for an extended period, it will tend to push the national economy towards a recession (see illustration #3). As noted earlier, the market for Flint's primary export is extraordinarily sensitive to such economic downturns.




Interest Rate Paid by Top Firms on Short-Term Loans

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SOURCE: U.S. NEWS & WORLD REPORT November 20, 1978

A tight money market is problematic for small businesses. Large corporations, generally, have no problem borrowing and, of course, have the option of financing capital programs internally. Small industries are generally precluded from the latter option and when money supplies are tight they often cannot obtain credit even when they can afford to pay the high interest costs. New and small industries have an extremely difficult time raising capital for development or expansion. Even many existing assistance programs operate in favor of larger, established, businesses. The use of tax-free industrial revenue bonds, for example, only become economical when their face value approaches $1 million. Of companies contacting the Economic Development Corporation of the City for assistance, 9 out of 10 required capital in amounts of $150,000 or less, and the EDC was unable to offer them financial assistance.

Financial conditions, then, impact local industry in at least 3 ways. First, industry is affected by the availability of capital for development and recently that has been a problem for smaller concerns. Secondly, the industry must bear the costs of doing business and those are comparatively high in the Flint area. Finally, manufacturing is dependent upon a market for its goods. The market for automobiles is good, but sensitive. The market for other goods is limited by competition from outside suppliers.

Other Conditions: Although wage rates are relatively high in the area, the labor force available to industry is adequate in numbers at almost all skill levels. There is usually a reserve of workers idle at any given point in time. Moreover, future manpower supplies are expected to be adequate (see Illustration 4). As the following table reveals, even college trained employees will be available at different times.

Estimated Occupations with Excess Workforce

| | 1980 | 2000 | 2005 |
|---|---|---|---|
| Professional, Technical & Kindred | 200 | 350 | 700 |
| Mngrs. & Administrators | 1515 | 1125 | 150 |
| Sales Workers | 3500 | 2500 | 2500 |
| Clerical & Kindred | 5000 | 4500 | 3500 |
| Operatives | -575 | -1500 | -1675 |
| Laborers | 1100 | 700 | 300 |
| Service Workers | -200 | - 450 | - 675 |

In addition to a manpower situation favorable to industry, the Flint area has unused capacity for specific skill training. It would be possible for an industry with specific needs, even in advance of starting operation, to arrange for staff training by several local public institutions and/or agencies. To date this has never been attempted by a new industry and links between existing business and the educational institutions has been informal and not closely coordinated. This is typical of the past relations between government and industry at the local level.

EMPLOYMENT BY INDUSTRY, GENESEE COUNTY, 1970 TO 2000

| | 1970 | 1975 | 1977 | 1980 | 1985 | 1990 | 1995 | 2000 |
|---|---|---|---|---|---|---|---|---|
| Total | 159,476 | 157,770 | 156,483 | 154,998 | 154,417 | 155,955 | 159,049 | 163,615 |
| Agr., Forestry & Fishing | 923 | 707 | 635 | 541 | 414 | 317 | 243 | 186 |
| Mining | 120 | 194 | 235 | 314 | 508 | 822 | 1,330 | 2,152 |
| Construction | 6,155 | 6,408 | 6,474 | 6,593 | 6,899 | 7,327 | 7,843 | 8,430 |
| Furniture, Lumber, Wood | 146 | 161 | 168 | 178 | 196 | 217 | 240 | 264 |
| Metals Industry | 3,003 | 2,239 | 1,991 | 1,670 | 1,245 | 929 | 692 | 516 |
| Machinery, Ex. Electrical | 1,248 | 1,623 | 1,803 | 2,112 | 2,747 | 3,573 | 4,643 | 6,046 |
| Electrical Machinery | 1,541 | 1,786 | 1,895 | 2,071 | 2,401 | 2,783 | 3,227 | 3,740 |
| Transportation Equipment | 59,791 | 56,861 | 55,729 | 54,074 | 51,424 | 48,903 | 46,507 | 44,227 |
| Other Durable Goods | 4,352 | 4,805 | 4,999 | 5,305 | 5,857 | 6,467 | 7,140 | 7,883 |
| Food and Kindred Products | 755 | 644 | 605 | 556 | 498 | 463 | 443 | 433 |
| Textiles and Textile Products | 283 | 247 | 234 | 215 | 188 | 164 | 143 | 125 |
| Printing and Publishing | 930 | 846 | 813 | 770 | 722 | 696 | 685 | 683 |
| Chemicals | 732 | 840 | 888 | 965 | 1,108 | 1,272 | 1,460 | 1,676 |
| Other Nondurable Goods | 978 | 1,227 | 1,354 | 1,592 | 2,158 | 3,024 | 4,334 | 6,310 |
| Railroad and Railway Express | 465 | 424 | 407 | 384 | 355 | 336 | 325 | 321 |
| Trucking | 1,733 | 1,686 | 1,661 | 1,624 | 1,583 | 1,565 | 1,565 | 1,580 |
| Other Transportation | 724 | 722 | 715 | 705 | 700 | 708 | 722 | 740 |
| Communications | 1,480 | 1,522 | 1,530 | 1,544 | 1,588 | 1,654 | 1,733 | 1,819 |
| Utilities and Sanitary Service | 1,455 | 1,452 | 1,437 | 1,416 | 1,406 | 1,422 | 1,452 | 1,487 |
| Wholesale Trade | 5,249 | 5,174 | 5,103 | 4,997 | 4,937 | 5,009 | 5,184 | 5,444 |
| Food and Dairy Stores | 3,582 | 3,617 | 3,592 | 3,562 | 3,555 | 3,584 | 3,609 | 3,607 |
| Eating and Drinking Places | 4,387 | 4,430 | 4,399 | 4,363 | 3,355 | 4,390 | 4,421 | 4,418 |
| General Merchandising | 4,029 | 4,068 | 4,040 | 4,007 | 3,999 | 4,031 | 4,060 | 4,058 |
| Motor Vehicle Retailing | 3,416 | 3,449 | 3,425 | 3,397 | 3,391 | 3,418 | 3,442 | 3,440 |
| Other Retail Trade | 8,028 | 8,106 | 8,049 | 7,983 | 7,969 | 8,033 | 8,089 | 8,085 |
| Finance | 1,961 | 1,996 | 1,996 | 2,000 | 2,029 | 2,084 | 2,149 | 2,218 |
| Insurance and Real Estate | 2,966 | 2,995 | 2,974 | 2,949 | 2,944 | 2,968 | 2,989 | 2,987 |
| Business and Repair Services | 2,962 | 3,109 | 3,153 | 3,232 | 3,425 | 3,691 | 4,016 | 4,399 |
| Private Households | 1,362 | 1,375 | 1,366 | 1,354 | 1,352 | 1,363 | 1,372 | 1,372 |
| Other Personal Services | 3,699 | 3,735 | 3,709 | 3,678 | 3,672 | 3,701 | 3,727 | 3,725 |
| Entertainment | 980 | 990 | 983 | 975 | 973 | 981 | 987 | 987 |
| Hospitals | 6,010 | 6,068 | 6,026 | 5,976 | 5,966 | 6,014 | 6,056 | 6,053 |
| Other Health Services | 3,279 | 3,311 | 3,288 | 3,261 | 3,255 | 3,281 | 3,304 | 3,302 |
| Government Education | 8,192 | 8,272 | 8,214 | 8,146 | 8,131 | 8,197 | 8,255 | 8,250 |
| Private Education | 3,500 | 3,534 | 3,509 | 3,480 | 3,474 | 3,502 | 3,527 | 3,525 |
| Other Educational Services | 488 | 493 | 489 | 485 | 484 | 488 | 492 | 491 |
| Religious and Nonprofit Org. | 1,840 | 1,858 | 1,845 | 1,830 | 1,826 | 1,841 | 1,854 | 1,853 |
| Professional Organizations | 2,415 | 2,438 | 2,421 | 2,402 | 2,397 | 2,416 | 2,433 | 2,432 |
| Public Administration | 4,317 | 4,359 | 4,329 | 4,293 | 4,285 | 4,320 | 4,350 | 4,348 |



Illustration 4

The relationship between industry and government at the local level has been one of sporadic cooperation when needed and uneasy watchfulness in between. A strong tradition of "free enterprise" thinking was partly responsible along with a stereotypical view of governmental bureaucracy. To some degree, the antipathy of business to deal with local government is caused by actions of that government. A zoning change, for example, can take anywhere from 4 weeks to 2 or more months. On a recent case the local planning commission and City Council have been deliberating a total of 4 months on the fate of a piece of unused railroad property, holding up its sale in the interim. Such foot dragging is a serious detriment to good relations between the City and private business.

The actions of the State and Federal governments too have an impact on industry in Flint. State taxing and workmens compensation programs have caused serious problems for private business and discouraged much investment. At the same time, the State created an Office of Economic Development and passed several pieces of economic incentive legislation. This seeming ambivalance toward business is caused by the more recent awareness of the need to maintain and expand industry and the need to answer to the powerful labor forces in the electorate.

The Federal government likewise has instituted programs that have effects upon local businesses. The Clean Air Act of 1970, is an excellent case in point. Its impact upon the automotive industry was to substantially increase design and production costs. This continues as auto emissions are forced to meet ever stricter standards every year. Similarly, in recent years Federal action has imposed requirements for Affirmative Action, Equal Opportunity, job safety programs of OSHA, product liability, new requirements by the Highway Safety Commission, the FTC, the IRS and a dozen or so other Federal agencies. The cumulative effect upon industry has been repressive, regardless of the relative merits of these regulations. Often the ultimate consequence of these Federal programs is unknown or has never been considered. A strict reading of the Clean Air Act, for example, would bar any industrial expansion. A compromise "off set" rule adopted by the EPA and applying to all areas not meeting Federal air quality standards, such as Flint, requires pollution reductions in excess of the amount a new facility would produce before construction can take place. This rule represents a big problem to any area with a goal of increased industrial development. It may eventuate in much more cooperation between local industry and local government in order to deal with the problems created by Federal and State regulations.

## III. Potential for Industry

### The Availability of Land

The supply of vacant developable land in the City is extremely short. The supply of vacant industrial land is shorter still. The

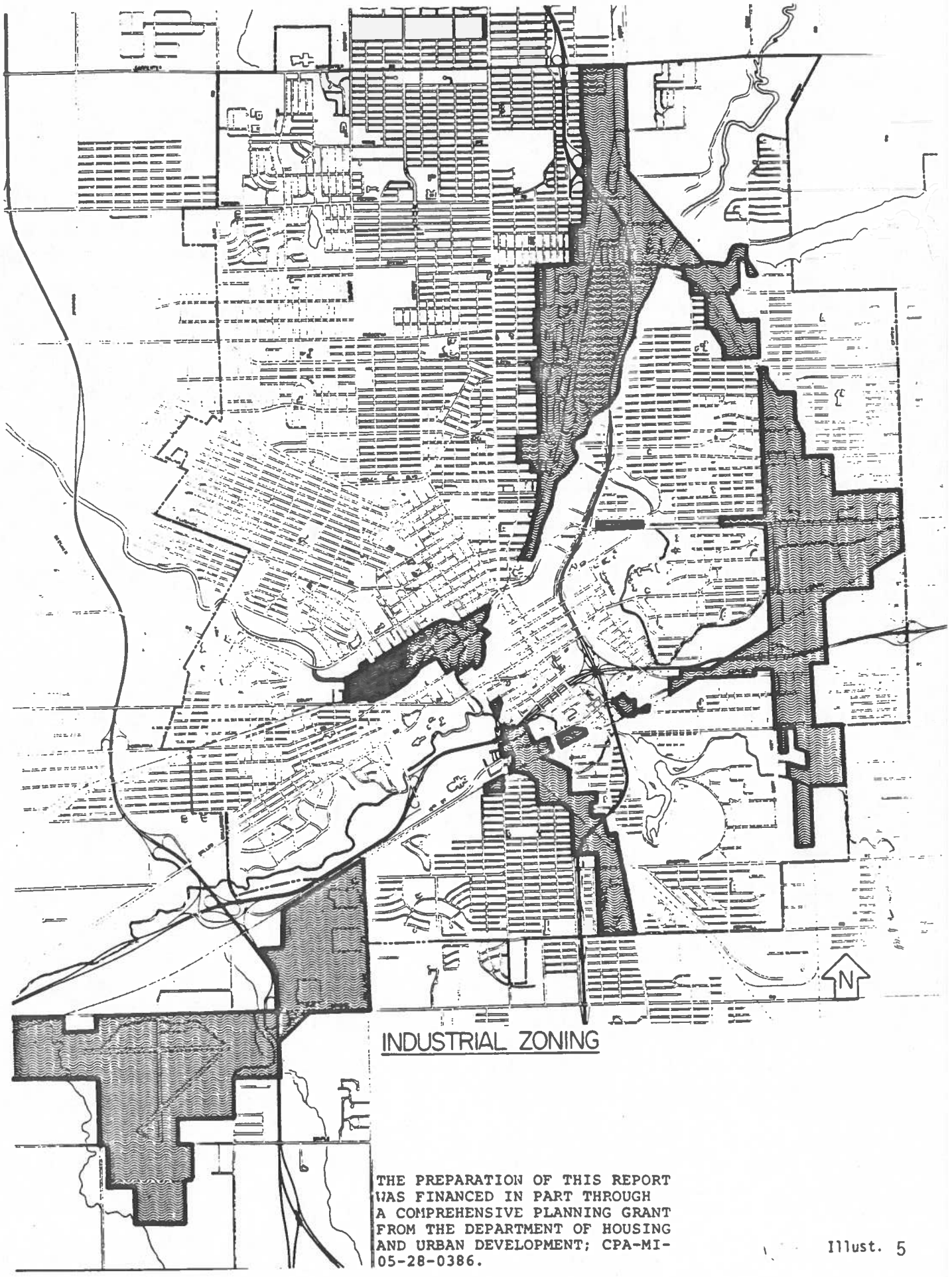
total currently stands at 410 acres although much of it is in scattered parcels which are too small to accept any sizeable industry. The maps in illustrations 5 and 6 indicate the present extent of industrial zoning and the occupied and unoccupied portions thereof.

Two of the largest available parcels of industrial land are contained in municipally developed industrial parks at Bishop Airport and between the Buick Motors complex and the new I-475 freeway. Combined, these two class A parks contain about 220 acres, about 150 of which remains on the market. A present rates of absorption, the remaining parcels in these parks could be gone in 3 to 5 years. Once that occurs, land for industrial expansion or development in the City will be very limited. Vacant land in private ownership is extremely scarce when parcels smaller than 2 acres are omitted, and for industrial uses 2 acres is about minimum parcel size. Unlike residential or office uses that can expand vertically to create room for new development, industrial uses generally must expand horizontally.

Two sources for new space for development are possible. The first, reuse of vacant or obsolete industrial structures, is limited, but should not be ignored. Several pieces of industrial property currently stand vacant and could be put to use. Reuse of these buildings could represent considerable savings over the cost of new construction. Moreover, there are some financial incentives available for the restoration of such property. These incentives are available also for the revitalization of an industry's existing building and facilities. In either case, better utilization of existing industrial property will result.

The second source of land for industrial development is land created through the conversion of another type of land use. There are some parcels of land in the City, generally adjacent to existing industrial areas, where existing residential or commercial uses are severely dilapidated and not viable. The parcel may be trapped between industrial uses, or between industry and a major thouroughfare, and its rehabilitation to the existing use is not feasible. In such cases, conversion may be legitimately proposed. Extreme care however, would need to be exercised to prevent industrial uses from impacting upon viable and/or salvagable neighborhoods.

When a block or set of parcels is targeted for conversion, it is likely that purchase will be made under the City's right of eminent domain. The City regularly acquires scattered parcels several other ways, such as through tax liens, gifts and condemnations. Better use could be made of such parcels if those industrial areas could be set aside until a parcel large enough for development could be put together. No land disposition should occur until the potential use of the parcel has been reviewed. Parcels with a potential for industrial use should be "land banked" until other parcels can be acquired and an appropriate development arranged.




INDUSTRIAL ZONING

THE PREPARATION OF THIS REPORT WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; CPA-MI-05-28-0386.

Illust. 5




THE PREPARATION OF THIS REPORT WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; CPA-MI-05-28-0386.

Illust. 6

Even with all the potential industrial land in the City added in, the total available is still meager. The acreage is adequate for development during the next 10 to 15 years, but the long term picture for industrial development in the urban area will necessarily focus on land in the urban fringe. Here the supply is much better, but services such as sewers and water lines have yet to be developed. The initial steps toward increased cooperation between local units of government in the Flint area have been taken and the potential for the long term supply of land for industry is excellent.

## Energy and Other Resources

Recent concerns over energy supplies have caused many industries to rethink expansion plans and many others to relocate in the so-called "sun belt" states where supposedly energy use would be lower. Two fallacies are involved in such thinking; first, that energy use would indeed be less and second, that energy supplies are inadequate in Michigan. Both arguments are erroneous.

Energy supplies are presently more than adequate and future supplies look very encouraging. Electricity is readily available at competitive prices and is over 65% coal generated, one of the highest such ratios in the country. The states large gas storage system is one of the best in the country and currently handles more gas than any other state. In the future, gas and oil from the Alaskan fields may be entering Michigan by pipeline. And finally, over 2/3 of the lower peninsula is covered by a supply of oil shale averaging 200 feet in depth. It is estimated to contain more hydrocarbons than 60 times the known crude oil reserves of the nation and utilization of even 1% of this supply would make the state energy independent for the next 100 years.[+]

The Flint area also has a virtually unlimited supply of fresh water, important to many industrial operations. Other resources include deposits of sand, gravel and brine, the latter being the basis for much organic and inorganic chemical manufacturing. Other parts of the state offer petroleum feed stocks, limestone, gypsum, iron and copper ore. These are not major deposits, but can supply many industrial operations, and have excellent potential for local businesses.

## Market Potentials

The Flint area has been determined to be a good potential location for a number of different industries. The following table contains a selection of industries for which a strong potential Michigan market is expected to develop by 1985:

[+] University of Michigan, Institute of Science & Technology; A New Industrial Potential; U. of M., April, 1976; pages 3 and 4.

Selected Products Showing
Potential Expressed as Demand
In Excess of Current Production (in $ millions)

| Property | 1972 Census Production | 1985 est. Consumption | 1985 Excess Demand |
|---|---|---|---|
| Printing ink | 7.7 | 23.4 | 15.7 |
| Carbon black | 0.0 | 13.3 | 13.3 |
| Phosphatic fertilizers | 0.0 | 40.4 | 40.4 |
| Mixed fertilizers | 50.4 | 85.4 | 35.0 |
| Synthetic ammonia | 17.2 | 52.6 | 35.4 |
| Thermoplastic resins | 169.6 | 340.7 | 171.1 |
| Synthetic rubber | 21.8 | 94.4 | 72.6 |
| Organic fibers (non-cellulosic) | 0.0 | 60.0 | 60.0 |
| Detergent | 20.4 | 75.0 | 54.6 |
| Rubber belts, etc. | 1.7 | 23.0 | 21.3 |
| Rubber hose & tubing | 3.5 | 27.5 | 24.0 |
| Perfumes, colognes, etc. | 3.6 | 32.7 | 29.1 |
| Toothpaste & other cosmetics | 20.8 | 192.9 | 172.1 |
| Oil and water base paints | 35.3 | 145.5 | 110.2 |
| Putty & caulk | 5.2 | 43.0 | 37.8 |
| Plastic film | 120.4 | 470.7 | 350.3 |
| Foamed plastic products | 69.2 | 214.6 | 145.4 |
| Laminated sheets, etc. | 11.7 | 58.0 | 46.3 |
| Shipping containers | 43.8 | 273.1 | 229.3 |

Source: Harbeck, Kryzowski, Dobbins; A New Industrial Potential: Michigans Growing Hydrocarbon Base for Industrial Energy & Petrochemical Feedstocks; Institute of Science and Technology, University of Michigan, 1976; Chapter VIII

The estimated dollar value of the excess demand represents a very real potential for industrial development. Moreover, the markets refer only to products based on hydrocarbon resources. Other products also have decided market potential and would do well in the area. Illustration #7 displays a list of desired industries prepared by the consultants doing marketing strategy for the St. Johns Industrial Park. It is, in fact, an update of an earlier study by Batelle Memorial Institute, which was designed to designate those industries best suited to the Flint urbanized area.+ Both efforts serve to illustrate the variety of manufacturing enterprise that could succeed in a Flint location.

One factor that has been important in restraining the development of local manufacturers has been the ease of market penetration by outside suppliers. Of particular importance to this has been the relatively cheap costs of transporting needed goods and products.

+ Coopers & Lybrand; St. John Industrial Park: A Report on Perspective Marketing Parameters; 1976 - also
Battelle Institute, A Study to Determine the Best Industries for Genesee County, Michigan; 1973.

| SIC | | Rating | Battelle Rank |
|---|---|---|---|
| 3674 | Semiconductors | 37 | 24 |
| 2394 | Canvas | 37 | 28 |
| 2386 | Leather clothing | 37 | 36 |
| 3851 | Opthalmic goods | 36 | 26 |
| 2399 | Other fabricated textiles | 36 | 29 |
| 2831 | Biological products | 34 | 38 |
| 2653 | Corrugated fiber boxes | 33 | 7 |
| 3399 | Primary metal products | 33 | 34 |
| 3079 | Misc plastic products | 32 | 1 |
| 3589 | Service industry machinery | 31 | 20 |
| 2096 | Shortening and margarine | 31 | 27 |
| 3999 | Mfg industries, nec | 31 | 33 |
| 2295 | Artificial leather & oilcloth | 31 | 35 |
| 3662 | Radio & TV equipment | 31 | 54 |
| 3555 | Printing trades machinery | 31 | 18 |
| 3264 | Porcelain electric supplies | 30 | 8 |
| 3613 | Switchgear & switchboard equipment | 30 | 9 |
| 3679 | Electrical components | 30 | 10 |
| 3699 | Electrical equip. nec | 30 | 42 |
| 3221 | Glass containers | 30 | 46 |
| 3295 | Minerals ground or treated | 30 | 47 |
| 3498 | Fabricated pipes & fittings | 30 | 50 |
| 3585 | Refrigeration equipment | 30 | 52 |
| 3622 | Industrial controls | 29 | 21 |
| 2641 | Paper coating & glazing | 29 | 31 |
| 3562 | Ball & roller | 29 | 32 |
| 3624 | Carbon & graphic products | 29 | 41 |
| 3791 | Trailer coaches | 28 | 25 |
| 3479 | Coating, engraving, etc. | 28 | 39 |
| 3069 | Rubber products, nec | 28 | 45 |
| 3599 | Misc. machinery minus electric | 27 | 23 |
| 3742 | Railroad & street cars | 25 | 6 |
| 3559 | Special industry machinery | 26 | 19 |
| 2621 | Paper mills | 25 | 30 |
| 3352 | Aluminum rolling & drawing | 24 | 12 |
| 3621 | Motors & generators | 24 | 53 |
| 3357 | Nonferrous wire drawing | 23 | 5 |
| 3351 | Copper rolling & drawing | 23 | 11 |
| 3356 | Rolling & drawing | 23 | 13 |
| 3541 | Metal cutting machine tools | 23 | 15 |
| 3317 | Steel pipe & tools | 23 | 48 |
| 3544 | Special dies, tools & dyes | 22 | 16 |
| 3545 | Machine tool accessories | 22 | 17 |
| 3537 | Industrial trucks & tractors | 22 | 40 |
| 3316 | Cold rolled steel sheets & bars | 22 | 56 |
| 3323 | Steel foundries | 21 | 2 |
| 3322 | Malleable iron foundries | 21 | 4 |
| 3461 | Metal stampings | 21 | 14 |
| 3713 | Truck & bus bodies | 21 | 43 |
| 3861 | Photographic equip & supplies | 21 | 44 |
| 3548 | Metal working machinery | 21 | 51 |
| 3312 | Blast furnace & steel works | 21 | 3 |
| 3321 | Gray iron foundries | 20 | 49 |
| 3711 | Motor vehicles | 19 | 22 |

Illustration 7

The continued rise of motor fuel prices and other vehicle costs may produce some economic benefit to the area to counter balance the negative influence on auto sales. That is, the added cost of transportation will act to increase the competitive position of local manufacturers. The result should be a long term stimulus to local industrial development. Any actions taken by the state or local government to enhance this competitive situation will be working in harmony with powerful forces inherent in the economy.

## IV. Action Alternatives

Having outlined some of the problems and potentials for industrial development in Flint, the remainder of this chapter will attempt to define some alternative courses of action for the area. Those alternatives are presented in brief as issues or points for consideration. Specific policies and recommendations are presented at the end of the element.

### Public-Private Cooperation

It is necessarily the case that the City be involved in industrial development if only from a promotional standpoint. A passive role has never been adequate even in a free enterprise system. This will require close cooperation with private sector forces which can be accomplished in a number of ways:

A. Develop firm, explicit policy designating the role City intends to play in development. Without such policy, the private sector has no way of knowing what to expect from the City and the City can only respond to private initiatives rather than define a purpose and course of action to meet the needs of its citizens.

B. Create a public economic development mechanism. This would be a department or division within the municipal government with direct responsibility for economic development. Projects would be official municipal projects, and would be limited as to scope and purpose. Probably restricted to provision of services to the business community.

C. Create a quasi-public mechanism. This would be a unit located outside of local government, but maintaining strong legal and financial relationships, reinforced by strong private sector involvement and support.

D. Participate in joint-ventures with private developers. This would entail the City participating with private sector forces in joint projects. The respective obligations and benefits of each party to the agreement would be negotiated. Actions beyond those necessary for the single project would not be forthcoming.

E. Establish industrial clearinghouse within municipal government. Such an entity would be responsible for interfacing with industry and expiditing the provision of City services, such as building permits, licenses, zoning, etc. Basic information requests for base maps, aerial photos, demographics, etc. would also be provided through this mechanism.

Land Management

For expansion or development to occur, there must be available land. Within urban areas, land is scarce and land costs very high. The wise management of land resources is critical in the urban setting. A number of action alternatives are open for consideration regarding the acquisition and disposition of land.

A. Pre-designation of development areas is a method to delinete the purpose of the City regarding its industrial areas. Land within such areas would be reserved for industrial use only.

B. Creation of an industrial land bank, would greatly enhance the City's ability to utilize land. All land acquired by the municipality would go into a bank where decision regarding disposition would be made. All land in industrial areas would be held and assembled into parcels of developable size. Other actions which could be part of the land banking process are:

1. preparation of sites for redevelopment
2. review and approval of redevelopment proposals
3. negotiating terms of disposition or sale
4. payment of brokerage fees and commissions
5. operation of a revolving fund from land sale proceeds for future acquisition, land maintenance, etc.

C. Create policies and standards for the disposition, which could serve to regulate land sales if no land bank or other entity exists. These should spell out the conditions under which the City would sell or release property in industrial areas. They would also make explicit the extent to which the City will go in negotiating price and terms for land. The terms of sale may vary and could include:

1. Land write-downs which have the City absorb part of the acquisition costs to provide lower priced land.

2. Leases which reduce developers capital, provide a tax write-off of lease payments, and provide revenue to the City or agency.

3. Subordinated leases provide all the advantages of standard leases while allowing the developer to mortgage the value of the land, thus reducing cash equity of developer and increasing risk of City.

4. Land contracts are purchase agreements for land with negotiated interest rates. Rates can be set low or high, but only interest portion of payment is tax deductible.

5. Fee simple in which the agreed to purchase price of the land is paid in full at the outset.

6. Subordinated mortgage in which the City "subordinates" its claim to land being purchased from it to a lender who is mortgaging the entire development. City's risks are increased, developers equity reduced.

D. Establish and fund an active economic development program to market industrial land. Such a program would employ professional staff to handle packaging industrial land and development proposals. The option exists to allow such an entity to hold title to City land on behalf of the municipality.

E. Allow an EDC or similar public/private entity to advise and recommend regarding utilizing land, efficacy of land use controls, terms of land sales, etc. Such an entity would rely heavily on the background and expertise of private sector members. (It could also advise on financing alternatives and other matters).

Financing Alternatives

Investment in the City is unlikely to take place unless that investment can be made financially attractive to the private sector. This will require the City to overcome several types of disincentives such as high land cost, taxes, urban blight impacts, and related issues. A development package in the City will need some type of subsidy to compete with non-urban areas. Land sale subsidies are discussed above. This section will deal with other financial options.

A. The City could establish a revolving loan fund perhaps with income from land sales or some other source. Such a fund could utilize its financial capacity in any number of ways, including:

1. Construction loans. Short-term loans at low interest rates during the construction period. Repaid when project complete and final mortgage arranged.

2. Interest-only loans. Borrower pays only interest during term of loan, repaying capital in lump sum at termination.

3. Participation loans. Fund joins with other lenders in providing capital. Usually employed to reduce developers cash equity, or to leverage conventional loan.

4. Balloon payment loans. Similar to interest only except low payments cover both interest and capital with large final payment.

5. Variable interest rates. Low payments when business is starting, increasing after it is established.

6. Interest reduction loans. Similar to participation loan except intent is to mix low interest money from non-profit fund with conventional financing in amounts that will minimize public funds and still secure overall favorable interest rate.

B. The City could assist private developers in obtaining financial backing from established government programs. This would involve no direct investment of City money, only staff time. The existing programs include:

1. The Small Business Administration operates numerous loan programs aimed at small businesses. One, the 502 program, requires that a local development corporation process the loan.

2. The HUD 312 loan program occasionally has money for low income areas. Funding is limited to rehabilitative work and 90 per cent is for code enforcement.

3. Michigan Job Development Authority provides loans to projects which will significantly increase employment. Guidelines call for at least 1 job for every $10,000 invested.

4. The Economic Development Administration operates the section 201 loan program for businesses that can't get credit conventionally. Federal participation may not exceed 65 per cent. The EDA also operates section 204 loans which are interest free loans to local governments to establish revolving loan funds for business development.

5. Office of Minority Business Enterprise limits its loans to minority entrepreneurs.

C. The City could provide other incentives to developers of industrial property. These incentive programs are a varied bag and include:

1. Tax abatement available under Public Act 198 which provides a 50 per cent reduction in property tax on new construction and which freezes taxes on rehabilitated property.

2. EDC abatement available by leaving the Economic Development Corporation hold title to a project, which can then be exempted from all property tax.

3. Tax-exempt bonds are available through the EDC or, under Public Act 62, through the municipality. A project can be financed through the sale of bonds at a considerably lower interest rate. Bonds are paid off by developer. Do not involve the credit of the City.

4. CETA manpower training can be utilized to provide a pool of trained workers for industry to begin operation or expand.

5. Linked depositing by which a municipality employs the leverage of its cash assets in local lending institutions to induce consideration of City proposals for development.

6. Enlightened land-use control by which a municipality acts to insure the integrity of an industrial development by carefully controlling land uses within and around it. This can be done through zoning and through deed restrictions.

7. Assistance in compliance with various environmental, safety and equal opportunity requirements.

## V. Recommendations

### Policy

Since the first step in controlling or influencing the course of industrial development is to establish a clear set of policies to serve as a guide for action, the City should act immediately to adopt the following:

A. The City will do everything practicable to promote the development and growth of industry and the increase of industrial employment. This policy implies the acceptance of industrial development as a legitimate concern of the municipal government in pursuit of the public welfare. The inclusion of the term "practicable" is a limiting term indicating that the interests of industry are not the only interests the City must consider.

B. The City will promote cooperation between government and the private sector at all levels as a means of increasing mutually supportive actions. This policy recognizes the interdependence between government and industry. It approves the creation of mechanisms for cooperation and coordination. It implies that the interests of industry will be represented in planning municipal actions.

B. Establish a one-stop service for industry within City government. This would require several things including the identification of those services commonly provided to business. Particular staff positions will be identified for handling documents and paper work under such a system. Coordination will be developed through higher level staff discussions.

C. Establish an energy planning and air quality off-set program. The need is both long and short term. In the long run such a program will be a necessity to maintain industry. In the short run the mechanisms for such a program must be designed and implemented before the need is imperative.

D. Establish a mechanism for increasing cooperation between private business and government. This could consist of a quasi-public organization, a mayoral task force or several other arrangements. The lines of communication have been traditionally maintained through particular personalities, however a more stable system is needed.

E. Establish an industrial land bank with the purpose of increasing the amount of developable industrial land. This will require specifying a person or persons to manage the land bank, identifying a source of funds if needed, and specifying powers and obligations of the "bank". Terms of land transfers and/or sales should be set by negotiation within parameters established by policy.

F. A program of industrial rehabilitation should be established. The goal would be to encourage older plants to modernize their productive capacity to keep pace with competition. This could be done almost entirely with tax incentives and non-public money. The incentives should be employed in a manner that will encourage plant maintenance.

G. New standards for the maintenance of industrial property should be written that would alleviate blighting influence of some businesses. This would require a rewrite of City ordinances governing land use. The goal would be to force the few objectionable industries to clean up their operations and to desist from activities that clearly have a negative impact upon surrounding land uses.

H. A small revolving loan fund should be established, with both public and private backing, to encourage new business This fund should be employed only to leverage conventiona financing for firms that appear to be good investments to the fund managers. It should be a "source of last resort" and should be kept small.

C. The City will act to promote private industrial capitalization through incentives but will limit the involvement of municipal funds to land acquisition, public improvements and use in a revolving loan fund under the Economic Development Corporation. This policy approves the offering of incentives, such as, for abatement to promote development. It recognizes the need to bolster the attractions of in-City sites, but it also limits the direct involvement of City funds in a project.

D. The City will act to establish an industrial land bank for the purpose of assembling larger developable parcels in and adjacent to industrial areas. This policy recognizes the need for land assemblage to occur prior to redevelopment. It implies that the City, or its agent, is the appropriate party to accomplish this task, land acquisition being a traditional function of municipal governments.

E. The City will institute an annual review of all City procedures for the purpose of reducing and simplifying the requirements it imposes upon corporate and individual residents to the extent possible. This policy recognizes that many of the municipal procedures could be simplified and streamlined. It also recognizes that doing so is an easy way to improve public/private relations and reduce business costs as figured in time and dollars.

F. The City will take no action on behalf of industry that will violate Federal or State law or municipal ordinance, or which will create unnecessary hardship upon any person or corporate body. This policy recognizes that economic development must be promoted within a legal and moral framework. It implies the difficult responsibility of weighing all actions against the requirements of law and the moral standards against harm to any individual or group.

Objectives

The policies outlined above will set the parameters within which the City will act to promote industry and industrial employment. In pursuit of this general, and long range, goal a number of short-term objectives are suggested as intermediate actions.

A. Develop an average of 300 new industrial jobs per year for the next 10 years. This is an ambitious objective and will involve both the recruitment of new industry and the expansion of existing industries. To meet the objective will require a coordinated effort of all groups or agencies associated with economic development, and the use of all existing incentives and techniques.

Recommendations:

The various short range objectives outlined in this section could be pursued in a number of different ways. It is recommended that the programs outlined in this section might be the easiest to implement.

To begin, the City could combine several of the objectives and make them the responsibility of the already created Economic Development Corporation. This organization is a public-private board that already possesses several legal powers such as the ability to issue tax exempt bonds. The EDC can own and acquire land and could be used to manage an industrial land bank. Moreover, the EDC might be the appropriate location for the revolving loan fund as well. The Board of Directors is composed of primarily private businessmen and several are bankers or financial analysts.

To effectively handle these additional responsibilities, it will be necessary for the EDC to acquire a full-time staff. It does not have to be a large staff, but it would have to be full time so that economic development was its singular concern and function. As such it could also serve as the prime contact for business with the local government. The full range of incentives and inducements would be available to the EDC and thus concentrated under a single purpose entity. This is the technique recommended by development organizations such as CUED and ULI. It will require that funding for full time staff be provided through some source, probably the City, until the EDC can establish a revenue stream from land sales and/or loan investments. The need for at least partial City funding may be permanent, but in the case of industrial development represents an investment rather than an expenditure.

Secondly, a mayoral advisory committee should be established on industrial, or general economic, concerns. If it met only twice a year, it should be sufficient to air problems and mutual concerns. The membership should be open and out put from these sessions should be incorporated into the ongoing City planning process and policy making.

Finally, an internal task force should be set up to investigate and eliminate red tape and related problems within City government. Top level staff should be involved in this project and coordination should come through the mayor's office. New procedures, regulations and policies resulting from these meetings should be enacted and the information communicated to the public promptly. This task force should continue to meet and review internal procedures on an annual basis to ensure their perpetual update.

gwa:S2/1



# OPEN SPACE / RECREATIONAL

PREPARED BY THE DEPARTMENT
OF COMMUNITY DEVELOPMENT,
CITY OF FLINT, MICHIGAN

THE PREPARATION OF THIS REPORT WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; CPA-MI-05-28-0386.

# ABSTRACT

TITLE: OPEN SPACE/RECREATIONAL ELEMENT

PREPARED BY: CITY OF FLINT, DEPARTMENT OF COMMUNITY DEVELOPMENT, DIVISION OF PLANNING AND PROGRAM DEVELOPMENT

SUBJECT: OPEN SPACE/RECREATION FACILITIES OF THE CITY OF FLINT

DATE: NOVEMBER, 1977

NUMBER OF PAGES: 65

ABSTRACT

THIS REPORT WILL EXPLAIN THE PRESENT RECREATION SYSTEM OF THE CITY OF FLINT, POINTING OUT WHAT IS THERE AND SHOWING WHERE POTENTIAL DEFICIENCIES MAY EXIST. THE MAIN GOAL OF OUR RECREATION SYSTEM IS TO PROVIDE A WIDE RANGE OF RECREATIONAL ACTIVITIES, CONVENIENTLY ACCESSIBLE TO EVERY RESIDENT OF THE CITY. ONCE THIS GOAL WAS FORMULATED, OBJECTIVES WERE ESTABLISHED TO HELP REACH THIS GOAL, WHILE STANDARDS WERE CREATED TO DEVELOP CRITERIA TO ANALYZE EACH INDIVIDUAL PARK. THE SPECIFIC RECREATION RECOMMENDATIONS PRESENTED IN THIS ELEMENT ARE A RESULT OF THIS ANALYSIS, CITIZENS WORK-SHOPS AND COMPLETED QUESTIONNAIRES CONCERNING RECREA-TION FACILITIES WITHIN THE CITY, AND MEETINGS HELD WITH THE RECREATION AND PARKS DEPARTMENT OF THE CITY OF FLINT, THE FLINT BOARD OF EDUCATION, AND THE FLINT PLANNING COMMISSION.

THE PREPARATION OF THIS REPORT
WAS FINANCED IN PART THROUGH
A COMPREHENSIVE PLANNING GRANT
FROM THE
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

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# I. INTRODUCTION - A RECREATION SYSTEM

A well balanced public recreation system should include the entire range of recreational activities. These recreational activities should be sponsored by either public, quasi-public, private, or commercial agencies. They should be located in indoor facilities or on public open space and park land, or be established in conjunction with school properties. They should be distributed conveniently throughout the community.

The facilities should accommodate all recreational activities, both individual and group. Because people of different ages require different modes of recreation, recreational areas are of many types which differ widely in function, size, and development.

Both indoor and outdoor recreation must be considered. Although the major emphasis will be placed on open space/recreation requirements and needs, indoor recreation facilities will also be discussed in the latter part of this section.

## Overall Open Space Commitment

The City of Flint is indeed fortunate to have a certain amount of acreage set aside specifically for open space recreation. Most cities the size of Flint lack a large open space base to work from at this late stage of urban development. There are several valid open space/recreation concepts reviewed in past city plans and now viable in this new Master Plan.

Flint's creek and river system offers the potential for a finger park approach. Just as the fingers on the human's body lead to the hand and make it functional, these creeks and the river, developed as parkways, would lead to major recreation facilities and help make them more functional to a greater number of people in the city.

There are, however, several areas of the city that are inappropriate for this approach. These areas include densely populated urban areas without water facilities, or intensely developed areas with little or no recreation facilities in the area and little vacant land that can be developed. Innovative approaches towards urban recreation will have to be developed to try and meet the needs of these areas. Innovative approaches would include anything other than the traditional ball diamond or playground type development to serve the specific needs of an area. These innovative approaches could include, vest pocket parks, mobile parks, roof top utilization, plaza development, fitness trails, bike paths, free play areas or semi-permanent equipment that can be moved from site to site as the neighborhood needs change, to name a few.

A questionnaire circulated among the participants of the 1976 Citizens Problem Identification Sessions, indicated that many people are not content with maintenance of existing facilities and that they feel the need for more facilities. Unfortunately, poor maintenance was cited as the main reason for the lack of use of many of the city parks.

## II. EXISTING OUTDOOR RECREATION CONDITIONS

A modern municipal open space recreation system is comprised of several types of areas or properties that differ in function, size, location, service area, and development. A well-balanced open space system is attained only when there is a proper relationship between the number, type, and location of the various recreation areas. After adjusting national outdoor recreation standards to fit local conditions, the principal types of open space categories were established using the following criteria:

A. Playlot

| | | |
|---|---|---|
| Size | - | usually less than one acre |
| Desirable ratio | - | where needed |
| Service area | - | limited |
| Location | - | high density neighborhoods where neighborhood playgrounds are not available for pre-school children, or adjoining school property, or, where feasible, on vacant lots between existing homes where parents can provide supervision. |

B. Neighborhood Park or Playground

| | | |
|---|---|---|
| Size | - | 2.75 acres minimum<br>6 to 15 acres desirable |
| Desirable ratio | - | 1.5 acres/1000 people served |
| Service area | - | .5 mile radius within walking distance |
| Type of facility | - | active recreation for predominately 5 to 15 age group, not ignoring both younger or older age groups. |
| May contain | - | 1. Softball<br>2. Play equipment for all ages<br>3. Multiple use paved area<br>4. Open field areas<br>5. Some rustic and passive areas<br>6. Limited parking |

C. Community Park or Playfield

| | | |
|---|---|---|
| Size | - | 7.5 acres minimum<br>15 to 25 acres desirable |
| Desirable ratio | - | 1.5 acres/1000 people served |

Type of facility - designed to provide and meet the requirements of a specific, specialized, or single purpose recreational activity

May contain -
1. Swimming pool
2. Athletic fields
3. Arboretums
4. Tennis courts
5. Stadiums
6. Picnic areas
7. Floral displays
8. Monuments and memorials
9. Golf courses

F. Public Green Areas

Description - land set aside for its visual qualities as "green spaces" and/or for the purpose of acting as a buffer between areas of non-compatible use

Types -
1. Boulevards
2. Industrial parks
3. Parkway areas
4. Park Islands
5. Triangles
6. Cemeteries

Open Space Requirements

There are two general standards widely recognized in measuring the adequacy of outdoor recreational areas in a community. The first method for measuring acreage requirements is that there should be 10 acres of open space available per 1,000 residents, of which 1.5 acres should be devoted to both neighborhood and community parks, 5 acres to major city parks, and 2 acres to special use parks and facilities. The second method is that 8 to 10 percent of the land in the community should be devoted to open space.

Illustration 1

OPEN SPACE ACREAGE REQUIREMENTS FOR THE CITY OF FLINT

Method I

Flint population based on 1975 ECHO Survey: 175,003

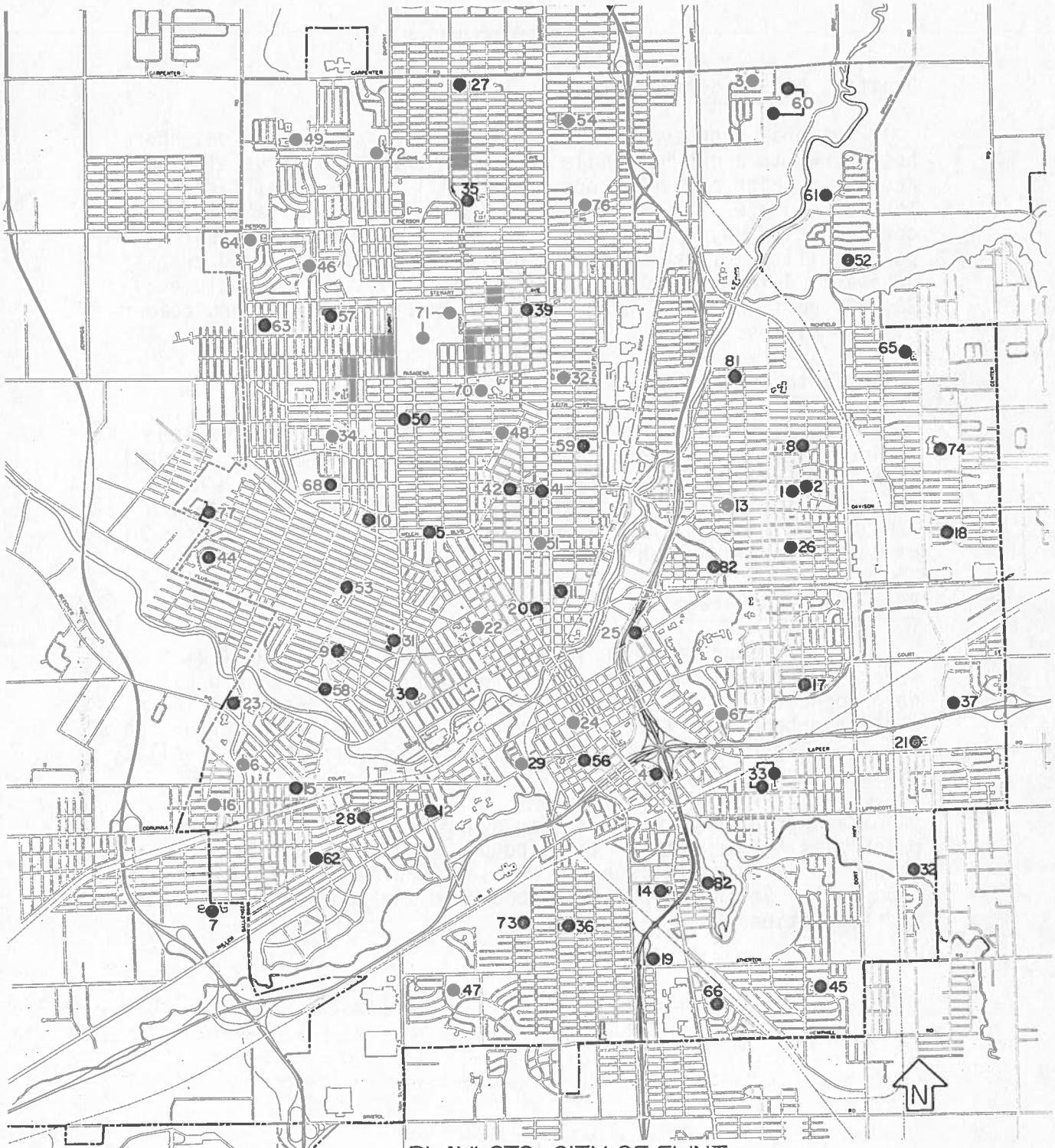
| | | |
|---|---|---|
| Neighborhood Parks | 1.5 acres/1000 pop. | = 262.5 acres |
| Community Parks | 1.5 acres/1000 pop. | = 262.5 acres |
| Major City Parks | 5.0 acres/1000 pop. | = 875.0 acres |
| Special Use Facilities | 2.0 acres/1000 pop. | = 350.0 acres |
| | 10.0 acres/1000 pop. | =1750.0 acres |

## OPEN SPACE ACREAGE BREAKDOWN BY OWNERSHIP

| TYPE OF USE | OWNERSHIP | | | Total Acreage |
|---|---|---|---|---|
| | City of Flint | Board of Ed. | Private | |
| Playlot | 5.95 | 29.15 | 4.15 | 39.25 |
| Neighborhood Park | 188.55 | 99.4 | 26.5 | 314.45 |
| Community Park | 409.0 | 111.4 | -0- | 520.4 |
| Major City Park | 57.0 | -0- | -0- | 57.0 |
| Golf Course | 564.0 | -0- | -0- | 564.0 |
| Special Use Facility | 125.7 | -0- | 2.3 | 128.0 |
| TOTAL ACREAGE | 1350.2 | 239.95 | 32.95 | 1623.1 |



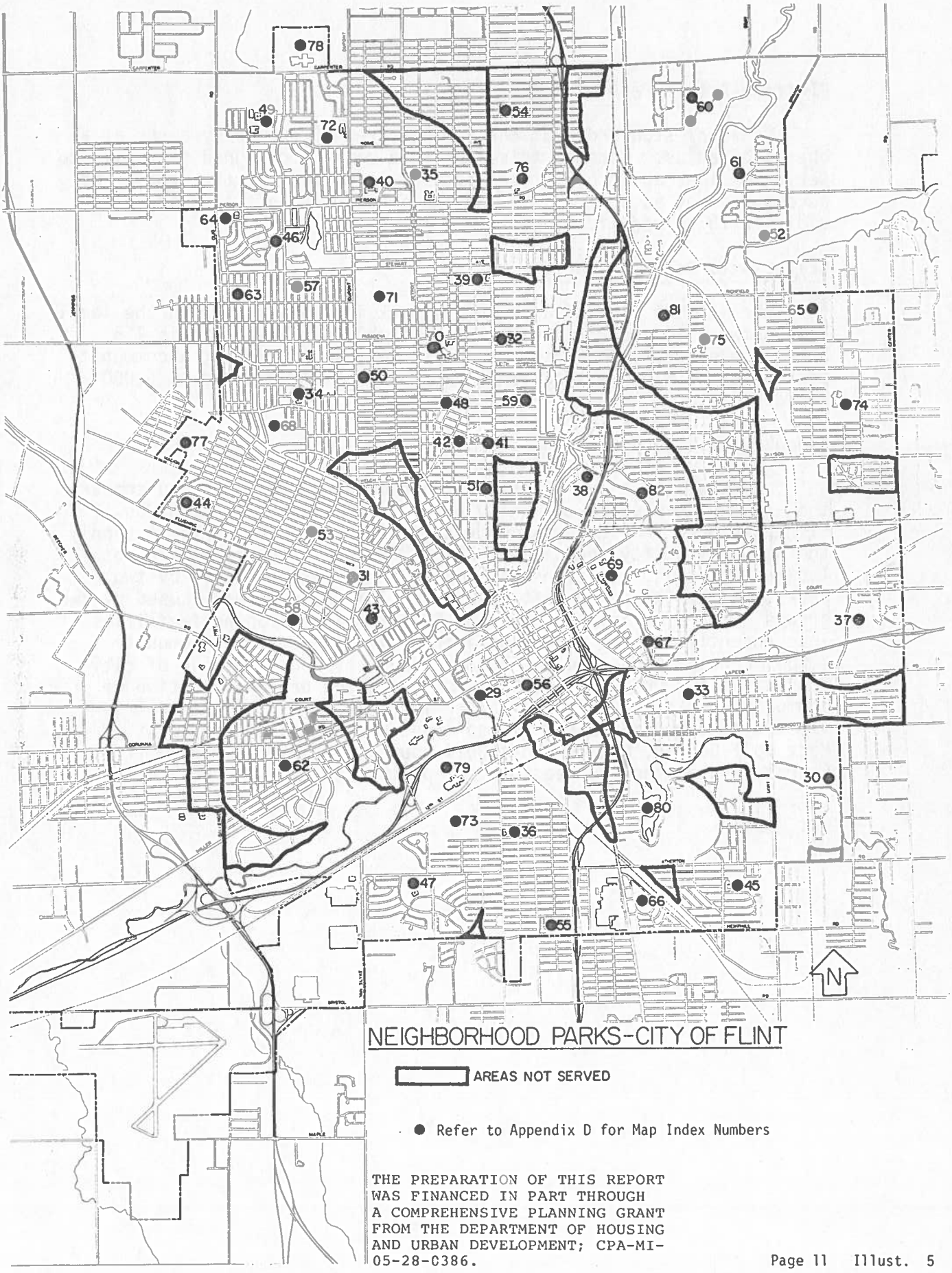
Illustration 3




## PLAYLOTS-CITY OF FLINT

● Refer to Appendix C for Map Index Numbers

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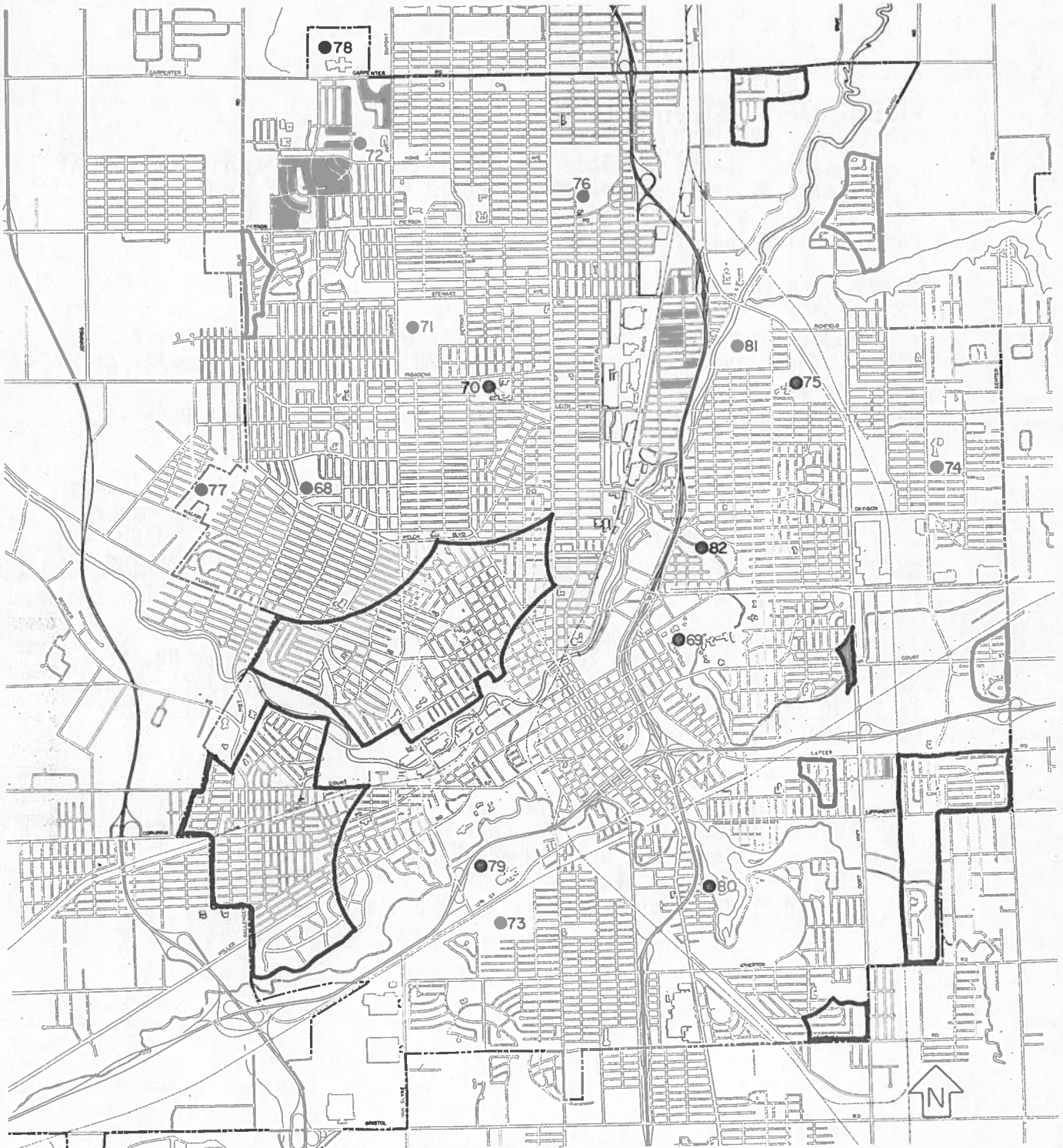



NEIGHBORHOOD PARKS-CITY OF FLINT

AREAS NOT SERVED

● Refer to Appendix D for Map Index Numbers

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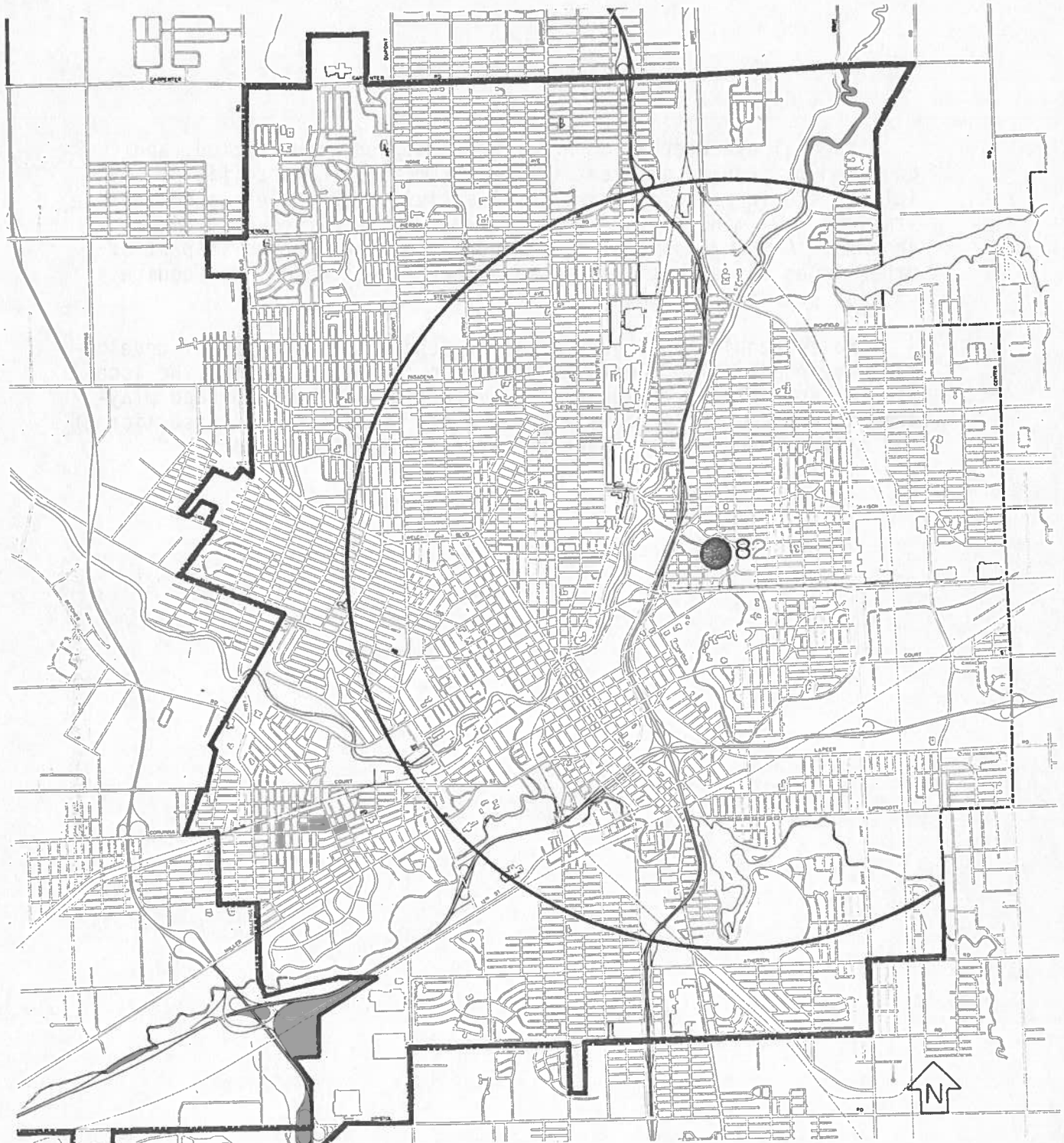



## COMMUNITY PARKS - CITY OF FLINT

AREAS NOT SERVED

● Refer to Appendix E for Map Index Numbers

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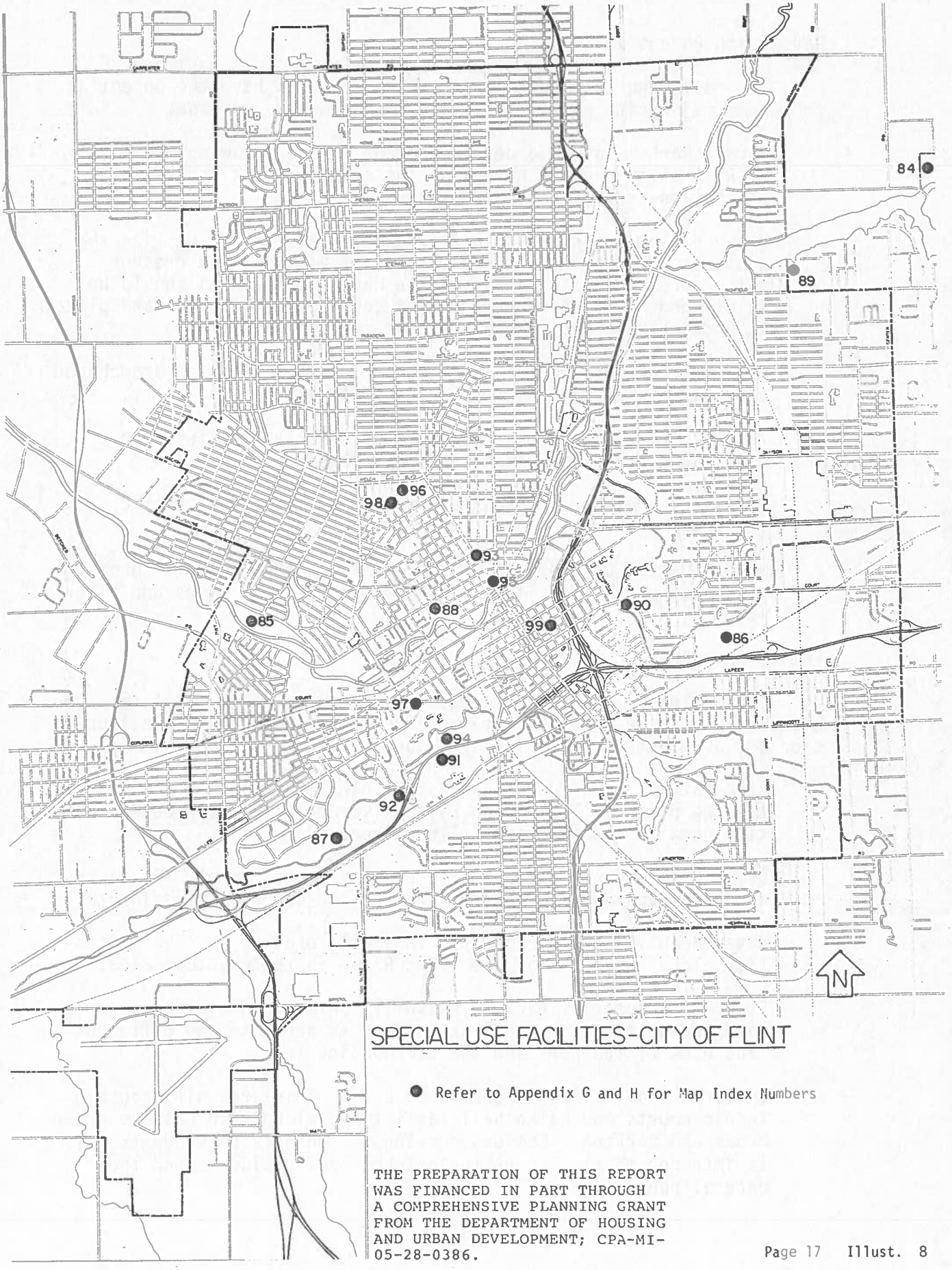



MAJOR CITY PARK-CITY OF FLINT

AREA NOT SERVED

● Refer to Appendix F for Map Index Numbers

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## SPECIAL USE FACILITIES-CITY OF FLINT

● Refer to Appendix G and H for Map Index Numbers

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## III. EXISTING INDOOR RECREATION CONDITIONS

A recreation system is not limited to outdoor activities only. Indoor facilities are needed to provide several types of recreation, especially in this particular part of the country, if people are to have the opportunity to engage in recreation activities throughout the entire year. In terms of function, they may range from a simple gymnasium to a complex community center offering a wide variety of facilities.

Many of these types of facilities are highly specialized and are designed to serve, not just the neighborhood residents, but also larger sections of the city (and sometimes the entire city). Often recreation buildings are established in conjunction with outdoor recreation areas, to provide either complimentary or supportive types of facilities. Because of the degree of specialization and sometimes close proximity to other types of recreation facilities, no definite standards or requirements have been set.

The major indoor recreation facilities are listed in Appendix L, with a map showing their approximate location in Appendix M.

Those areas throughout the city that are not currently being serviced were identified and are represented by the shaded area on the maps. These areas should be considered first for the expenditure of open space/recreation money if our overall goal is to serve all residents with each particular type of facility.

Of these areas not served, the first priority should be given to those areas that have the greatest need. The criteria for need should be based on: (1) current and projected population for the area, (2) the age composition in the area, (3) the future land use of the area, (4) the housing conditions of the area, (5) average residential lots size in the area, (6) median income of area residents, and (7) the stability of the neighborhood.

Many of these areas can be serviced through one of the following methods: A) major land acquisition for development of new facilities; B) upgrading lesser level facilities; or C) innovative approaches such as mobile parks, vest pocket mini parks. Attempts should be made to preserve existing housing stock; in other words, no major relocation or demolition is recommended to provide park land. When no land is available, other innovative approaches will have to be developed.

The level of development of each individual park is another important aspect of the overall city open space/recreation policy. For example, some playlots are nothing more than a monkey bar in the paved area of a parking lot while others have a wide variety of "playground" equipment in a fenced-in green area. Both are shown on the inventory as a playlot, although one is certainly of more use to the neighborhood than the other. It is important, therefore, to look at the facilities available to gain some idea of how adequate a particular park is.

The problem of ownership arises in the area of park development because there is little that can be done to force a private park owner to further develop his park for the benefit of the entire City. This is why most future developments will have to take place on municipal or Board of Education property so the public will always have access to this land.

A study of existing parks has revealed that several parks have the potential (as far as land available) to be expanded. To develop and offer new facilities, therefore, would upgrade the parks classification and increase the number of people served.

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The standards used for the park area classification for the City of Flint are based on the figures and criteria recommended by the following sources:


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2. Elements of Park and Recreation Administration, Charles E. Doell, 1963

3. Regional Wide Recreation Planning, Michigan State University, 1970

4. The Language of Open Space, the Department of Research and Planning - The City of Duluth, 1975

5. Urban Planning and Design Criteria, Joseph DeChiara and Lee Koppelman, 1969

## ALPHABETICAL CODE INDEX TO FACILITIES

| | |
|---|---|
| A | Airplane circle |
| AC | Arts & Crafts Building |
| B | Baseball |
| Bb | Basketball |
| Bh | Bath house |
| Bl | Bowling |
| C | Clubhouse |
| CC | Community Center |
| DF | Drinking Fountain |
| DH | Soap box derby hill |
| F | Fishing |
| FB | Football |
| FT | Field and Track |
| Gl | Golf Course - 9 hole |
| G2 | Golf Course - 18 hole |
| G3 | Golf Course - Par 3 |
| H | Horseshoe Court |
| I | Ice Rink - Artificial |
| IN | Ice Rink - Natural |
| LB | Lawn Bowling |
| MB | Maintenance Building |
| Pl | Picnic shelter |
| P2 | Picnic grills |
| P3 | Picnic tables |
| Pg | Playground |
| Pk | Parking |
| Ps | Park/School site |
| R | Rest room available |
| RB | Rest room building |
| RT | Running Track |
| S | Outdoor Swimming Pool |
| Sa | Sand Box |
| Sb | Softball |
| Sh | Shuffleboard |
| SI | Indoor Swimming Pool |
| SIO | Indoor-Outdoor Swimming |
| SL | Sliding Hill |
| SM | Snowmobiling |
| So | Soccer |
| St | Storage Building |
| SV | Safetyville (Kiddie Car Track) |
| T | Tennis |
| Tb | Tetherball |
| To | Tobogganning |
| U | Undeveloped Land |
| V | Volleyball |
| W | Water Body |
| + | Sports Lighting |
| () | Area not included in acreage totals |
| * | Acreage figure is an estimate. Area not devoted to open space, such as buildings and parking lots, were planimetered off aerials and subtracted from the total acreage of the site. |

## PLAYLOTS

| Map Index Number | Planning District | Name | Ownership | Facilities Available | Park Acreage |
|---|---|---|---|---|---|
| 23 | 12 | St. Pauls Church/School | P. | Sb,Pg,Pk | 1.6* |
| 24 | 7 | Valley School | P. | Bb,Pg,Pk | 0.4* |
| 25 | 8 | Walker Elementary | B.O.E. | Pg,Pk | 0.8* |
| 26 | 8 | Washington Elementary | B.O.E. | Bb,Sb,Pg,Pk | 1.8* |
| 27 | 2 | Wilkins Park<br>(Wilkins Elementary) | C.O.F.<br>B.O.E. | Sb,Bb,Pg<br>Pk | 1.7<br>1.0* |
| 28 | 12 | Zimmerman Junior High | B.O.E. | Sb,Pk | 2.2* |
| | | TOTAL PLAYLOTS 28 | | | 39.25 acres |

## NEIGHBORHOOD PARKS

| Map Index Number | Planning District | Name | Ownership | Facilities Available | Park Acreage |
|---|---|---|---|---|---|
| 44 | 6 | Eldorado Vista | C.O.F. | Sb,Pg | 6.75 |
| 45 | 10 | Farnumwood P.S. | C.O.F. | Sb,In,Pg,P3,Pk | 11.2 |
| | | (Freeman Elementary) | B.O.E. | Sb,Bb,Pg,Pk,T | 5.3* |
| 46 | 1 | Fleming Park | C.O.F. | Bb,Sb,DF,P1,P3 Pg,Sa | 2.5 |
| 47 | 11 | Gerholtz P.S. | C.O.F. | T,W | 5.0 |
| | | (Neithercut Elementary) | B.O.E. | Bb,Sb,Pg,Pk | 4.3* |
| 48 | 4 | Hardenbrook Park | C.O.F. | Bb,Sb,DF,Pg,V,RB | 3.6 |
| 49 | 1 | Holmes Jr. High/ Brownell Elementary | B.O.E. | B,Bb,Sb,Pg,Pk | 9.6* |
| 50 | 4 | Iroquois P.S. | C.O.F. | Bb,Sg,Pg,P2,P3 IN,RT,Tb,V | 8.5 |
| | | (King Elementary) | B.O.E. | Pk,Pg | 0.0* |
| 51 | 5 | Kennedy Park P.S. | C.O.F. | Bb+,T+,I+,Pk,S1O, Bh,R | 4.0 |
| | | (Kennedy Elementary) | B.O.E. | Pk | 2.0* |
| 52 | 3 | Layton Park | C.O.F. | Bb,Sb,Pg | 8.8 |
| 53 | 6 | Longfellow Jr. High/ Summerfield Elem. | B.O.E. | Bb+,Bb,Pg,Pk | 5.2* |
| 54 | 2 | Martin Park P.S. | C.O.F. | Bb+,Sb,DF,P1,P2, P3,Pg,Sa,Bb,T+ | 3.6 |
| | | (Martin Elementary) | B.O.E. | Bb,Pk,Pg | 2.1* |
| 55 | 11 | McKinley Jr. High | B.O.E. | B+,Bb,Sb,Fb,RT,PK | 17.1* |
| 56 | 7 | Memorial Park | P. | Bb,Pg,T,I+,Sb,Pk | 2.1 |
| 57 | 1 | Merrill Elementary | B.O.E. | Bb,Sb,Pg,Pk | 2.9* |
| 58 | 6 | Mott Park | C.O.F. | Bb,Pg,DF,T,Sa | 7.5 |
| 59 | 5 | Oak Park | C.O.F. | Bb,Sb,P2,P3,T,Tb RB,Sa,V | 8.0 |
| 60 | 3 | Riverside Park (3 sites) | C.O.F. | Pg,Sb | 7.9 |

## COMMUNITY PARKS

| Map Index Number | Planning District | Name | Ownership | Facilities Available | Park Acreage |
|---|---|---|---|---|---|
| 68 | 6 | Bassett Park | C.O.F. | Bb,Sb,CC,DF,Fb,IN+ P2,P3,Pg,Pk,Tb,R,V,SI | 35.0 |
| 69 | 9 | Central Sr. Hign/ Whittier Jr. High | B.O.E. | B,Bb,RT,Fb,Pk,T | 8.9* |
| 70 | 4 | Emerson Jr. High/ Emerson Inter./ Garfield Elementary | B.O.E. | B,Bb,Sb,Pg,Pk,RT,Fb | 9.2* |
| 71 | 4 | Forest Park P.S. | C.O.F. | Bb,Sb,AC,DF,PI,P2,P3 Pg,Pk,R,IN+,MB,T,V | 102.5 |
| | | (Bunche Elementary) | B.O.E. | Pk+ | 0.0* |
| 72 | 1 | Hasselbring P.S. | C.O.F. | Bb,Sb+,P3,Pg,Tb | 30.5 |
| | | (Gundry Elementary) | B.O.E. | Bb,Pg,Pk,T,V | 4.1* |
| 73 | 11 | Lincoln Park (Name changed to Stan Broome) | C.O.F. | A,B+,Bb+,Bh,CC,DF, Fb,I+,H,Pg,Pk+,Rb, S+,T+,Tb,Sb | 79.0 |
| 74 | 8 | Longway P.S. | C.O.F. | Sb,P2,P3,Pg,T+,IN,Pk | 33.0 |
| | | (Potter Elementary) | B.O.E. | Bb,Pg,Pk,Sh,T+ | 5.7* |
| 75 | 3 | Lowell Junior High | B.O.E. | B,Bb,Sb,Fb,Pk | 12.9* |
| 76 | 2 | Oak Knoll P.S. (Name changed to Bonner/Jefferson) | C.O.F. | Sb+,DF,Fb,Pl,P2,P3 Pg,FT,R,St,So | 21.0 |
| | | (Jefferson Elementary) | B.O.E. | Bb+,DF,Pg,Pk+,Sa | 1.6* |
| 77 | 6 | Northern Senior High/ Anderson Elementary | B.O.E. | B,Bb,Pg,Pk,T | 20.4* |
| 78 | 1 | Northwestern Sr. High | B.O.E. | B,Bb,RT,Fb+,T,Pk | 26.6* |
| 79 | 11 | Southwestern Sr. High | B.O.E. | B,Bb,RT,Fb,T,Pk | 22.0* |
| 80 | 10 | Thread Lake, Cummings, and McKinley Park | C.O.F. | Bb,Sb+,Bh,CC,F,IN H,Pl,P2,P3,Pg,Pk,R S,Sh,T,Tb,V,W | 36 land (70 water) |
| 81 | 3 | Whaley P.S. | C.O.F. | Bb,B+,Bh,CC,FB,I+,Pl P3,R,SIO,Sh+,SM,So, St,T+,Tb,V,pk,MB,W, | 72.0 |
| | | (Williams Elementary) | B.O.E. | Pk,Bb | 0.0* |
| | | TOTAL COMMUNITY PARKS 14 | | | 520.4 acres |

APPENDIX H

## SPECIAL USE PARKS

| Map Index Number | Planning District | Name | Ownership | Facilities Available | Park Acreage |
|---|---|---|---|---|---|
| 88 | 7 | Atwood Stadium | C.O.F. | Fb+,Pk,So+,R | 13.5 |
| 89 | 3 | Branch & Carr | C.O.F. | U | (3.0) |
| 90 | 9 | Burroughs Park | C.O.F. | W | 11.75 |
| 91 | 11 | Cronin Downs | C.O.F. | DH | -0-* |
| 92 | 12 | Kellar Tennis Courts | C.O.F. | Pk,T,DF | -0-** |
| 93 | 7 | Hamilton Park | C.O.F. | Floral Display | 0.15 |
| 94 | 7 | Happy Hollow | C.O.F. | D.W. | 95.0 |
| 95 | 7 | McFarlan Park | C.O.F. | Veterans Memorial Eternal Flame | 0.4 |
| 96 | 7 | Metawanee Park | C.O.F. | Landscaped Island | 1.0 |
| 97 | 7 | Mobley Park | C.O.F. | Floral Display | 2.9 |
| 98 | 7 | Ramona Park | C.O.F. | Landscaped | 1.0 |
| 99 | 8 | Willson Park | P. | Landscaped | 2.3 |
| | | TOTAL SPECIAL USE PARKS 11 | | | 128.0 acres |

*Area included with Happy Hollow Nature Area
**Area included with Swartz Creek Golf Course

## OPEN SPACE BY PLANNING DISTRICT

The following is a breakdown of the types of parks located in each planning district. In some instances a park may be listed more than once. If it is a park/school site, or two or more schools are at the site, then the park will be listed under all references to it.

### OPEN SPACE IN PLANNING DISTRICT #1

| Map Index Number | Name | Type of Open Space | Ownership* |
|---|---|---|---|
| 46 | Fleming Park | Neighborhood Park | C.O.F. |
| 49 | Holmes Junior High | Neighborhood Park | B.O.E. |
| 49 | Brownell Elementary | Neighborhood Park | B.O.E. |
| 57 | Merrill Elementary | Neighborhood Park | B.O.E |
| 63 | Sarvis Park | Neighborhood Park | C.O.F. |
| 64 | Selby Elementary | Neighborhood Park | B.O.E. |
| 72 | Hasselbring P.S. | Community Park | C.O.F. |
| 72 | Gundry Elementary | Community Park | B.O.E. |
| 78 | Northwestern Senior High | Community Park | B.O.E. |

### OPEN SPACE IN PLANNING DISTRICT #2

| | | | |
|---|---|---|---|
| 27 | Wilkins Park P.S. | Playlot | C.O.F. |
| 27 | Wilkins Elementary | Playlot | B.O.E. |
| 32 | Berston P.S. | Neighborhood Park | C.O.F. |
| 32 | Parkland Elementary | Neighborhood Park | B.O.E. |
| 35 | Clara Hilborn P.S. | Neighborhood Park | C.O.F. |
| 35 | Bryant Junior High | Neighborhood Park | B.O.E. |
| 35 | Pierson Elementary | Neighborhood Park | B.O.E. |
| 40 | Donovan North Middle School | Neighborhood Park | P. |
| 40 | Olk Primary School | Neighborhood Park | P. |
| 54 | Martin Park P.S. | Neighborhood Park | C.O.F. |
| 54 | Martin Elementary | Neighborhood Park | B.O.E. |
| 76 | Oak Knoll P.S. | Community Park | C.O.F. |
| 76 | Jefferson Elementary | Community Park | B.O.E. |

### OPEN SPACE IN PLANNING DISTRICT #3

| | | | |
|---|---|---|---|
| 3 | Carpenter Elementary | Playlot | B.O.E. |
| 52 | Layton Park | Neighborhood Park | C.O.F. |
| 60 | Riverside Park | Neighborhood Park | C.O.F. |
| 61 | Rollingwood P.S. | Neighborhood Park | C.O.F. |
| 61 | Johnson Elementary | Neighborhood Park | B.O.E. |
| 75 | Lowell Junior High | Community Park | B.O.E. |
| 81 | Whaley P.S. | Community Park | C.O.F. |
| 81 | Williams Elementary | Community Park | B.O.E. |
| 83 | UpRiver Park | Undeveloped | C.O.F. |
| 84 | Kearsley Lake Golf Course | Golf Course | C.O.F. |
| 89 | Branch & Carr | Undeveloped | C.O.F. |

*C.O.F. - City of Flint, Department of Parks and Recreation
B.O.E. - Board of Education, Flint School District
P. - Privately Owned and Operated, Open to Public

## OPEN SPACE IN PLANNING DISTRICT #7 (Cont'd)

| Map Index Number | Name | Type of Open Space | Ownership |
|---|---|---|---|
| 56 | Memorial Park | Neighborhood Park | P. |
| 88 | Atwood Stadium | Special Use | C.O.F. |
| 93 | Hamilton Park | Special Use | C.O.F. |
| 94 | Happy Hollow Nature Area | Special Use | C.O.F. |
| 95 | McFarlan Park | Special Use | C.O.F. |
| 96 | Metawanee Park | Special Use | C.O.F. |
| 97 | Mobley Park | Special Use | C.O.F. |
| 98 | Ramona Park | Special Use | C.O.F. |

## OPEN SPACE IN PLANNING DISTRICT #8

| | | | |
|---|---|---|---|
| 1 | Amos Triangle | Playlot | C.O.F. |
| 2 | Beechwood Playground | Playlot | C.O.F. |
| 8 | Delaware Playground | Playlot | C.O.F. |
| 13 | Homedale Elementary | Playlot | B.O.E. |
| 18 | Polk Playground | Playlot | C.O.F. |
| 25 | Walker Elementary | Playlot | B.O.E. |
| 26 | Washington Elementary | Playlot | B.O.E. |
| 38 | Dayton Park | Neighborhood Park | C.O.F. |
| 65 | Sobey Elementary | Neighborhood Park | B.O.E. |
| 74 | Longway P.S. | Community Park | C.O.F. |
| 74 | Potter Elementary | Community Park | B.O.E. |
| 82 | Kearsley Park | Major City Park | C.O.F. |
| 99 | Willson Park | Special Use | P. |

## OPEN SPACE IN PLANNING DISTRICT #9

| | | | |
|---|---|---|---|
| 4 | Clark School | Playlot | B.O.E. |
| 17 | Pierce Elementary | Playlot | B.O.E. |
| 21 | Scott Elementary | Playlot | B.O.E. |
| 33 | Brennan P.S. | Neighborhood Park | C.O.F. |
| 33 | Stewart Elementary | Neighborhood Park | B.O.E. |
| 37 | Cook Park | Neighborhood Park | C.O.F. |
| 67 | Woodlawn Park | Neighborhood Park | C.O.F. |
| 69 | Central Senior High | Community Park | B.O.E. |
| 69 | Whittier Junior High | Community Park | B.O.E. |
| 86 | Pierce Park Golf Course | Golf Course | C.O.F. |
| 90 | Burrough Park | Special Use | C.O.F. |

## OPEN SPACE IN PLANNING DISTRICT #10

| | | | |
|---|---|---|---|
| 30 | Atherton East P.S. | Neighborhood Park | C.O.F. |
| 30 | Manley Elementary | Neighborhood Park | B.O.E. |
| 45 | Farnumwood P.S. | Neighborhood Park | C.O.F. |
| 45 | Freeman Elementary | Neighborhood Park | B.O.E. |
| 66 | Windiate Park | Neighborhood Park | C.O.F. |
| 80 | Thread Lake | Community Park | C.O.F. |
| 80 | Cummings Park | Community Park | C.O.F. |
| 80 | McKinley Park | Community Park | C.O.F. |

# NEIGHBORHOOD PARK ANALYSIS BY PLANNING DISTRICT

The following is an analysis of the neighborhood park system within the City of Flint. The object of this analysis was to determine which areas of the city are not served by one or more neighborhood parks. This analysis was done by planning district to detail what areas are not served and the basic characteristics of the population within each area. Although done by planning district, parks in the adjoining planning districts were not ignored.

After deficient areas were located, each area was treated separately as to the number of persons within the area, the age composition of those persons, along with other characteristics of the area were identified. Once identified, possible solutions were given.

## PLANNING DISTRICT 1

Planning district 1 has the highest population of any district in the city and over 44% of these residents are 17 years of age or younger. All residents in planning district 1 are within the service area of one or more neighborhood parks.

## PLANNING DISTRICT 2

Planning District 2 has shown a 20% decrease (nearly 5,000 residents) in population since 1970. Our information shows that this population loss is partly due to acquisition for the I-475 expressway. This P.D. has a vacancy rate of over 16%. The high vacancy rate would indicate that housing is available in the area and the population of the district has a potential to increase.

Areas not served in P.D. #2

I. Northern section

   A. Size approximately 30 block; population approximately 2,000 residents

   B. The size of the area and the number of people not served does warrant the development of a new park

   C. Due to the land constraints the expansion of an existing smaller park may be a feasible solution

II. Northeast corner

   A. Size approximately 10 blocks; population approximately 650 residents

   B. Since neighborhood park requires a minimum of 2.75 acres (1.5 acres/1,000 population), this small of an area does not warrant a new park site

   C. Possible solution - innovative approach

III. Southern section

   A. Size approximately 8 blocks; population approximately 520 residents

   B. Same as B above

   C. Possible solution - innovative approach

## PLANNING DISTRICT 3

Planning District 3 has shown a decrease in population since 1970 - down approximately 2,000 people or 14%. There is a vacancy rate of almost 10% in this Planning District. The demographic data shows that approximately 50% of the population are adults (age 18 through 58).

Areas <u>not</u> served in P.D. #3

I. West side of P.D. #3

   A. Area in process of total clearance for development of an industrial park - no park needed

II. West of River

   A. The size of the area approximately 13 blocks; population approximately 700

   B. The size of the area does not warrant the development of a neighborhood park in the area

   C. Innovative approach could relieve the problem

## PLANNING DISTRICT 4

Planning District 4 has shown some stability through the past few years. It has gained about 500 residents since 1970, despite its rather high vacancy rate (10.2%). This district shows a high percentage of children (0-17 years) 42% and a higher than average household size of 3.45. However, all residents are within the service area of a neighborhood park except for a 1/2 block area in the NE corner of P.D. 4. This area is too small to warrant a neighborhood park.

## PLANNING DISTRICT 5

Planning district 5 has shown a slight decrease in population (about 500 people), since 1970. Many of these can be attributed to the clearance of the Doyle area. Planning district 5 has a vacancy rate of approximately 14%. The demographic data indicates that there are more children per household than most other planning districts, while this district has less than 8% of the population over 60 years of age.

Areas <u>not</u> served in P.D. #5

I. West side

   A. Size of area 10 blocks; however, it abuts areas not served in P.D.'s #6 and #7 approximately 45 more blocks with a total population of approximately 4,000 residents

   B. The size of the area in all three P.D.'s would warrant a neighborhood park in the area

II. South central (Harriet, 5th Avenue, Saginaw, Industrial)

   A. Size of the area approximately 8 acres

   B. Over half of the area is part of the Doyle redevelopment project, and that area has no residents at this time

   C. When the project is completed, there will be the need for a neighborhood park to serve the Doyle residents and those people to the north

## PLANNING DISTRICT 6

Planning district 6 has shown a slight decrease in population - down approximately 800 since 1970. The district has a vacancy rate of just over 5%, one of the lowest in the City. The demographic data indicated that there are 33% children, while 15% of the population is over 60 years.

Areas <u>not</u> serviced

I. East side; abuts west side of P.D. #5; see P.D. 5 for details

II. Northwest corner

A. Size of area approximately 1 block

B. Too small to warrant park

## PLANNING DISTRICT 7

Planning district 7 has shown the largest decrease in population since 1970 of nearly 5000 people. About half of the loss can be attributed to an increase in vacancy rate from approximately 7% in 1970 to over 20% in 1975. The other can be attributed to spot clearance throughout the district. The demographic information indicates that P.D. #7 has one of the lowest avearge household size in the City. The district has a slightly higher percent of over 60 year olds (14.3%) and a slightly lower percent (30.4%) of children under 18 than the City average.

Areas <u>not</u> served in P.D. #7

I. Southeast corner

   A. Size - isolated pocket of approximately 6 blocks that has no facilities; pocket may be acquired if Ann Arbor Yards expand. (See plan for NDP-4 Grand Traverse South Urban Renewal District).

   B. Size of area does not warrant its own facility

   C. Innovative approach or development of creek way (bike trails to connect to other facilities

II. North central: abuts the west side of P.D. #5 (See P.D. #5 for details).

III. Southwest corner

   A. Size over 20 blocks; population approximately 1000

   B. Size of area and number of people do not warrant a neighborhood park

   C. Area abuts an area not serviced in P.D. #12 of approximately 10 blocks and 200 residents

   D. Possible solution - innovative approach

   E. Consider park acquisition at time work on Dupont-Hammerberg connector work begin

## PLANNING DISTRICT 8

Planning District 8 has shown a decrease in population since 1970, down approximatey 1,500. There is a vacancy rate of 4.3% while other demographic data is consistent with the city average.

Areas <u>not</u> served in P.D. #8

I. North side

A. Size of area approximately 4 blocks, population approximately 200

B. Size of area and population do not warrant neighborhood park

C. Possible solution - innovative approach

II. East side

A. Size of area approximately 20 blocks, population 200

B. Size and population do not warrant neighborhood park

C. However, area is totally isolated, vacant land not available

D. Possible solution - innovative approach to avoid clearance

III. Central

A. Size of area approximately 70 blocks, population 3,500

B. Size and population warrant a neighborhood facility

C. Upgrade lesser facility or innovative approach since no land is available

# PLANNING DISTRICT 9

Planning District 9 has shown a decrease in population since 1970, of approximately 1,800. There is a vacancy rate of approximately 8% - about average for the City. The area has a lower number of children (27.0%) than other P.D.'s in the City and a higher than average percent of over 60 year olds (20%).

Areas not served in P.D. #9

I. North side

   A. Size - approximately 50 blocks, population approximately 2,500

   B. Size and population warrant a neighborhood facility

   C. There is little vacant land in area

   D. Possible solution - innovative approach or upgrading lesser facilities

II. West side

   A. Size approximately 6 blocks, population approximately 800

   B. Size and population do not warrant a neighborhood park

# PLANNING DISTRICT 10

Planning District 10 has maintained a stable population since 1970, with a vacancy rate of 9.0%. There are over 40% children in this district while only 7.7%, 60 year olds and over.

Areas not served in P.D. #10

I. Northeast side

   A. Size approximately 20 blocks, population approximately 2,000

   B. Size of population warrants a neighborhood park

   C. Vacant land not available

   D. Possible solution - innovative approach or upgrading lesser facility

II. Northwest corner

   A. Size approximately 1 block

   B. Too small to warrant park

III. Central

   A. Size approximately 10 blocks, approximate population 1,000

   B. Size and population do not warrant neighborhood park

IV. Southeast corner

   A. Size approximately 1 block

   B. Too small to warrant park

V. West side

   A. Size approximately 3 blocks

   B. Too small to warrant park

## PLANNING DISTRICT 11

Planning District 11 has shown a decline in population since 1970 of approximately 2,500, or about an 18% decrease. P.D. #11 has a vacancy rate of approximately 4.4%. The demographic data indicates that in this district there is over 20% elderly population (highest percent in the City), and there is a low percent of children age 0 - 17 (28.2%).

Areas <u>not</u> served in P.D. #11

I. Northeast corner

   A. Size of area approximately 13 blocks, and population of approximately 500

   B. Size of area and population do not warrant neighborhood park

   C. The high concentration of elderly would suggest an innovative approach to service their needs

   D. Areas along Thread Creek could be used for an innovative approach

II. South side

   A. Area approximately 1 block

   B. Too small to warrant park

# PLANNING DISTRICT 12

Planning District 12 has shown a decrease in population since 1970, down approximately 1,600 or 14%. The vacancy rate of 4.5% is one of the lowest in the City. The demographic data shows the smallest average household size in the City, (2.53%) a high percentage of elderly, (19.1%) and a low percent of children 0 - 17 years, (24.1%).

Area <u>not</u> served in P.D. #11

I. West side

   A. Size of area approximately 1/2 of P.D. #12, approximate population 4,500

   B. Size and population of area warrant a neighborhood park; however, the low percent of children (24%) and the low average household may indicate that a traditional neighborhood park may not be necessary.

   C. Possible solution - innovative approach

   D. There are several special use facility and greenspace in area

II. East side

   A. Size approximately 10 blocks and 200 residents

   B. Abuts area in P.D. #7, see P.D. #7 for details

# INVENTORY - INDOOR RECREATION

Following is a list of the major indoor recreation facilities. The list is divided by the type of activity that takes place. Therefore, some facilities that have multi-uses, will be listed more than once. These facilities are scattered throughout the city and provided by public, school, and commercial agencies.

## SWIMMING POOLS

| Map Index Number | |
|---|---|
| 1 | Central High School |
| 2 | Durant-Tuuri-Mott |
| 3 | Durham Pool |
| 4 | Emerson Intermediate School |
| 5 | Haskell Community Center |
| 6 | Northern High School |
| 7 | Northwestern High School |
| 8 | Southwestern High School |
| 9 | YMCA |
| 10 | YWCA |

## SWIMMING POOLS - INDOOR/OUTDOOR

| | | |
|---|---|---|
| 11 | Kennedy Park/School | |
| 12 | Whaley Park/School | |

## BOWLING ALLEYS

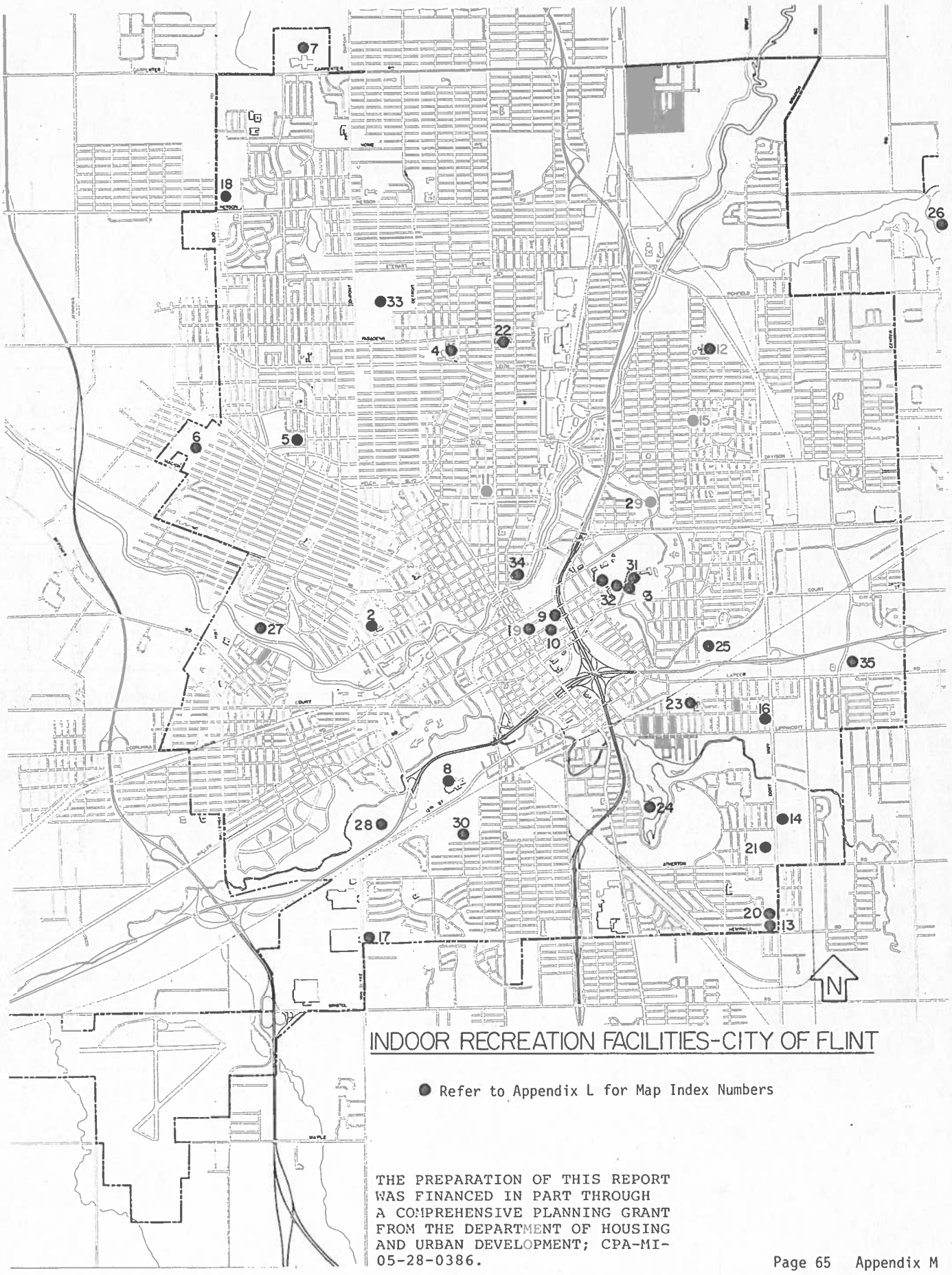
| | | |
|---|---|---|
| 13 | Dort Bowl | 48 lanes |
| 14 | Eastown Bowl | 24 lanes |
| 5 | Haskell Community Center | 6 lanes |
| 15 | Merry Inn | 4 lanes |
| 16 | Panorama Lanes | 40 lanes |
| 17 | Skyway Lanes | 40 lanes |
| 18 | West Lanes | 40 lanes |

## THEATRES

| | |
|---|---|
| 19 | Capital Theatre |
| 20 | Flint Cinema |
| 21 | Small Mall Cinema I |
| 21 | Small Mall Cinema II |

## COMMUNITY CENTERS

| | |
|---|---|
| 22 | Berston |
| 23 | Brennan |
| 5 | Haskell |
| 24 | McKinley |
| 25 | Pierce Park |




## INDOOR RECREATION FACILITIES-CITY OF FLINT

● Refer to Appendix L for Map Index Numbers

THE PREPARATION OF THIS REPORT WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; CPA-MI-05-28-0386.

# 6

# PUBLIC / COMMUNITY FACILITIES

PREPARED BY THE DEPARTMENT
OF COMMUNITY DEVELOPMENT,
CITY OF FLINT, MICHIGAN

THE PREPARATION OF THIS REPORT
WAS FINANCED IN PART THROUGH
A COMPREHENSIVE PLANNING GRANT
FROM THE DEPARTMENT OF HOUSING
AND URBAN DEVELOPMENT; CPA-MI-
05-28-0386.

# ABSTRACT


| | |
|---|---|
| TITLE: | PUBLIC FACILITIES |
| PREPARED BY: | CITY OF FLINT, DEPARTMENT OF COMMUNITY DEVELOPMENT<br>DIVISION OF PLANNING AND PROGRAM DEVELOPMENT |
| SUBJECT: | PUBLIC AND COMMUNITY FACILITIES OF FLINT |
| DATE: | NOVEMBER, 1977 |
| NUMBER OF PAGES: | 90 |
| ABSTRACT: | THIS REPORT WILL DEFINE AND OUTLINE PUBLIC AND COMMUNITY FACILITIES, CATALOG AND INVENTORY THOSE DEEMED TO BE OF PRINCIPAL SIGNIFICANCE, CITE CURRENT AND PROJECTED LAND USE NEEDS, AND PRESENT RELEVANT DISCUSSION OF SPECIAL CONSIDERATIONS. DEFICIENCIES ARE GENERALLY GIVEN AS RECOMMENDATIONS. THE REPORT GIVES PRIMACY TO EDUCATIONAL AND HEALTH CARE FACILITIES ESPECIALLY THE LARGER INSTITUTIONAL COMPLEXES HAVING MAJOR IMPACTS ON COMMUNITY RESOURCES. |



THE PREPARATION OF THIS REPORT
WAS FINANCED IN PART THROUGH A
COMPREHENSIVE PLANNING GRANT
FROM THE
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

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# I. INTRODUCTION

Public facilities represent a basic function of local government; that of providing essential and certain desirable services to citizens. Municipal facilities probably began with the town pump; the water works; a lake or riverfront pier; the railroad station; town hall and a jail. Such facilities are now covered by other 701 elements. This element, therefore, deals with a broader definition of such facilities, community rather than public, and further expands this to include many quasi-public facilities as well. The traditional definition of public facilities now seems to be too narrow, that of public-owned facilities for public use. Because of changing land use patterns, public ownership no longer seems to be necessary, just as public access and use is qualified and restricted. Services, importantly, have greatly increased. Therefore, facilities and their ownership, become minor in importance. A more workable definition, simply, is: facility-based services acting for the general public benefit. Land use is considered critical to the physical land use orientation of 701.

These principal categories are covered: Education; Health; Welfare; Protection; and Cemeteries.

Public or community facilities are included within the overall 701 process because of several prime considerations:

Such facilities are major consumers of urban land. In periods of economic depression, the development and expansion of public facilities, along with other public works, is often a principal economic generator in the City. It is, therefore, useful to have plans for such facilities' renovation or expansion. In periods of affluence, these facilities are often favored with both private and public funding support. Staged development plans are, therefore, useful to have available at all times.

The growth or other change of such facilities can be a major influence in the influencing of development in other quarters or the support of continuing development of land in the City. In Flint in recent years, the downtown riverfront university campus donation and collateral development, is a good example of such synergistic activities.

A substantial investment of public funds is usually required for public or community facilities. The character and location of facilities must be optimized relative to the comprehensive design for community development if invested funds are not to be wasted.

Finally, although the historic thrust of public facilities and other government and quasi-public development has been in response to the pressures of growth, and to change within a broad pattern of growth, a counter-force has been developing. This is manifested as the reduced use of facilities such as schools, and is presumed to be an essentially short term problem. However, whatever the causes and time impact, negative growth factors must be addressed until population stabilization is achieved.

## II. GOALS AND OBJECTIVES

The principal goal of studying community facilities is to assure the availability of adequate public and communities facilities to serve properly the populations of various neighborhood areas within the City of Flint; also to promote optimal location of facilities in accordance with authorized land use plans of such facilities, in order to maximize accessibility and service utility to the community.

The objectives of this section's study tasks cover two levels: The generalized objectives for overall guidance of the activities, as are listed here; plus specialized objectives that specifically relate to each section, and are stated with each, along with existing, projected conditions, and recommendations.

## III. EDUCATION - COMMUNITY SCHOOLS

### A. Introduction

This study will inventory the principal and important school facilities at all levels. Where appropriate, minor facilities will be combined for analysis and treated as a group. Two general groupings were found to contribute the greatest impact to the community, partly because of their size and partly because of their intimate relationships to not just the youth, but all age categories within and around the city:

- The Flint Community School System - K-12 (Kindergarten to 12th grades)
- The Post-Secondary System--2 and 4 yr. institutions, or Mott Community College and the University of Michigan-Flint

The study will identify the most important apparent physical impact that these schools and systems are having and predictably will have in the immediate future (a short-term assessment or one anticipating known activities covering approximately five years). As the recommendations and collateral discussions will indicate, these cover two problem areas relative to the two systems:

(1) Flint Community Schools (K-12) will not grow and are faced with a winding down process which has begun with the closing of some center city schools and will result in the closing of others. The problem is essentially that of continued use and or re-use of such facilities no longer operated as system schools.

(2) The post-secondary schools, essentially the college and university, are entertaining some growth and major change in their facilities. For Mott College, this is mainly physical changes within their existing campus plus a new extended facility. For the University of Michigan-Flint, there are changes within the campus that they currently share with the College, plus construction continuing at their new riverfront campus located in downtown Flint. Both institutions, however, are relatively close to each other and will impact upon transportation within the area.

(3) This study will also provide limited assessments of the performance and role of the schools in the community, and suggest special localized needs largely based on a changing population mix. The impact of transporting public K-12 students is too new to assess, but it is important to note that City schools are in process of great change, partly because of rising federal intervention.

this settlement surrounded by Indians. In 1836, the first schoolhouse was opened, and ten years later the first permanent brick structure, McFarlan School, was built.

Michigan School for the Deaf was founded by the State Legislature in 1848 and in 1854 received its first student. By 1873, the cornerstone for the first high school was laid and the Flint High School was dedicated two years later. In 1923, Flint High School had a replacement which was renamed Central High; then Northern High School was opened in 1928. Southwestern was completed in 1958, and Northwestern in 1964.

The oldest surviving elementary school structure, Doyle, was built in 1902 on the near north side, which was closed in 1974 because of declining enrollment. The next oldest, Oak, built in 1908 was closed in 1976 for similar reasons. Parkland, built in 1914, was also closed in 1976.

C. Existing Condition

There are two established approaches to evaluating the physical plant in terms of adequacy: Campus size and distance from home (or commuting time if transported). How do Flint Community Schools measure up to these standards? Flint Community Schools often do not appear to conform to site size recommendations. The schools exceeding minimum sizes are, in many cases, shared sites, often integrated as community parks and open space. Older schools have the smallest sites (e.g., Oak's 1.4 acres).

Campus Size

| School Level | Minimum Size | Enrollment** | Recommended Size |
|---|---|---|---|
| Elementary | 10 acres plus* | 800 pupils | 18 acres (for 800 acres) |
| Junior High | 20 acres plus* | 1200 pupils | 32 acres (for 1200) |
| Senior High | 30 acres plus* | 1800 pupils | 48 acres (for 1800) |

*The basic minimum size given is a starting point. For each 100 pupils add one (1) acre.

Source: NCSC Guide to Planning School Plants, 1969

**Enrollment recommendations (given above) are those cited by DeChiara, Joseph and Lee Koppelman, Planning Design Criteria, 1969.

actually be any elementary students residing within a remote area. An analysis of service areas revealed that five elementary schools had walking distances in excess of 3/4 mile from the schools to their extreme boundaries. Of greater concern was the number of barriers and hazards (such as major streets and highways) that school districts included. It is therefore possible that transporting of students, whether by school bus or parents' car, may be safer even though less convenient and more costly.

Elementary-transporting policy: "The Board's policy is all elementary students who attend an elementary school program at a school other than their neighborhood elementary school and who travel more than 1.5 miles from home to school will be eligible for free transportation between the school which they choose to attend and designated pick-up points in their neighborhood. These pick-up points will be determined on the basis of student convenience, transportation routes, and scheduling contraints."* A similar policy applies to Junior High School students.

The 1976 Board of Education Plan calls for extensive cross-district bus transporting of students. Approximately 20% now so travel by bus.

The principal thrust of this study--relating the adequacy of facilities to their service areas--was arrested before completion by the intervention of Federal authorities (Department of Health, Education and Welfare) concerned with school desegregation and integration. During the last year, it became apparent that the previously stable physical relationship between Flint students and Community Schools was to change even more sharply than was originally envisioned. In September, 1976, the Flint Board of Education initiated an innovative concept and allowed and encouraged students to attend Community School city-wide without being constrained by established formal school districts or local boundaries. The Board believed that this freedom of mobility would meet HEW requirements. Subsequent hearings and federal court review established that the Flint Plan was not acceptable to HEW. The details of the HEW requirement are not yet fully known. But it appears clear that greater changes will take place, and that busing will exceed the current 20%. The greatest impact of this will not be immediate (Fall, 1977).

It is currently impossible to estimate the long-term implications and requirements of the HEW mandate, except to speculate that there may be profound changes in the physical structure of Community Schools. The City should, therefore, remain alert to the effects of such changes and maintain close liaison with the Board of Education. To preserve the viability of neighborhoods, the City must

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* Source: "Elementary Educational Alternatives 1976-77", Board of Education, Flint, Michigan, 1976, page 5.

over one-half (53%) of its residents lacking high school completion. In contrast, District 9 residents, many tied to Culture Center facilities, include 30% college graduates. Age is probably the key factor in explaining this, also involved. Areas that feature low educational attainment are also concentrations of elderly-poor disadvantaged persons, often of rural origins. Because of the City's large percentage of black persons, the sharp differences by race are important to consider:

| | All | Black |
|---|---|---|
| Residents with high school diploma | 64% | 58% |
| Residents with college degree | 8.8% | 2.7% |

Source: ECHO, 1975

Beyond meeting the critical need for high school completion, it is therefore also apparent that college programs, especially for minorities should be supported.

Student Mobility

Enrollment changes within the school year are called "student mobility" by the Board. A demographic analysis of student mobility by schools suggests that this condition of instability, while complex, is closely tied to family income and employment stability. Looking at Center City schools (Stevenson, Lincoln, Kennedy, Dort) with high mobility reveals that these are located in low income areas with high minority concentrations. In general, the lowest mobility rates occur in the affluent neighborhoods. Mobility can be taken as an indicator of community or neighborhood instability. The student is often at the end of a chain of events. It may begin with a father losing his job. Student mobility averages 30.3% City-wide.

K- Enrollment Overall

School enrollments based on recent data for the Flint area shows distinct departures from projections made around 1970, moving downward, rather than upward. Such projections were based on overly optimistic population expectations. A 1960 Comprehensive Master Plan for Flint in 1958 estimated the city population at 194,958. The city did not reach that level until about 1970, a decade later. Two major recessions plus other public awareness of critical scarcities capped by the energy crisis in the 1970's were important factors holding down the population rise. Within the national picture, regional and state population seemed to have stabilized. In the Flint area, the schoolage population seemed to have peaked roughly around 1967 and now appears to be slowly declining.

The impact of this is reflected in actual school enrollments within the Genesee County Intermediate School District. In 1971,

Old Doyle School is a residual problem. As the oldest school structure still standing in the City, hopes for saving the 1902 building have been fading for lack of sustained re-use and the high costs of modernizing ($500,000). The historic building* last housed a public agency's offices.

Interim educational needs were being met by Kennedy Community School. Located on Saginaw at Rankin, the elementary facility is just two blocks north of the upper boundary of Doyle redevelopment. At a capacity in excess of 500 students, current Kennedy enrollment of near 200 suggests that the school will be closed this year.

About $1.2 million has been spent on construction improvements to the City park next to Kennedy School, for indoor-outdoor needs. The improved City complex provides adult and family recreation: swimming, tennis, hockey, baseball and other activities.

Oak Community School, 1020 Oak Street, in Grand Traverse South, like Doyle no longer in use as a school, and has a similar re-use problem. Its declining enrollment was redirected to other nearby schools when Oak was closed in 1976. The building currently has limited use to house a community service office. Although remodeled in 1954, the basic structure is old (built 1908) and would be costly to bring up to current public building standards. Its campus (1.4 acres) offers some prospect of recreation park use, but is under-used and should be upgraded for neighborhood use. There are other former Community Schools that have similar problems of re-use limited by operating and remodeling costs.

The School board has been studying policy relative to the re-use of closed schools. A policy statement currently being considered encourages re-use by public agencies but suggests that demolition may be necessary. This policy includes a prioritization system that is biased against older buildings, which runs contrary to historic preservation wishes expressed by some residents; but also ignores a number of alternative re-use options. Additional continuing citizens participation exploring such policy is desirable, as is further study of viable options to preserve unique schools.

Special Education--School for the Deaf

Michigan School for the Deaf, Flint's oldest school in continuous operation, established 1854, is nominally a public school offering K-12 education, operated by the State. Because of its special education function, students range in age from pre-kindergarten

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* Doyle is not oficially designated a historic site or property.

with play equipment requires maintenance, whether or not it is used. The Board of Education is presently faced with rising costs created by un-used facilities. Re-use of vacant facilities is highly desirable, but demolition of the structures and site clearance remain the ultimate possibility to reduce maintenance costs.

Since most school buildings were completed in the period before energy costs rose greatly, before barrier-free design was deemed to be important, and other restraints, the continued use or re-use of buildings will not be easy or low in costs.

E. Recommendations

1. Given the limited amount of data available on the composition of neighborhood populations, further demographic study is desirable. This should identify composition factors such as minorities make-up, numbers by ages, educational attainment and needs, ethnic origins, income, health status and any other conditions that may affect school attendance and performance. Projections of composition change should also be addressed, ideally given by annual increments.

2. A comprehensive master plan should be formulated by the Board of Education that includes physical facilities such as schools, their continued use and re-use by the community, whether for academic or other uses. Such a plan should consider the feasibility of integration of non-public and public facilities, both within the City and around the City, possibly within the boundaries of the Genesee County Intermediate School District. A prime objective would be to explore the possible consolidation of facilities throughout the area to optimize the uses of all available facilities.

3. A mechanism should be established to improve citizens' participation, to review the scheduled closings of facilities and to assist in the formulation of re-use or other disposition procedures. Such a citizens' advisory group might play a major role in establishing a prioritized list of schools closings. Such a group should be representative of the community, and operate as long as the facilities problem exists.

4. Re-use utility of existing school buildings and their improved sites, should be examined thoroughly. Both re-use and continued use for education should consider mixed uses even to the extent of leasing space. Single uses include:

   (a) Park and recreation

   (b) Community (public) services

## IV. EDUCATION - POST-SECONDARY SCHOOLS

### A. Introduction

Post-secondary schools provide education which follows or builds upon intermediate or high school work (above 12th grade). This grouping is essentially academic -- accredited higher education -- in contrast to pure vocational training (not for academic credit) although the distinction today may be small. Roughly two-thirds of Flint residents qualify for post-secondary or college work, as measured by their having a high school diploma. About one-fifth have so opted (15% having some college, 3.9% with college degree, and 0.1% having a graduate degree), in the City. Educational attainment levels are considerably higher out of the City, especially for higher degrees. Of those persons in Flint without college training, only 19.4% have had vocational training, a possible problem. Most of this training has been in trades and crafts, but business and office skills, also nursing and health care rank high. Unskilled workers make up nearly one-half (45%) of the City population, which has some relationship to their levels of education.

Post-secondary schools are not limited to City residents and recruit from a service area at least as large as Genesee County, representing roughly 446,000 population. The University of Michigan-Flint has a designated service area covering 11 counties including Genesee. Since they are not tax supported, private schools do not observe political boundaries.

Local public schools now spend approximately $3 million per year for adult education at all levels. This represents direct operating costs and ignores a far greater investment in facilities. To include the private sector's contribution, would increase the $3 million level significantly. The rising emphasis on "adult" education is founded on the relative decline of children as a part of our overall population, the so-called "graying" of America. In 1974, 3.7 million Americans signed up for college courses (for 34% of all college enrollments) -- roughly twice the 1970 level of 1.7 million (22% of the total). By 1980 the U.S. Census estimates that adults could form 40% of college enrollments. The junior college, such as Flint's, was begun to accommodate post-secondary students who were typically recent high school graduates and ranged from 17 to about 20 years of age. The average age of students at Mott Junior College today is over 26. Just as the age of students has increased, so has the educational mix or coursework offerings.

The term "continuing education" has become a catch-all that incorporates a broad and varied number of educational courses and programs. Because of the mobility of Americans, often in response

1963, Charles Stewart Mott deeded 32 acres of land for the present 56 acre campus. The three-level College Center was opened in 1972 as a multi-purpose facility featuring food services. Arrangements were made with the University of Michigan-Flint to use their library resources in 1961. Extended classes are held nearby at the DeWaters Art Center, F.A. Bower Theatre, and J. Dallas Dort Music Center, all located within the Culture Center area.

Academic offerings are broad and diverse in liberal arts and sciences, ranging from business administration, art and music, English and foreign languages, science, mathematics, history, engineering. These all can transfer to any accredited four-year institution. Associate degrees are a popular offering. The College also offers one and two-year programs in vocational concentrations: nursing, auto service, data processing, food technology, and technical programs. Trades programs in 30 fields are offered, along with a variety of pre-professional sequences. Vocational-technical programs have been exceptionally popular. This may be because the College's students are predominantly from moderate and lower-income families, mostly part-time and self-supporting, although Mott College students are so diverse as a group that there is no such thing as an "average" student.

Mott Community College also established a new facility centrally located on Flint's near-north side, the Walter P. Reuther Center for Learning Development located at Fourth, Fifth Streets and Detroit and Chippewa Avenues.

Offering a broad and varied continuing education program encompassing business and technical training, the Center also features cooperative programs and provides space for a number of public agencies. The latter includes job-skills training, plus office space for the agencies themselves. The Center was opened in September, 1975.

The main campus has been handicapped by being located within a floodplain, which creates annual flooding of low lying areas including parking facilities. This has also made more difficult development of limited open land into needed facilities such as those for physical education. It was once assumed that Central High School would be closed, a new plant to be built elsewhere, thus making the existing facility and land available to Mott College. The Board of Education elected instead to remodel Central, retaining it and Whittier Junior High School at their present locations immediately west of Mott College. It is assumed that the College will continue shared use of Central athletic facilities, since no other nearby sites have been made available for College use. The College would benefit from having space to construct its own facilities.

(Academic Program Plan, 1974) establishes a planning level of 6,500 Full-time Equivalent Students, noting that "growth of the institution and development of its mission are both dependent upon the creation of new academic programs and the delivery of facilities that will be appropriate to a regional campus of the University of Michigan located in an urban environment." An intermediate planning level of 4,000 FTE was subsequently established as part of the University's prospectus for a new classroom/ laboratory building and a library/learning resource center. Present planning thus utilizes the following data:

| | Planning Level I | Planning Level II |
|---|---|---|
| Headcount students | 6,200 | 8,000 |
| Full-time Equivalent (FTE) | 4,000 | 6,500 |
| Parking levels | | |
| "Limited" program | 1,230 | 2,000 |
| "Full" program | 2,805 | 4,560 |

Actual enrollments (Fall, 1975 - 3474 HC, 2501 FTE and Fall, 1976 - 3685 HC, 2520 FTE) have fallen somewhat short of original estimates, but long-range planning has not been revised. Such enrollment projections are subject to various uncertainties, and declining traditional college age populations suggest hesitancy in the projection of growth into the 1980's. Nonetheless, the establishment of a full complement of academic programs at UM-F in conjunction with new facilities in an urban setting is cause for an optimistic outlook for the eventual attainment of original goals.

The University here has been, and expects to remain, a commuting school. Although designated as a regional campus, a great majority of its enrollment has come from the Flint Area. Most (80%) drive, or share rides and a few (4.0%) take a City bus. Since the University has no resident housing policy (there is hope that Doyle redevelopment will help) transportation remains the school's principal problem, one it has in common with Mott College with which it has shared a 56-acre campus. Relocation to its new downtown riverfront campus is expected to greatly reduce but not eliminate parking problems. Circulation is a problem likely to remain.

The University has not indicated any further land needs, as for expansion. Since the University enrollments have generally fallen below earlier predictions, there has been less pressure to designate expansion areas or land bays appropriate for growth. University planners have acknowledged this possible need and retain contingency plans for leasing non-contiguous space.

Motors Division on the west side of the city. Facilities include a Campus Center Building, Academic Building, Student Dormitory and Parking Deck. No expansion land needs have been indicated.

GMI accepts a limited number of high school graduates from throughout the United States and Canada. Baccalaureate degrees are granted in Electrical, Industrial and Mechanical Engineering, and in Industrial Administration. Enrollments have been fairly stable with 2,275 enrolled for Fall, 1977. GMI also serves General Motors personnel internationally.

The Institute students and employes are active in community service and contribute to the area economy. Institute social and cultural programs are often open to the public. About forty percent of its students are housed on the campus, the balance finding residential quarters in the area.

D. Projected Conditions

Mott Community College has identified a need for additional usable land. Part of its existing campus is floodplain, of marginal utility. A substantial portion is absorbed by internal circulation and parking. Of the large amount of facilities that are shared but owned by other institutions, a significant portion is that devoted to physical education, provided by a City high school. The College would prefer its own athletic facilities, space requirements given as a minimum of 8.11 acres; 4.22 acres for baseball, 2.19 acres for softball, and 1.70 acres for tennis court development. Such land should be nearby (up to 1/2 mile) or contiguous to the present Court Street campus.

Walter P. Reuther Center for Learning Development, at its south Oak Park location, represents an exemplary re-use of what was once a busy retail complex. Conversion to offices now involves substantial clientele. If enrollments continue to rise, traffic congestion may become a problem, especially if the City-envisioned Fourth-Fifth Avenue pair is further developed. Doyle redevelopment is only one of a number of factors that will tend to add congestion to the area. The City must remain sensitive to changes in the area, particularly if the current revitalization efforts result in the re-opening of other buildings, whatever their uses.

Projected conditions for the University of Michigan-Flint differ from those of the Mott Community College for slightly different reasons - the College has effectively redirected its growth into largely adult education-vocational areas, while the University has held to its basic academic plan with sustained investments of resources. Thus, the University appears to be meeting its earlier planned objectives, although slightly below and behind level and date projections. Similarly, the University

E. Recommendations

1. The City should continue to monitor and work with major institutions such as Mott Community College and the University of Michigan-Flint, and play an active role in resolving actual and incipient problems including but not limited to transportation.

2. Site plan review should be required of all construction that will have a significant and predictable impact on the community, not only as to transportation and circulation.

3. The City should reconsider its role relative to major in-institutions, particularly those that are tax-exempt, with a view toward formulating a consistent and coherent policy.

4. The City should be particularly sensitive toward institutional activities that generate construction without planning and coordination.

5. The City should consider the establishment of a special quasi-public coordinating board or commission devoted to monitoring and resolving the special needs and problems of institutional factors such as the Board of Education, hospitals, major schools.

6. The City should maintain an on-going linkage or liaison with all major institutional planners and City planners to coordinate current activities and future planning related to physical development, land use and transportation.

## V. EDUCATION - VOCATIONAL SCHOOLS

### A. Introduction

Vocational education - also termed jobs, skills, trades training - has received greater attention and emphasis in recent years. The need for skilled persons such as technicians is growing. The fact that the services category of the economy has been increasing at a rate faster than the general economy, indicates the need for greater numbers of vocationally-trained persons. Our nation's growing population is the basis of this demand. The growing technical complexity is another force. Whether auto mechanic or business machine operator, a higher level of skills and expertise is required. The impact of affirmative action and equal opportunity programs is also apparent - many occupations traditionally held only by men are open to women, and many employers are actively recruiting such persons and calling for appropriate skills development.

### B. Goals and Objectives

See those given earlier for Education.

### C. Existing Conditions

All vocational training is employment oriented and much is generated by the employer as a means of improving employee skills. This often takes the form of on-the-job training, often within the place of employment, which makes it difficult to assess the actual numbers of persons in training. But a large proportion of such training is displaced outside of the place of employment to both private and public educational plants.

There is, therefore, an overlap between private and public vocational programs and those that are nominally academic, at all levels. Vocational training is available in Flint Community Schools, Mott Community College, and at a variety of privately-owned schools.

Enrollments for vocational training have increased steadily over recent years and will probably continue to increase. Since there is no single coordinating authority or information source, enrollments must be estimated and are difficult to project with any real reliability. For the basic vocational schools (Vocational/trade, barber/beauty, business, professional) the 1970 County (GCMPC) study found enrollments increasing from 359 (in 1960) to 1,542 (in 1969) for these 21 schools. A rough estimate today suggests enrollment over 2,000 in the Flint area, which could be increased greatly depending on the scope and level of training being estimated.

As a medical school, its students were given as approximately:

| | |
|---|---|
| Anesthesia | 11 |
| Nursing | 199 |
| Laboratory | 11 |
| X-Ray Training | 24 |
| Interns and Residents | 81 |
| Medical Students | 29 |
| | 355 |

Continuing education is offered by the major universities on an extension basis, both at undergraduate and graduate levels for tuition costs that are generally under resident levels. Of the three major programs, offered by Eastern Michigan University, and Michigan State, and the University of Michigan, the latter is typical recruiting from six counties in the region around Flint. Enrollment for U of M Graduate Extension runs a fairly stable 700 per semester or 1500 per year, roughly half of which students are teachers. For all, enrollment is estimated at 4 to 5,000 per year. Oakland University, Rochester, Michigan, (near Pontiac) also offers both resident and Flint-area extension courses, the latter held typically at local high schools.

Cooperative Extension Service, conducted by the U.S. Department of Agriculture for County residents, offers a large variety of non-credit, informal educational programs for citizens. Such educational services are not simply agricultural but inform City residents and government agencies and offices as well. The Service numbers 33 paid and 325 volunteer workers, and is located just outside of the City.

D. Projected Conditions

Vocational education continues to be important. It may also be rising in popularity, as measured by enrollments. However, it is important to be aware that total headcount measurements may be misleading because of a trend away from a smaller number of full-time towards a large number of part-time students in many schools. The growth of post-secondary schools, particularly the vocational, and especially the private, will be closely related to changes in the local economy. Flint has an unusually high income level along with a relatively large number of poorly educated residents. In future years this could take the form of a pressure to improve their educational levels; academically, vocationally (via specific technical skills) or overall.

Since 45% of Flint workers are unskilled and roughly one-third of the labor force works for a single corporate employer, that employer's policies, in concert with those of involved unions, will continue to have an important effect on education. Corporate executives were supportive in bringing the University of Michigan

# VI. CHILD CARE FACILITIES

## Existing Conditions

Child day care facilities represent a very small factor in City land use and other resources, and therefore are typically ignored in comprehensive planning. Although their cost, staffing and land consumption impacts are minor, these facilities do represent important constraints on some part of the community as a whole, especially parents who work and require child care during their hours of employment. Nearly 10,000 households in the City are headed by females with children, representing an estimated 23,382 children (ECHO, 1975). Although primarily custodial facilities, child care centers also serve educational functions (why they are included within this document's section), and possibly limited health care. Many schools and health care facilities also offer custodial child care as part of their principal activities, which makes this category of facilities difficult to inventory thoroughly. More typically, child care is available within the community on an informal basis. There are also over a dozen child care centers being operated, not all for-profit, which are licensed by the State. However, strict regulation by government is limited.

Relative to planning, the principal concern is not one of land use but of sensitivity to existing uses - concern for location and amenities such as traffic circulation and parking, plus street traffic and other hazards to children. There is also the possibility that existing public (and private) buildings that suggest re-use, such as former school structures might be used as child day care centers. Schools are particularly appropriate for this utility as they were designed to service children and incorporate play facilities and adequate site space for up to several hundred children.

## Recommendations

1. Local re-use planning should consider utilization of existing structures City-wide, including former schools, as physical plants for child care facilities. More study is needed.

2. The City should study the desirability of the regulatory licensing of all child day care facilities; via initial and periodic inspections for compliance with code and other standards. Study should be devoted to establishing applicable standards.

# VII. LIBRARIES

## A. History

In the spring of 1851, four years before Flint became a city, a library was established with a treasury of $10 and some donated books and magazines. A fire in 1861 nearly destroyed the collection of 2,000 books. A new library was built at the corner of Beach and Kearsley. The library moved once more before moving into its present quarters at 1026 E. Kearsley in 1958. There are seven branches, three in schools.

## B. Existing Conditions

Today the Flint Public Library System presently has a book stock of 400,000 volumes, 1,400 films, 12,500 recordings, 12,000 federal and state documents, plus a variety of uncatalogued items including sheet music, pamphlets, maps, photographs, telephone directories and paper back books.

As Flint grew, branch libraries became a necessity. The branch department was organized in 1923 with three branches and a staff of five which today has expanded to seven branches with a staff of sixty-four and a circulation of over 500,000. All branches offer full range of modern library services, including adult and children's books, magazines and recordings, reference collections and information; also programs such as book reviews, pre-school story hours, and films. A very important service is simply answering questions. Hospital service is also a responsibility of the Branch Department. Service to hospital patients is provided for four Flint hospitals: Flint Osteopathic, Hurley, McLaren and St. Joseph.

The library ordered, cataloged and processed 87,830 books for the year for the Flint libraries, and other contracting libraries. Library circulation decreased slightly, in 1976 due to some closings due to budget cuts. The circulation per capita was 5.6 considerably above the average 3.6 for the 37 libraries in the state serving over 50,000 population. The system is operated by the Board of Education.

## C. Projected Conditions

By 1980, the Flint Public Library System will require little if any additional space to serve the expected city population of 168,975 persons. Based upon a space requirement of 0.5 square feet of library space per capita, the total library space well exceeds the minimum requirements. Since the addition of two new library branches the distribution of library facilities has improved to a point where 99% of the population resides within a 2-mile radius of some library service facility. No land expansion is indicated.

## VIII. MUSEUMS, AUDITORIUMS AND OTHER CULTURAL FACILITIES

The "Culture Center" is the physical location of varied facilities, and is located immediately to the east of the central business district. The Culture Center was comprehensively developed in the 1950s adjacent to C.S. Mott Community College, and quickly incorporated the University of Michigan (1956).

### J. Dallas Dort Music Center

The J. Dallas Dort Music Center, an imposing $1.5 million dark brick structure, is the largest addition to the complex of college and cultural buildings comprising the Flint Cultural Center. Located on the onetime estate of and named for, the Flint automobile pioneer who is considered the father of music as a community activity in Flint, it is the center of community music activities.

The Flint Institute of Music (FIM), a privately supported entity representing many music organizations in the area--professional, amateur and educational--is responsible for operation of Dort Music Center. It shares occupancy of the facility with the music department of Mott Community College. Under the FIM aegis, professional and amateur music efforts are consolidated under the same financial and artistic leadership. A major feature of the music building is a 281 seat auditorium with an excellent lighting system and a stage designed for maximum versatility. Adjacent is a large rehearsal room that will accommodate a full symphony orchestra.

Nearby are two ensemble rooms for rehearsals of chamber music. A large reception room with attached kitchen is equipped to seat about 150 for a luncheon or banquet or can be modified to accommodate 400 for a standup function. The academic section of the building includes six offices for faculty, a lounge each for students and faculty, an orchestra library, four classrooms and three teaching studios. Also housed in the facility is the Charles A. Cumings Music Library, which has a capacity of 30,000 volumes in its 5,760 square feet. Adjacent is an audiovisual center designed to accommodate 24 record listening stations. In proximity are 15 practice rooms, equipped with pianos and other musical instruments.Based at the center is the Flint Symphony Orchestra, a group of 75 professional musicians, which presents eight concerts a year at Whiting Auditorium.

Designed to accommodate an audience of 2,001 persons, the Auditorium is completely equipped for offering the finest programs of the performing arts. Its presentations have included leading symphony orchestras and stage companies from abroad as well as this country. A full schedule of professional theater, featuring top theatrical personalities, is presented daily throughout the summer. Conveniently located and easily reached from any point in the area, a circular driveway permits entry from cars in front of the building. Lighted parking space is at hand for 750 cars. An attractive mall provides pleasant access

by the staff and student assistants. This results in a facility that is in regular use throughout most of the year. Each year twelve or more plays are presented, many meetings and other events are scheduled with a total annual attendance figure of 35,000 to 40,000 persons.

## The DeWaters Art Center

The DeWaters Art Center, in Flint's Cultural Center, contains the classrooms of the Art Department of Mott Community College, the classrooms of the art classes of the Flint Institute of Arts, two classrooms for the Mott Foundation, and the administrative offices and galleries of the Flint Institute of Arts. The Flint Institute of Arts is an autonomous, privately funded institution. It is open to the public and admission to the galleries is free. The classes are non-credit and taught by professional artists for adults and children on a year-round basis. The programs are varied including a most popular annual Art Fair. The programs scheduled include film, lecture and music series, receptions, trips, etc. The museum attracts approximately 100,000 visitors a year. The exhibition program changes approximately 20 times per year, during which fine temporary displays are shown.

## Planetariums

Flint is also served by the Robert T. Longway Planetarium, completed in 1958. The dome-shaped structure measures 60 ft. in diameter and 40 ft. in height, and has seating space for 292 persons. The facility contains equipment for reproducing the skies and the motions of the sun, moon, stars, earth, and other planets and objects with reality and completeness. The planetarium is located in the Flint College and Cultural Center in the eastern portion of central Flint. Most of the visitors are comprised of students. In 1976, it was estimated that 55,000 persons visited this institution. Since planetaria are novel and unique facilities, with few in this region, Longway has the potential for attracting many more visitors including tourists.

## Recommendations

As there are no known substantial plans for expansions of land use, no specific recommendations are made, other than that the City continue encouraging the development and use of these facilities.

# IX. HEALTH CARE

## A. Introduction

The providing of health care for Americans remains as one of today's most important issues, and by some standards, a critical problem. As part of the "revolution of rising expectations" Americans have largely come to expect responsible and effective health care as a routine obligation. While it is difficult to argue that the actual condition of American health has deteriorated (although it may have in specific ways), abundant statistics indicate that Americans enjoy a relatively mixed state of health. This revelation is probably principally due to improved intake and diagnostic techniques, but also due to more rigorous data-collection methods as well, which simply gives us a more thorough and accurate picture of real conditions. It is similarly true that along with this improved perception of peoples' needs, there has been greater access to and uses of health care facilities. This is reflected in the greater costs of health care. Government statistics reveal that in five years (1970-1975):

| | |
|---|---|
| Medical care costs overall have risen | 39.8% |
| Physician fees alone have risen | 39.5% |
| Total expenditures for health rose (from $69.2 billion to $118.5 billion) | 71.2% |
| Family medical care budgets rose (from $564 to $822) | 45.7% |
| Family budgets (before taxes) rose (from $10,664 to $15,318) | 43.6% |
| Family budgets (after taxes) rose | 42.1% |
| Budget food expenditures rose | 56.1% |
| Housing expenditures rose | 41.3% |
| Transportation expenditures rose | 40.2% |

Federal health expenditures have doubled since 1970. But the number of people receiving Medicaid benefits, now 32.5 million, has tripled. Medical insurance, especially government insurance, has greatly improved access to medical care. As for costs, hospital payroll costs alone have risen from $33.16 per patient day to $72.34 (in the five year period), which costs the public ultimately absorbs.

Lastly, land use will be reviewed, along with an outline of known current expansion plans by facilities, in the next sections (addressing hospitals, long-term-care facilities and professional services).

C. Existing Conditions

As a statistical review will indicate, personal health is far less than ideal. Community health planning can introduce a mediating factor that serves to balance facilities in relation to needs, while considering the costs and other impacts of the health system.

The planning agency GLS Health Systems, Inc. practices goal-oriented planning. This begins with a series of statements which describe desired conditions or goals. Having stated such conditions, the next step is to assess to what extent each condition is being met. Such an assessment gives the nature and scope of the problem. Deficiencies in the desired conditions may then be prioritized for action. Such setting of priorities is based on a number of criteria or considerations (the entire set having been formally adopted by the agency). Determination of priorities for action is followed by a series of planning steps which result in the development of programs of policies moving to goal-attainment.

The following planning steps were adopted by the GLS Board of Directors:

1) Develop goal statements
2) Assess present status of each goal
3) Adopt criteria for goal orientation
4) Prioritize goals
5) Develop objectives
6) Develop alternatives to meet objectives
7) Develop annual plan to reflect priorities

The comprehensive statement of existing conditions is similar to that step given as (2) above, and is based on the 1975 assessment of health status of individuals and the status of factors in the environment which affect health (given as A-HEALTH STATUS).* Subsequent steps are being pursued by the health planning agency.**

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* Health and Environmental Status, 1975, Tri-County Health Planning Council, Flint, Michigan.

**Their environmental health analysis is presently inadequately developed, which deficiency will be corrected after their Health System Plan (HSP) is released. To date some "at risk" factors have not been addressed. See the City Master Plan's Environment element and Health Department Reports.

This is true of both pediatric (young) and geriatric (elderly) patients, although the latter may pose more of a problem. One strategy available to deal with the displacement of patients is to expand other hospital departments to deal with out-patient services or minimum-care. Another may be the encouragement of additional nursing homes or other supervisory (minimum) care facilities. Since the City of Flint is relatively underdeveloped and a surplus of housing exists, either new construction or conversion is feasible.

The relatively high use of existing beds and facilities may provide a transitional factor as well, although this would not conform to the essence of the planning agency recommendation--less critical admissions could continue as acute and serious admissions rise over a period of time, even though this is a costly approach. The other extreme would be the immediate implementation of a close-down plan based on the recommendation that beds be reduced within the three-county area; and the most cost-effective method would be to totally close one or two hospitals. Since Flint is the principal population concentration within the area, at least one such hospital would probably be designated within the City.

It is important to note that the planning agency functions for the entire three-county area (Genesee, Lapeer, and Shiawassee) and that its activities are geared to this three-county population and inventory of facilities. The actual service area of a hospital or other facility is generally considered to be based on actual utilization.

D. Projected Conditions

Measuring the adequacy of facilities for the future creates some difficult questions. The principal problem is projecting population change, both in numbers and composition. It is recognized that the data base provided by the State is only one of several population projections available. Therefore, until projections are coupled with superior indicators of change, the challenger to state projections relate to two areas:

Overall numbers are projected upward at a moderate rate. Recent experience has demonstrated deficiencies in such upward bound estimates. It may also be that the current surplus of facilities is the direct result of over-optimistic population projections.

Population projections should specify subpopulations including the very young and elderly. Yet the statement of existing conditions speaks of extreme differentiation of health conditions by other factors, notably that of race. If this is correct, a continued shift in racial mix, especially one on the order of Detroit's (about 1-2% per year), might have sharp impacts on Flint's needs for health care deliveries.

35.4% black population, the greatest concentration occurs in the north-central corridor -- Planning Districts 2, 4 and 5 -- where the black population ranges from 75% to 90%. There is also a correlation between black population and the "at risk" characteristics cited, families with income below poverty level, female head of household, overcrowding, elderly population and so on. These factors all tend to show concentration. One method of assigning "best location" would be to define known conditions of poor health or other medical care need, at risk factors, and relate these to particular areas within the City. A very limited analysis of known demographics suggests that localized health care is most needed in the north-central corridor. More intensive study of this would be beneficial.

Satellite Location Considered

1. A drive-in community health center that is conveniently located in or near a shopping or other local center that encourages a high number of shoppers or other routine visitors. This is to encourage patients who by themselves or with others might wish to combine daily chores with personal medical care.

2. A community walk-in health care center that is located in a place central to a known high concentration of sub-population estimated to have high probable need. Such a center might combine a variety of other community functions, as is the case of the present Senior Citizens Center on Flint's north side.

The City can play a role in assisting the establishment of such centers. There are several possibilities:

1. Structures that are, or will become vacant, but are generally sound and only in need of remodeling and rehabilitation, may be set aside as the physical base for a community center. Up to now, many such structures have been demolished since there was no viable reuse for them.

2. Community Schools that have declining enrollments and are in imminent peril of being closed, or are actually closed, are another prime candidate for such centers.

3. City redevelopment or urban renewal projects may have room for community health centers, if only on an interim basis (until leasing or sale totally obligates inside space).

4. Vacant and privately owned structures, typically commercial, may be leased or purchased for reuse as health centers.

5. Zoning requires study, whether nonconforming or conditional uses, or special; including parking and circulation.

6. The City should consider sponsoring and co-funding the construction of new community health care facilities either to

Illustration 1

Major Health Care Facilities -- Hospitals

| Facility | Site Size |
|---|---|
| Flint General Hospital<br>765 E. Hamilton at North | 1.5 Acres |
| Flint Osteopathic Hospital<br>3921 Beecher at Ballenger | 18.0 Acres |
| Genesee Memorial Hospital<br>702 S. Ballenger at Beecher | 17.2 Acres |
| Hurley Medical Center<br>West Sixth Avenue at Begole | 7.4 Acres |
| McLaren General Hospital<br>401 S. Ballenger | 14.8 Acres |
| St. Joseph Hospital<br>302 Kensington | 23.3 Acres |
| Total existing land use | 80.2 Acres* |

Wheelock Memorial Hospital, located in Goodrich, Michigan, is estimated to provide care to a very small number of Flint residents and is part of the regional planning activity, but is not addressed here since it is not within the City of Flint. There are also other facilities in the Flint area.

Illustration 2

Minor Health Care Facilities By Use

| | | | |
|---|---|---|---|
| Physicians | 19.2 Acres | Optometrists and Optical Centers | 2.8 Acres |
| Dentists | 7.6 Acres | Sanitariums and Rest Homes | 7.7 Acres |
| Dental Laboratories | .2 Acres | Clinics, Out Patient Services | 9.4 Acres |
| Medical Laboratories | 2.5 Acres | | |

*Because of coding inconsistencies, this is not precise.

There are great variations by geographical location of population and hospital use, just as between hospitals. This has not been thoroughly studied but deserves greater attention. Analysis is also handicapped by current health care deliveries planning methodology, especially service area analysis that is predicated on the use of postal zip code areas. While the use of zip code areas may be adequate for regional analysis, aggregating population within six zones that reach beyond the City of Flint does not permit detailed study of usage by City residents, much less study by community areas. This suggests that more microscopic data be made available. Such data might be invaluable for planning neighborhood health facilities.

County (ECHO) data shows that the percent of residents who reported being hospitalized in the past three years (1972-1975) ranged from 24-25% to 35-40% and varied considerably within the City. While the data seems inconclusive, the County speculated that hospital use was related to unemployment and poverty, and that health care for central City poor may have been delayed until conditions became acute, requiring hospitalization.

The utilization of hospitals is based on the number of licensed beds (which determines in-patient care) and the number of patient days. This roughly indicates in-patient capacity, although any meaningful analysis requires much more detailed data than is available from local hospitals, the State and the local health agency GLSHSI.

Current data on hospital utilization is not available, and use by local service areas within the City can only be estimated because of the way that records are maintained. However, Hurley Medical Center found that in 1974 some 113,898 persons were treated, with 22,600 admissions. Most of these (71.6%) were from the City of Flint, 17.8% were from the out-county or suburbs, while 10.6% were from counties other than Genesee. Older data on service areas suggests that there is a great deal of variation as to patient origins. Data from local hospitals suggests that their service areas are at least the greater or metropolitan Flint area and Genesee County which corresponds to 460,000 persons.

Illustration 4

Gross Utilization Characteristics
For Genesee County Hospitals - 1974

| Hospital | Number of Licensed Beds | Number of Patient Days | Percent of Total Patient Days |
|---|---|---|---|
| Flint General | 164 | 34,384 | 5.1 |
| Flint Osteopathic | 401 | 127,232 | 18.9 |
| Genesee Memorial | 148 | 39,107 | 5.8 |

as the above Plan suggests there will be a substantial increase in land use contiguous to their present site.

Present site size: 7.4 Acres

McLaren General Hospital, at Ballenger Highway and Beecher Road, has completed a minor expansion of physical facilities with the completion of their parking structure along Sunset Drive at the north boundary of their 12.35 acre campus. This adds a 440-car capacity to their present structure and surface parking. The hospital complex consists of one large structure, a garage and the parking facilities. To the west, across Ballenger Highway, there is a clinic on .74 acres of land. The new ramp suggested possible traffic problems at Sunset Drive but these are being resolved. Since the ramp was constructed on McLaren's existing property, there is no additional land consumption.

Present site size: 14.8 Acres

Flint Osteopathic Hospital, 3921 Beecher Road, at the southwest corner of Beecher and Ballenger, recently added a 10,000 sq. ft. addition to their cafeteria. Existing facilities also entertained some renovation. A 24 x 32 ft. addition was also constructed onto their existing 28 x 32 ft. storage building. The work was begun in 1974. There was no expansion of their existing site of 18 acres. There are no known plans for further changes.

Donald M. Whaley Children's Center, 1201 N. Grand Traverse Street, has begun a six-classroom addition to their Activity Building. The structure now under construction will house special education programs that are an extension of their treatment of the emotionally impaired. The addition will be completed in August, 1977 and extends from the Activity Building housing a gym and multipurpose recreation center. This is separate from the Administrative Center Building which has a second floor devoted to residential housing. While sharing the same 11.8 acre site immediately to the north of Hurley Medical Center, a Community Mental Health building is not connected either with Hurley or the Whaley Center's activities. There are no plans for Hurley to expand in this direction. All Whaley growth is presently confined to their own site.

Whaley Center activities also embrace three nearby but separate community-based group-treatment residences: Alarie House, 1214 Mackin Road, about one block from the Center; Boylan House, 1014 West Sixth Avenue, and Kenworthy House, 515 West Third Street. These were opened in 1972, 1973 and 1975.

Although essentially a welfare and community service activity, Whaley Center is listed in the Health section because it is a major land user within the City's health care "corridor".

term-care facilities, which is uncertain.* Present legislation and health planning, however, is not conducive to expanding extended care facilities, which deficiency requires attention.

If there is an expansion of long-term-care facilities, the City would have a good opportunity to promote the re-use of existing inventories of housing and other structures. Because the architectural requirements of these facilities are much less demanding than, say, hospitals (with the exception of barrier-free features), renovation costs of existing homes and commercial structures may be attractive. However, many older structures, especially a long-favored conversion, the once elegant mansion, may not be feasible in the long run because of poor energy efficiency and high re-insulation costs, atop normal remodeling costs.

Because of the relatively great decentralization of these facilities, any growth in their numbers would represent an opportunity to recentralize long-term-care facilities. It is assumed that historical movement outward is based on typical high land costs in the center City. Because of the relatively low level of development in Flint (about 10% of the developable land is vacant) and a probable increase in available land, it may be feasible for facilities requiring some substantial site size (for parking, landscaping and so on) to locate within the City. Aside from possible improvement in land acquisition feasibility, there are other attractions:

1. Many ill and elderly probably originate from the center City. Family visiting would therefore be facilitated,

2. Locating patients in facilities close to existing hospitals, laboratories and physicians would improve personal convenience (which appears to be a significant factor) and might improve the cost factor because less movement time is involved,

3. Recentralization provides possible re-use of existing inventory of structures as well as land.

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* Health care planning requires that distinction be drawn between long-term-care as discussed here and short-term recuperation or convalescence from a medical condition. The latter may more typically serve to reduce unnecessary hospital days. But both are required to service the population, while not differing greatly as to the nature of the physical facility and its site and location.

## Physicians, Dentists And Other Professional Services

rofessional services, including medical practitioners, were not studied in detail because their physical impact is slight. Only 19.2 acres were devoted to professional offices, overall. Medical laboratories represented 2.5 acres. Dental offices were 7.6 acres with laboratories adding just .2 acres of land use.

A location analysis indicated that most professional services are located in clusters or small medical centers which are found throughout the City and suburbs. Although there is considerable scatter, most offices are located within a "corridor" ranging east to west across the City, and are concentrated near the major facilities or six hospitals on the west side of Flint. This positioning is based on the desirability of physicians to be close to hospitals. Many physicians also maintain more than one office, the second often located at a hospital. The County (ECHO) found that physician location is today less important than in years past and that patients traveling some distance is common. Their recent survey found that, "nearly all respondents throughout Genesee County reported that they could get transportation to the Health Department, (located near the center of the City) if necessary. From this it would not seem that physician location presents any particular problem to persons seeking medical attention. It might also be noted that physicians are also somewhat restricted from locating in residential areas by various zoning ordinances."

In terms of numbers, there were 617 physicians licensed to practice in Genesee County and Michigan in 1975. The number of physicians has risen faster than the population in recent years (rate per 1,000 population), so as to be in greater supply. The County acknowledges that the local rate is somewhat less than the State average, but does not feel that this is a problem because many physicians are not available for community practice of medicine because of research or teaching obligations.

| | 1971 | | 1975 | | |
|---|---|---|---|---|---|
| Area | Number | Rate | Number | Rate | Increase |
| Genesee County | 493 | 1.1 | 617 | 1.4 | 25% |
| Michigan State | 11,001 | 1.2 | 13,602 | 1.5 | 24% |

Source: ECHO, 1975

In terms of usage, about three out of every five persons saw a physician during 1975, although there is considerable variation throughout both the County and City. Residents in Flint's southwest sector displayed significantly higher usage than other parts of the City, which may be related to higher income rather than actual need.

5. Because of the various impacts of major institutions such as hospitals, all substantial physical changes within and around such facilities should be coordinated with the City. Site plan review should be required of all significant changes, especially those that may cause a change in traffic and circulation around such facilities' sites.

6. Existing zoning should be reviewed and changes be considered to improve the provisions for hospitals and all related land uses including laboratory and professional office.

7. The City should remain alert to a possible demand for long-term-care facilities, and encourage recentralization and re-use of existing inventory should this demand materialize.

8. The City should encourage health care deliveries authorization and planning that increases financial and other support of extended care while using existing physical plant inventories economically.

# X. WELFARE

## A. Introduction

In order to provide a comprehensive picture of community facilities, really services, a survey of the organizations basically concerned with the welfare of Flint and Flint area citzens was made. The term "welfare" was a broad one and included community "social services" and related organizations. The purpose of this section is to determine if additional land use allotments are needed for such organizations and functions.

### History And Conditions

The first welfare organization in Flint appeared in 1888 when a Sunday school class of one of the local churches formed the Kings Daughters Society. This volunteer organization, religious in viewpoint, was the only privately supported program with social services to the entire community as its main purpose.

From time to time, other new agencies; relief, health, recreation and other miscellaneous agencies were formed, each concentrating on their own work and seldom paying much attention to the other programs. With growing needs and programs, the need for finances grew. Financial dimes drives started, benefits of various sorts, tag days, individual campaigns for funds and so on, requiring great amounts of work and time, and large overhead expenses. An attempt to correct this inefficiency through the Flint Community Chest was formed in 1921. The Flint Community Association was organized in 1936 and subsequently, the Flint Council of Social Agencies in 1942 with two new members, the Flint Federation of Labor (AFL) and the Flint Industrial Union Council (CIO). The Flint War Chest was formally organized early in World War II and represented a combined fund raising campaign of the Flint Community Chest and National and Overseas Relief Agencies from 1942 through 1945. By 1949 the Community Chest was changed to the Red Feather Fund of Flint and Genesee County; then to the United Fund in 1971 and finally in 1975, "The United Way of Genesee and Lapeer Counties". It is through the United Way that most of the area welfare organizations are funded either partially or in full. Of the other major welfare organizations and agencies, most now fall within the government; municipal, state or federal category (primarily the latter two).

Because most organizations reviewed represented limited local government funding and typically utilized large private resources, it was decided that a thorough and time-consuming analysis was not justified. Such analysis was already made by McAllister Associates in the 1973 Master Plan update, and also the study by the Community Service Survey Committee in 1970.

# XI. PROTECTIVE SERVICES

## A. Introduction

Protective City services normally encompass fire and police. Preliminary analysis of police services indicated that these services, while prescribed to some extent by service areas within the City, have a very limited impact on physical planning. Administration is totally centralized at the Civic Center police building, while all field operations are totally mobile. No land needs have been identified. For these reasons, police services will not be detailed.

Civil defense represents a possible third category of protective services. This is a responsibility of Genesee County, and is in the process of being replanned, and for these reasons civil defense will not be detailed here. The City, however, should remain alert to any recommendations or needs to be identified by County administration. Since civil defense includes identification of certain public emergencies such as tornado-storm hazard, and a possible need for shelter development, there is a definite linkage to physical planning within the City.

## B. Goals And Objectives

The study goal is to assure that fire protection is adequate within the City, to minimize possible human and property damage.

The objectives are to:

1. Review fire protection services in general and by service areas (districts) within the City.

2. Identify any apparent deficiencies as to physical plant and firehouse locations, relative to optimal response.

3. Identify any apparent deficiencies as to support systems, especially the adequacy of access to development and water supply including hydrants.

4. Identify a need for new ordinances regulating development, including mobile home parks and fire/smoke detection.

## C. Existing Conditions

1. The City is divided into nine fire districts. First district facilities are located with the departmental headquarters at 310 East Fifth Street, part of the Civic Center complex. The other eight facilities are strategically located throughout the City to best serve various areas. District nine is actually Bishop Airport.

require adding new hydrants. Since the locational pattern, in detail, is impossible to predict over a long period of time, no projections are practical. This suggests that there is an ongoing need to restudy periodically the number and location of both hydrants and stations. Allied to the hydrant location is the water system, and in addition to possible current deficiencies, the availability of water must be considered relative to new hydrant locations.

Another current deficiency is apparent: Trailer parks largely lack hydrants, and the general issue of serious fires in trailer homes has been cited in the last few years. This has resulted in a demand for more fire-resistant construction and other trailer (mobile home) features designed to reduce the incidence of fires. But this has not been met by improved systems of fighting fires that may begin. The Flint Fire Department has indicated that not only is there a lack of hydrants in trailer parks, but many (especially the older) have inadequately narrow streets or lanes that seriously handicap access and lanes that are cluttered with cars, trucks and other items that impede emergency equipment.

Trailer parks have been built to relatively high densities, especially the older facilities (Flint's first was in 1937). Densities range from 29.82 spaces per acre to 4.67 spaces (roughly the same as trailers per acre, discounting vacancies). The County (GCMPC) 1970 study found 142.38 acres of land devoted to trailers; in 1975 ECHO re-estimated 137.5 acres. Both studies found about 1,834 spaces, ECHO 1975 finding 1,600 occupied by trailers. Current occupancy factors are unknown, but the number of persons per trailer varies greatly. Housing occupancy and other standards are generally not enforced in these areas. Part of the reason why normal residential standards are not applied, is because trailer parks are not normal neighborhoods; they are commercial enterprises located in commercial zones, principally along Dort Highway and its commercial-industrial development. Normal building codes cannot be applied to factory-built housing, and housing codes are difficult to enforce. The State is responsible for controlling trailer parks, but has limited effect beyond licensing. Such control is largely via the Mobile Home Park Act of 1959 (PA 243). A City ordinance may be necessary for local control.

4. A substantial amount of government regulation and control of housing and other human habitation involves safety. Fire has always been a focal concern. In 1976 there were 1,601 fires in the City. Some 62 persons were injured, with six deaths (one firefighter and five civilians). Quite aside from the human losses, economic loss and displacement caused by fires could have been reduced greatly by the early detection of fire.

campus, Doyle, highway I-475 and other area projects. If it is determined that this is not a necessary study immediately, such study should be reconvened no later than 1980 (when I-475 is completed).

3. Since fire control features must be built into a multi-unit complex, site plan review must be applied to all residential developments to allow Fire Department review.

4. The City study the adequacy of hydrants and other aspects that are part of trailer parks (or mobile home parks) and that affect fire protection on such premises; and if appropriate, formulate additional regulations as in the form of an ordinance to be enacted by the City.

5. The City study the need and scope of fire smoke detection equipment in homes, mobile homes and other habitable structures and enact an ordinance requiring installation of such equipment based on the recommendations of the City DPW Housing and Safety Inspection section, and Fire Department.

## XII. CEMETERIES

Some 139 acres of land are used by cemeteries. No change is projected since burial needs are being met and no deficiencies have been identified. The County (GCMPC 1970) found no problem since adequate undeveloped land exists outside the City. Because of the difficulty and expense of relocating burial sites, further development within the City is inadvisable.

Illustration 6

| CEMETERY NAME | Ownership | Status* |
|---|---|---|
| All Saints, Groveland near W. Boulevard | Religious | Active |
| Assyrian, Branch and Plainfield | Religious | Active |
| Aventine, Lewis and Geneseret | City | Active |
| Avondale, 833 Lewis (north of Aventine) | Corporation | Active |
| Glenwood, 2500 W. Court | Corporation | Active |
| Gracelawn, 5710 N. Saginaw at Mott | Association | Active |
| Machpellah-Hebrew, 4615 Branch | Religious | Active |
| St. Michaels-Byzantine, Groveland near St. Nicholas Cemetery | Religious | Active |
| St. Micholas-Orthodox, Groveland near Dort Hwy. and All Saints Cemetery | Religious | Active |

*The State of Michigan classifies cemeteries as active, inactive, abandoned or obliterated. Only active cemeteries are listed, according to the State Cemetery Commission data.

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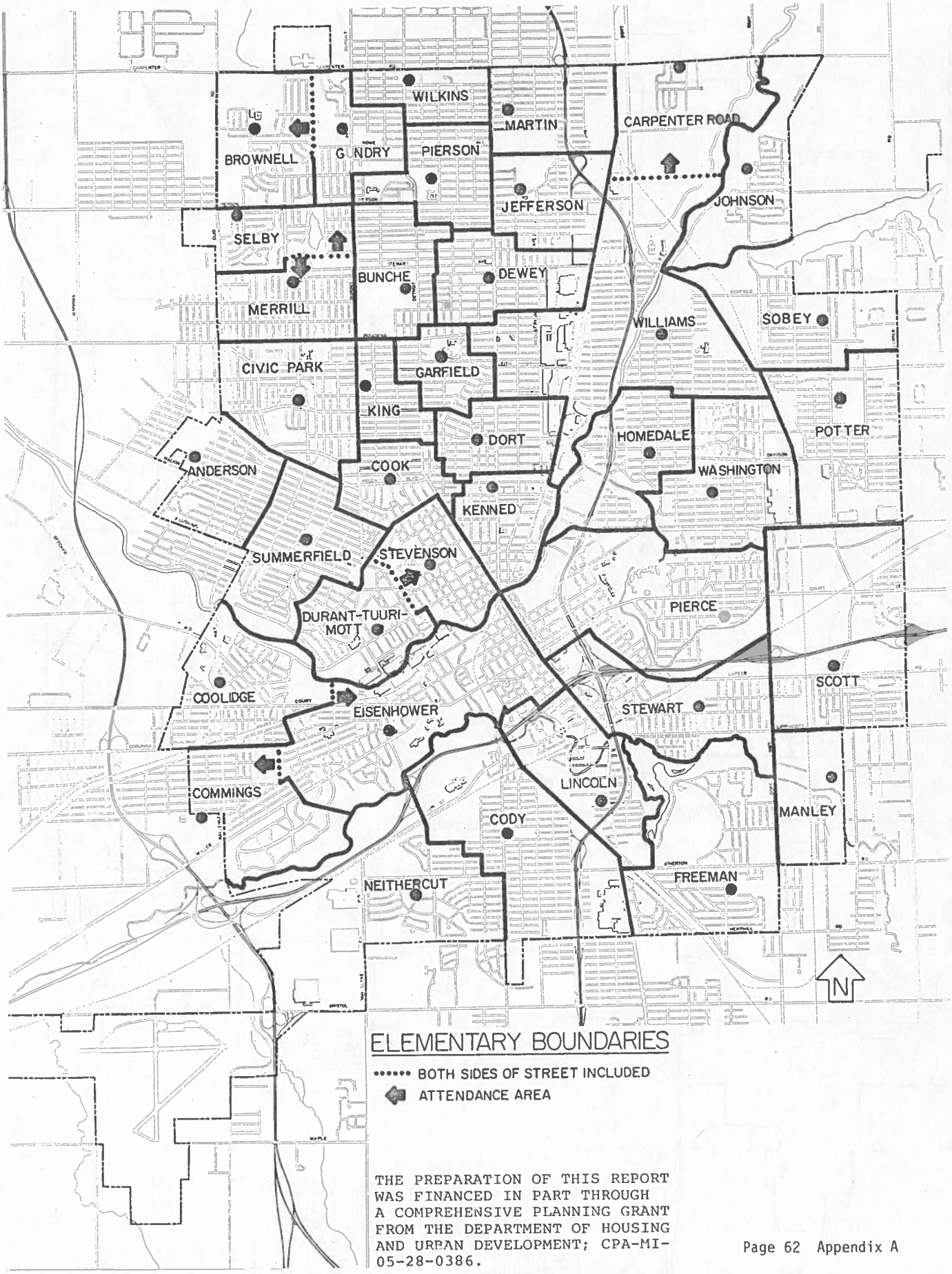
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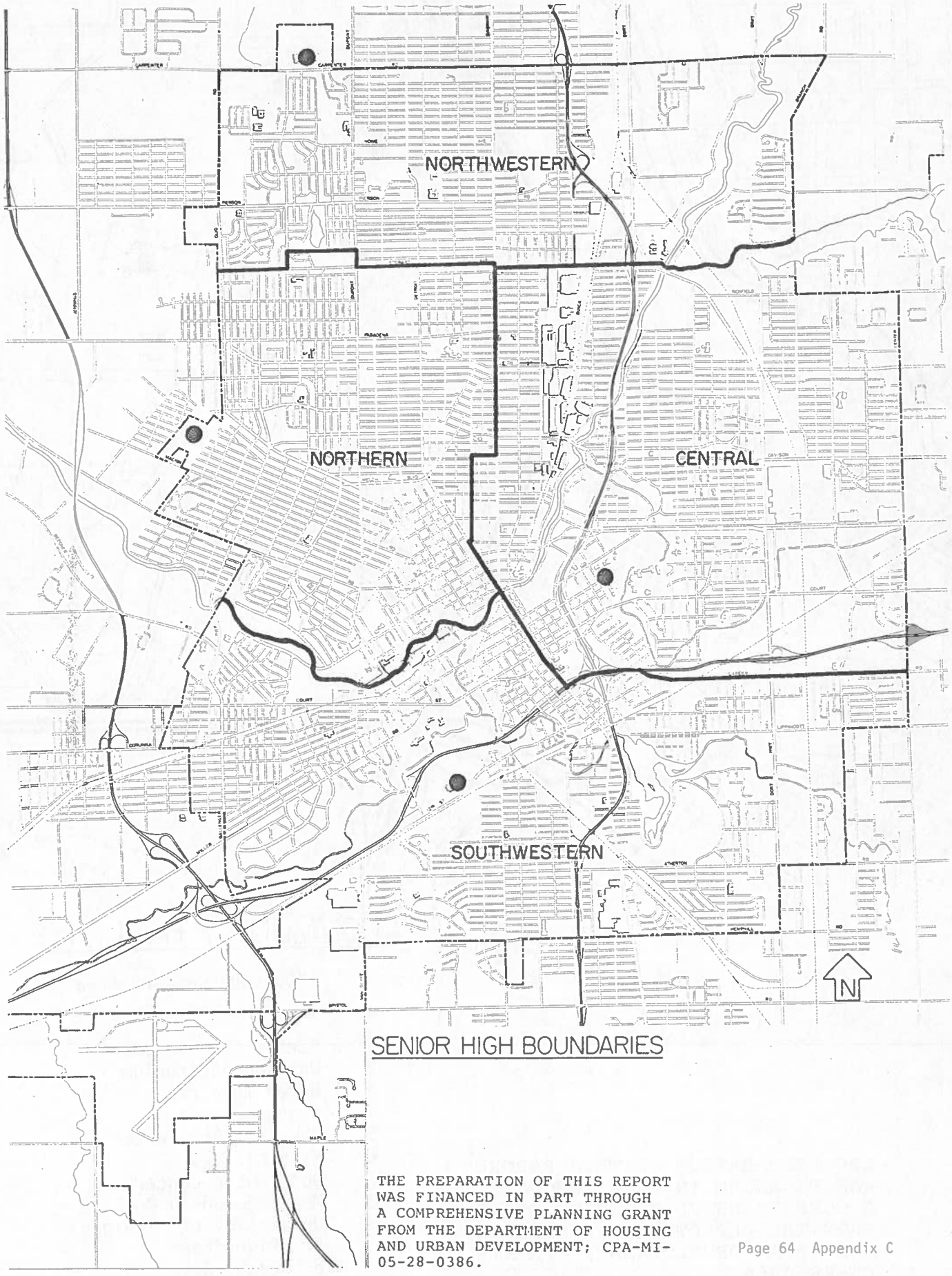



## ELEMENTARY BOUNDARIES

•••••• BOTH SIDES OF STREET INCLUDED

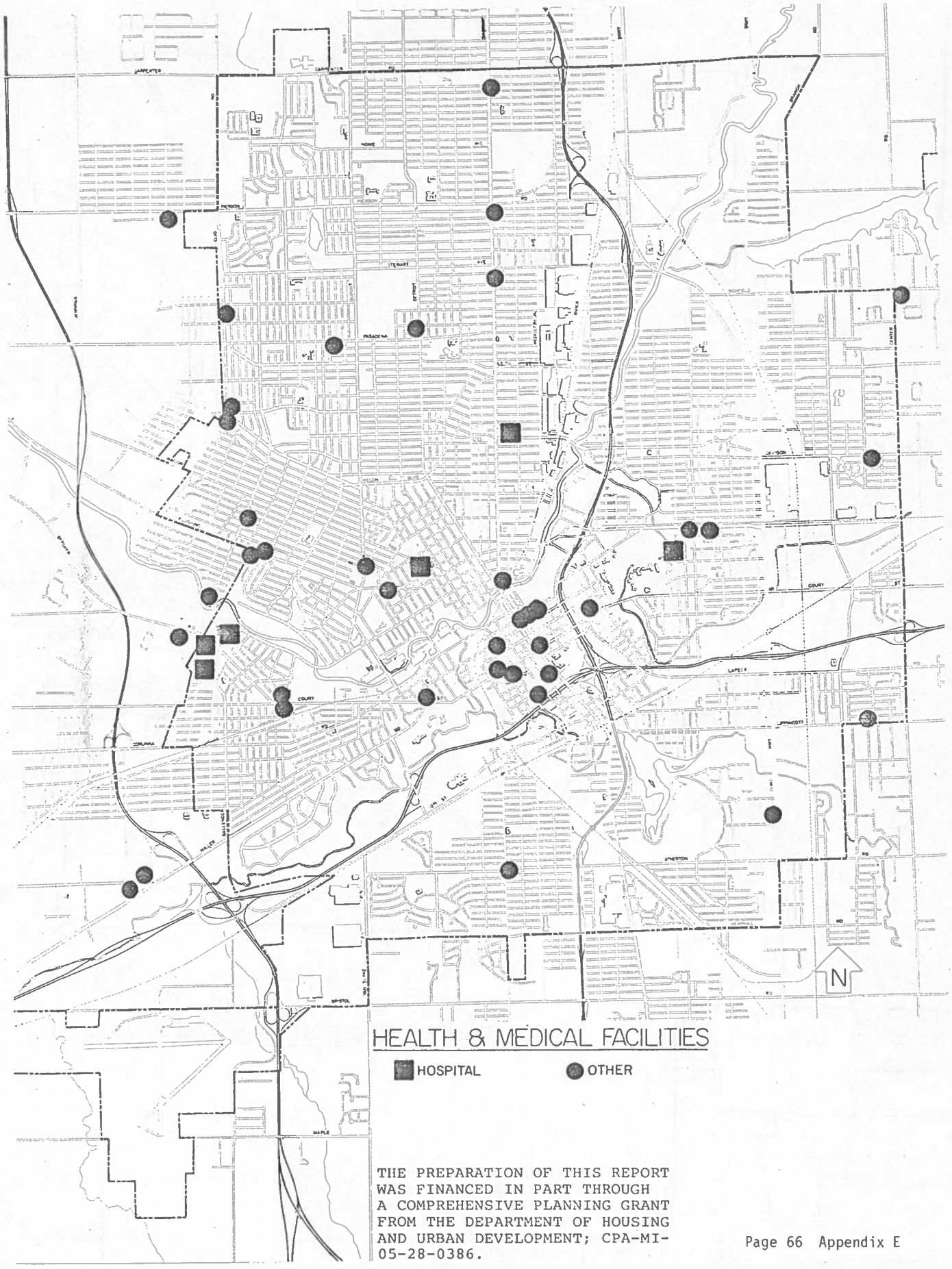
ATTENDANCE AREA

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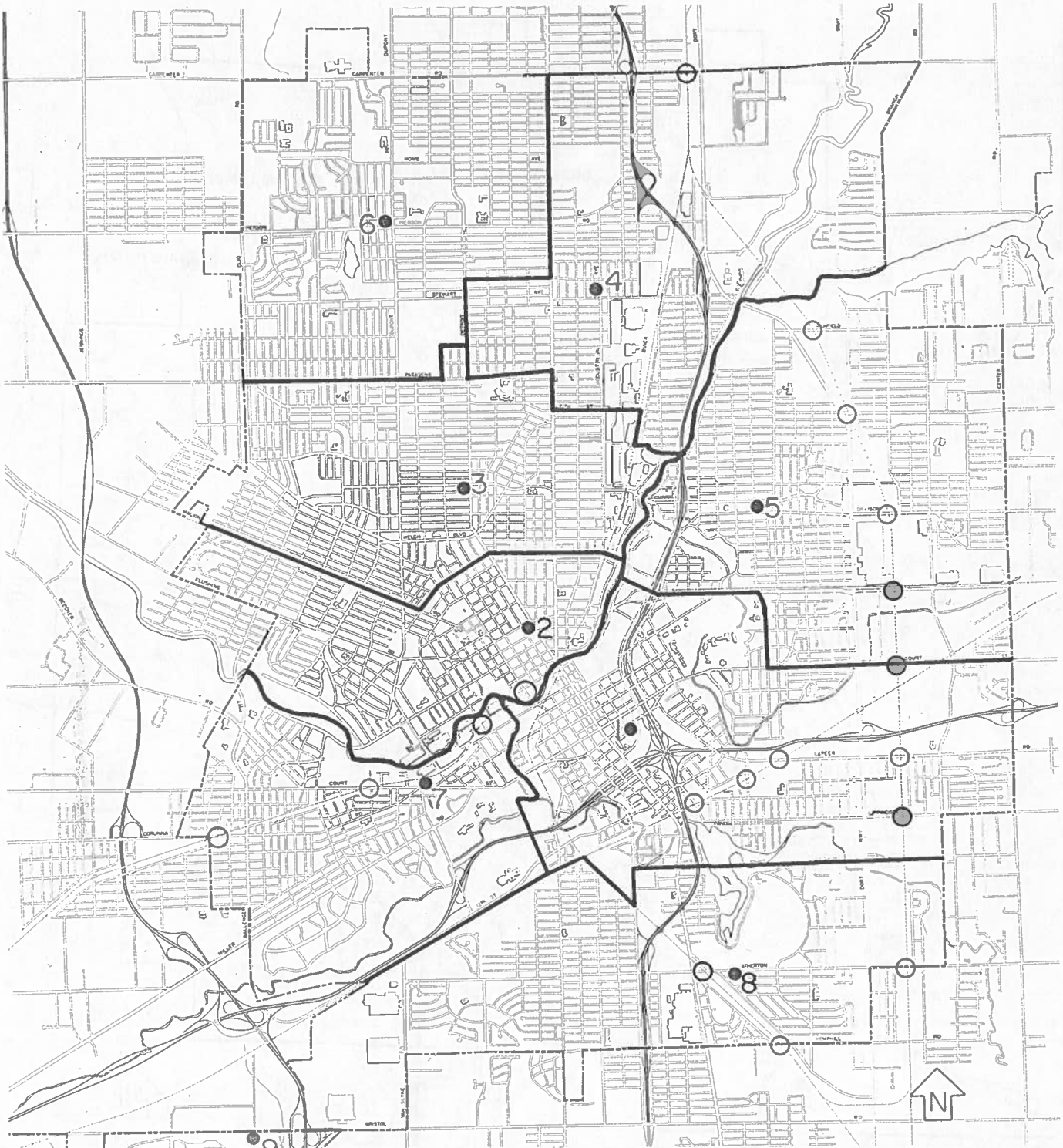



SENIOR HIGH BOUNDARIES

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FIRE DEPARTMENT DISTRICTS

○ INCIPIENT BARRIERS

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## ENROLLMENTS IN FLINT COMMUNITY SCHOOLS

| School Year | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 |
|---|---|---|---|---|---|---|---|---|---|
| Elementary | 27,743 | 27,172 | 25,996 | 25,473 | 24,812 | 23,305 | 22,466 | 21,841 | 21,217 |
| Jr. High | 10,099 | 10,402 | 10,332 | 10,274 | 9,862 | 9,628 | 9,333 | 9,144 | 8,931 |
| Sr. High | 8,270 | 8,439 | 8,737 | 8,909 | 8,847 | 8,693 | 8,688 | 8,579 | 8,425 |
| Total | 46,112 | 46,013 | 45,065 | 44,656 | 43,521 | 41,626 | 40,487 | 39,564 | 38,573 |
| Net Change | | -99 | -948 | -409 | -1,135 | -1,895 | -1,139 | -943 | -991 |

The average loss per year has been 943 students or 2.05%. Not included is Adult Education enrollment, 6,092 headcount Fall 1976, Mott Adult High School, or Pre-kindergarten (600 students).

For comparative purposes, total Flint Community Schools enrollment for prior years is recorded.

| 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 |
|---|---|---|---|---|---|---|---|
| 40,558 | 42,266 | 44,136 | 44,741 | 46,570 | 47,389 | 47,867 | 47,082 |

These numbers are slightly higher than those above because they include enrollments in Adult Education, generally separated from K-12 programs.

### Fall, 1976 Enrollments

| Grade | K | 1st | 2nd | 3rd | 4th | 5th | 6th | Spec. | Total |
|---|---|---|---|---|---|---|---|---|---|
| Students | 3,262 | 3,192 | 3,084 | 2,738 | 2,841 | 2,758 | 2,703 | 639 | 21,217 |

| | 7th | 8th | 9th | 10th | 11th | 12th | Total |
|---|---|---|---|---|---|---|---|
| | 2,983 | 2,927 | 3,021 | 3,472 | 2,780 | 2,173 | 17,356 |

| Sum Total |
|---|
| 38,573 |

## ENROLLMENTS IN NON-PUBLLIC SCHOOLS

| NON-PUBLIC | 1972 | 1973 | 1974 | 1975 | 1976 |
|---|---|---|---|---|---|
| Luke M. Powers | 1,348 | 1,283 | 1,240 | 1,204 | 1,120 |
| Holy Family | 526 | 540 | 516 | 567 | 559 |
| St. Robert | 520 | 490 | 496 | 508 | 541 |
| Holy Redeemer | 575 | 565 | 493 | 454 | 481 |
| Holy Rosary | | | | 375 | 367 |
| Donovan South Mayotte | | | | | 332 |
| St. John | 306 | 306 | 273 | 276 | 312 |
| John R. Rice | | 70 | 197 | 253 | 310 |
| Flint Christian | 266 | 245 | 141 | 233 | 303 |
| St. Mary (Swartz Creek) | 149 | 182 | 220 | 255 | 275 |
| St. Paul Lutheran | 206 | 201 | 184 | 232 | 247 |
| Donovan Middle School North | 365 | 291 | 264 | 251 | 234 |
| Holy Rosary | 678 | 643 | 602 | 214 | 217 |
| St. Mary (Flint) | 218 | 201 | 186 | 215 | 201 |
| Redeemer Lutheran | 164 | 164 | 124 | 187 | 200 |
| Maurice Olk | 258 | 303 | 220 | 225 | 186 |
| Genesee Christian | | | 141 | 110 | 157 |
| St. Mary's (Mt. Morris) | 85 | 76 | 94 | 114 | 144 |
| Our Savior Lutheran | 88 | 96 | 90 | 75 | 116 |
| St. Pius X Primary | 134 | 109 | 94 | 85 | 96 |
| Emanuel Lutheran Elementary | 107 | 98 | 94 | 76 | 92 |
| St. Mark Lutheran | 58 | 54 | 72 | 80 | 87 |
| Linden Road Seventh Day Adventist | | | | | 49 |
| Foss Avenue Christian | | | | | 47 |
| Good Shepard Lutheran | 34 | 31 | 28 | 38 | 38 |
| The Valley School | 181 | 186 | 143 | 157 | 162 |
| Total Non-Public (Includes schools now closed) | 7,116 | 6,787 | 6,572 | 6,710 | 6,743* |
| GRAND TOTAL | 133,746 | 131,460 | 130,086 | 128,939 | 125,691 |

* Non-public enrollments from the City of Flint are estimated at 3,861.

## ELEMENTARY SCHOOLS

| Name & Address | Year Completed | Year(s) Added to | School Site Acres | Rooms in Building | | | | | | | | Primary Units | Mobile Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Class-rooms | Gym | Aud. | Comm. Room | Inst. Materials | Branch Library | Other(a) | Total | | |
| Dewey<br>4119 N. Saginaw Street | 1921 | 1960-1964 | 4.2 | 31 | 1 | | 1 | 1 | | 1 | 35 | | |
| Dort (d)<br>2025 N. Saginaw Street | 1976 | | 3.7 | 25 | 1 | | 1 | 1 | | | 28 | | |
| Doyle (e)<br>1040 N. Saginaw Street | 1902 | 1954 | 2 | School closed at the end of the 1973-74 school year. | | | | | | | | | |
| Durant-Tuuri-Mott<br>1518 West Third Avenue | 1922 | 1958-1969 | 21.9 | 44 | 1 | 1 | 1 | 1 | | 3 | 51 | | 1 |
| Eisenhower<br>1235 Pershing Street | 1966 | | 6 | 16 | 1 | 1 | 1 | 1 | | 1 | 21 | 8 | |
| Flint Open School<br>316 E. Pasadena Avenue | 1925 | 1958-1968 | 21.8(s) | 54 | 2 | 1 | 1 | 1 | | 1 | 60 | | |
| Freeman<br>4001 Ogema Avenue | 1951 | 1959 | 5 | 16 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 9 | |
| Garfield<br>301 E. McClellan Street | 1928 | | 21.8(s) | 25 | 1 | 1 | 1 | 1 | | 1 | 29 | | |
| Gundry<br>6031 Dupont Street | 1955 | 1960 | 10 | 22 | 1 | 1 | 1 | 1 | | 1 | 27 | 4 | 1 |

(a) Other areas such as backstage rooms, basement rooms, etc.
(b) Purchased in 1963.
(c) Estimated classroom equivalency of all instructional areas except the gym.
(d) Rebuilt; completed January, 1976.
(e) There is a commitment to build a new school on a 6-acre site in Doyle area.
(s) Shared with another school.

## ELEMENTARY SCHOOLS

| Name & Address | Year Completed | Year(s) Added to | School Site Acres | Rooms in Building | | | | | | | | Primary Units | Mobile Units |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Classrooms | Gym | Aud. | Comm. Room | Inst. Materials | Branch Library | Other(a) | Total | | |
| Neithercut<br>2010 Crestbrook Lane | 1961 | 1966 | 7.3 | 14 | 1 | 1 | 1 | 1 | | 1 | 19 | 8 | |
| Oak<br>1020 Oak Street | 1908 | 1954 | 1.4 | School closed at the end of the 1975-76 school year. | | | | | | | | | |
| Parkland<br>3319 North Street | 1914 | 1954 | 2.7 | School closed at the end of the 1975-76 school year. | | | | | | | | | |
| Pierce<br>1101 West Vernon Drive | 1952 | | 4.6 | 14 | 1 | 1 | 1 | 1 | | | 18 | | 1 |
| Pierson<br>300 E. Mott Avenue | 1928 | 1964-1971 | 12.8(s) | 34 | 1 | | 1 | 1 | | 3 | 40 | | 1 |
| Potter<br>2500 N. Averill Avenue | 1952 | | 12 | 23 | 1 | 1 | 1 | 1 | 1 | 1 | 29 | 7 | |
| Scott<br>1602 S. Averill Avenue | 1961 | 1965 | 15.3 | 14 | 1 | 1 | 1 | 1 | | 1 | 19 | 5 | |
| Selby<br>5005 Cloverlawn Drive | 1956 | | 7.2 | 8 | 1 | 1 | 1 | 1 | | 1 | 13 | 10 | |
| Sobey<br>3701 N. Averill Avenue | 1962 | | 6.3 | 11 | 1 | 1 | 1 | 1 | | 6 | 21 | 7 | 1 |

(a) Other areas such as backstage rooms, basement rooms, etc.
(b) Purchased in 1963.
(c) Estimated classroom equivalency of all instructional areas except the gym.
(d) Rebuilt; completed January, 1976.
(e) There is a commitment to build a new school on a 6-acre site in Doyle area.
(s) Shared with another school.

## JUNIOR HIGH SCHOOLS

| | Year Completed | Year(s) Added to | School Site Acres | Rooms in Building | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Class-rooms | Gym | Aud. | Comm. Room | Li-brary | Cafe-teria | Other(a) | |
| Bryant<br>201 E. Pierson Road | 1958 | | 12.8(s) | 32 | 2 | 1 | 1 | 1 | 1 | 1 | 39 |
| Flint Academy<br>401 E. McClellan Street | 1928 | 1961-1967<br>1953-1956 | 21.8(s) | 54 | 2 | 1 | | 1 | 1 | 1 | 60 |
| Holmes<br>6602 Oxley Drive | 1962 | 1966 | 24 (s) | 42 | 2 | 1 | 1 | 1 | 1 | | 48 |
| Longfellow<br>1255 N. Chevrolet Avenue | 1928 | 1962 | 12.4(s) | 46 | 3 | 1 | 1 | 1 | 1 | 3 | 56 |
| Lowell<br>3301 N. Vernon Avenue | 1918(b) | 1962 | 31 | 65 | 2 | 1 | 1 | 1 | 1 | | 71 |
| McKinley<br>4501 Camden Avenue | 1930 | 1954 | 21.7 | 43 | 2 | 1 | 1 | 1 | 1 | 2 | 51 |
| Whittier<br>701 Crapo Street | 1925 | 1958-1966 | 20.5(s) | 52 | 2 | 1 | 1 | 1 | 1 | | 58 |
| Zimmerman<br>2421 Corunna Road | 1929 | 1958-1972 | 4.6 | 36 | 2 | | 1 | 1 | 1 | | 41 |
| TOTAL | | | | 370 | 17 | 7 | 7 | 8 | 8 | 7 | 424 |

(a) At Flint Academy: 1 swimming pool
At Bryant: 1 mobile unit
At McKinley: 2 mobile units
At Longfellow: 3 basement rooms

(b) Lewis Elementary School (built in 1918) became part of Lowell Junior High School (built in 1930) in September, 1964

(s) Shared with another school.

## POST-SECONDARY SCHOOL ENROLLMENTS

| Major Institutions | 1966-67 | 1975-76 | 1976-77 | Projections |
|---|---|---|---|---|
| U of M-Flint | 919 | 3,479 | 3,685 | 6,200 |
| (Full time equated enrollment) | (671) | (2,501) | (2,521) | (4,000) |
| Mott Comm. College | 11,573 | 10,800 | 49,767@ | 10,000 in 1980 |
| (Full time equated enrollment) | | | (6,030) | (5,632) |
| General Motors Institute | 1,236 | 3,039 | 2,334 | 3,000 E. |
| Baker Jr. College (Est.) | N.A. | 1,105 | 1,500 | N.A. |
| Hurley Medical Center | | | | |
| Nursing Only | N.A. | 188 | 199 | N.A. |
| All Students | N.A.* | N.A. | 355 | N.A. |
| All college and university-sponsored continuing and extension enrollments** | N.A. | 2,000 | 2,000 | 2,000+ |
| All non-academic vocational | 600 E. | N.A. | 1,200 E. | 1,200+ |

E = Estimate

To estimate faculty and staff, add approximately 10% to the above enrollments. Hurley Medical Center is an exception. Although a teaching hospital, its educational role is incidental. Hurley's payroll exceeds 2,000.

*A combined total of 438 was given by GCMPC in 1968 for two "professional" schools. Hurley is now the only such school.

**Several universities play an active role here, offering both undergraduate and graduate credit, also non-credit coursework, in Flint and elsewhere. Of these, the University of Michigan-Flint is the largest, currently enrolling about 700 per term or 1,500 per year.

Enrollments are given as headcount totals. For planning purposes, fulltime equivalents (FTE) are useful to weigh total enrollments.

@Such a high headcount is based on a large number of students taking relatively few courses and the current State aid formula calculations, according to Mott College. The full-time equivalents (FTE) should be noted to weigh enrollments.

## TOTAL CITY LIBRARY STATISTICS

| | 1970 | 1976 |
|---|---|---|
| Volumes | 388,305 | 404,000 |
| Circulation | 1,546,480 | 1,111,995 |
| Square Feet | 77,327 | 110,397 |
| Staff | 77 | 120 |

## STATISTICAL SUMMARY

| | 1973-74 | 1975-76 |
|---|---|---|
| Population of School District (1970 Census) | 193,317 | 193,317 |
| Library Materials Circulated | 1,130,017 | 1,111,995 |
| Questions Asked | 153,929 | 155,464 |
| Number of Films | 726 | 800 |
| Number of 16MM Films (Circulated) | 23,553 | 22,147 |
| Number of Recordings | 12,615 | 11,670 |
| Number of Volumes | 402,735 | 403,373 |
| Total Number of Persons Entering Main Library | 398,845 | 443,131 |
| Total Budget | $2,145,390 | $2,293,701 |

## LIBRARY SUMMARY

| LIBRARY LOCATION | FLR. AREA (Sq. ft.) | FULL-TIME STAFF | BOOK COLLECTION 1970 | BOOK COLLECTION 1976 | CIRCULATION June, 1976 |
|---|---|---|---|---|---|
| Main Branch<br>1026 E. Kearsley | 90,966 | 104 | 289,052 | 259,531 | 608,355 |
| Branches | | | | | |
| Civic Park<br>1402 W. Dayton | 2,200 | 3 | 26,934 | 27,296 | 115,771 |
| Cody<br>3201 Fenton | 1,431 | 1 | 15,801 | 16,650 | 44,717 |
| Downtown<br>200 E. Kearsley | 8,300 | 4 | 29,094 | 31,022 | 61,810 |
| Freeman<br>4001 Ogema | 1,250 | 1 | 7,823 | 9,607 | 53,108 |
| North Flint<br>118 W. Pierson | 2,400 | 3 | Built 1972 | 20,037 | 67,138 |
| Potter<br>2500 N. Averill | 1,050 | 1 | 11,044 | 11,044 | 49,377 |
| West Flint<br>3601 Beecher | 2,800 | 3 | Built 1971 | 30,813 | 111,719 |

## GLSHSI GOALS:*

A-HEALTH STATUS

GOAL I.

HEALTHY INFANTS BORN FULL TERM

Within the City of Flint the infant mortality rate is 25.6; the rate for blacks is 31.8. The level of prenatal care for mothers in the City of Flint is lower than the State level, and a larger proportion of babies are below normal birth weight: 7.7% for the State and 9.5% for the City of Flint.

The balance of the County has an infant mortality rate which is lower than the State. Out-county mothers have a higher than average level of prenatal care and deliver fewer low birth weight infants. Rate is deaths per thousand live births.

Infant health vulnerability is concentrated in the City of Flint among young black mothers; an increasing number of whom are single parents.

GOAL II.

INCREASE LIFE EXPECTANCY

The death rate, by age, in Genesee County is similar to that of the State, with the exception of the under one (1) year old age group. The higher death rate in this category in Genesee County is analyzed in Goal I. When death rates are compared between the City of Flint and the balance of the County, significant variations are evident. The City of Flint has much higher death rates for all age groups, with the exception of those aged five (5) to twenty-four (24) and over sixty-five (65). Comparison of death rates within the City of Flint, by race and sex, show that blacks experience a death rate almost double that of whites under the age of sixty-five (65). Males experience much higher death rates than do females. Black males have the highest death rates at all age levels.

GOAL III.

MENTAL OR PHYSICAL DISABILITY REDUCED

Information about local residents is not available at the present time. The ECHO survey for the City of Flint does indicate that sixty (60%) percent of the population saw a doctor in the past year for some reason other than a routine medical checkup.

* Source: Health and Environment Status, 1975, Tri-County Health Planning Council, GLSHSI, Flint, Michigan

forty-one (41%) percent of persons in the City of Flint received dental care, according to an ECHO Health Department Survey. The Flint Public Schools health report for January 1975 indicates seventy-four (74%) percent of all school children are currently without dental defects.

The inclusion of dental payments in employee benefit plans for a number of major employers in Genesee County is expected to increase the level of dental care in the community. Medicaid has also begun to include preventive and remedial dental care as well as emergency treatment. The Mott Children's Health Center provides dental care for eligible children not covered under public and private payment plans.

GOAL VIII.

NUTRITION ADEQUATE FOR GROWTH AND GOOD HEALTH

No local measurements are available for the adequacy of nutrition or extent of malnutrition; however, a 1972 nutritional survey by the National Center for Health Statistics found that:

a) Nearly thirty (30%) percent of people ages 60-74 with incomes below poverty level reported daily intakes of less than 1,000 calories.

b) Sixteen (16%) percent of people ages 60-74 with incomes above the poverty level reported daily intakes of less than 1,000 calories.

c) Black children ages 1-5 had higher proportions with daily intakes of less than 1,000 calories than white children in the same age group.

d) Blacks, women, and persons with incomes below the poverty level were shown to have the largest deficiencies of the nutrient iron. (e.g. black women below the poverty level had fifty-seven (57%) percent of recommended standards for iron intake)

e) Seventy-five (75%) percent of black women had calcium intakes below recommended standards, compared to fifty-six (56%) for white women.

f) Daily iron intakes for preschool children were sixty-eight (68%) of the recommended standards.

Groups particularly vulnerable to the effects of malnutrition are infants whose mothers have had poor diets, the aging, teenagers and the poor.

4. HOUSEHOLDS ARE OVERCROWDED - Indicates potential stress in living conditions which impinge on an individual's ability to secure privacy and a sense of individuality. Overcrowding may also produce unhealthful living conditions. 9%

5. PERSONS UNDER 18 NOT LIVING WITH BOTH PARENTS - Indicates potential lack of alternative role models, and may indicate family stress. 23%

6. POPULATION MOVED BETWEEN 1965-1970 - Indicates lack of both family and neighborhood stability. 46%

7. POPULATION AGED 14 AND ABOVE ARE WIDOWED AND DIVORCED - Indicates potential stress caused by marital dislocation. 13%

8. LIVE BIRTHS WITH MOTHER UNDER 20 YEARS OF AGE - Indicates potential stress through child rearing responsibility at a comparatively young age. 27%

9. SCHOOL DROPOUTS - Indicates potential stress through lack of attainment of basic skills and success in meeting social expectations as well as difficulty of obtaining employment. It often also indicates lack of knowledge concerning positive healthful living. 10%

10. POPULATION OVER AGE 65 - Indicates population vulnerable to protracted illness and to stress from changing life role, often resulting in increased isolation. 9%

# 7

# ENVIRONMENTAL

PREPARED BY THE DEPARTMENT OF COMMUNITY DEVELOPMENT, CITY OF FLINT, MICHIGAN

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# ABSTRACT


TITLE: ENVIRONMENT ELEMENT

PREPARED BY: CITY OF FLINT, DEPARTMENT OF COMMUNITY DEVELOPMENT, DIVISION OF PLANNING AND PROGRAM DEVELOPMENT

SUBJECT: ENVIRONMENTAL CONDITIONS AND NEEDS OF FLINT

DATE: NOVEMBER, 1977

NUMBER OF PAGES: 87

ABSTRACT: THIS REPORT WILL OUTLINE THE SCOPE OF ENVIRIONMENTAL FACTORS OR PARAMETERS, INDICATE APPLICABLE LOCAL, STATE AND FEDERAL AUTHORITY AND GUIDELINES, SPECIFY CONTROL AGENCIES AND DETAIL THEIR ACTIVITIES, PRESENT EXISTING ENVIRONMENTAL CONDITIONS AND PROJECT NEEDS INCLUDING DEFICIENCIES. THE DEFICIENCIES ARE GENERALLY GIVEN AS RECOMMENDATIONS. THE REPORT RELATES AND GIVES EMPHASIS TO DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT PRIORITIES AND PRESENTS AN ENVIRONMENTAL DISCUSSION WEIGHTED TOWARD HOUSING AND COMMUNITY DEVELOPMENT, THE MISSION OF THE AUTHOR ORGANIZATION.



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# I. ENVIRONMENTAL CONDITIONS

## A. General Introduction

In recent years there has been rising concern for our environment. Together with an increasing body of data and knowledge both as to existing conditions and the implications for future generations, such awareness has been manifested as a growing amount of regulation and control. It has also become clear that simply "passing a law" is not enough, and that such legal authority must be combined with economic and technical assistance to localities. The identification of deficiencies, such as inadequate water treatment, may simply create by definition a problem, and one that cannot be solved solely by applying local resources, for solutions are ultimately economic.

It has similarly become clear that most environmental problems or deficiencies, while local are also common to most areas of the state and nation. This is because we all share, to some extent, a common environment such as air and water. This indicates a second major problem, the regional scope of environmental issues. Solutions, while locally based, must be regionally applied if substantial improvement is to take place. The City has an important role, but it is only one of several actors involved in a broader context.

This section will deal with these environmental areas:

1. Water, as domestic municipal supply.
2. Water, as liquid wastes, both sanitary and storm.
3. Water, as surface features such as rivers and streams.
4. Air quality.
5. Soil erosion and sedimentation.
6. Flooding and floodplains.
7. Special environments (nosie, lead paint).
8. Environmental policy.

## II. GOALS AND OBJECTIVES

The goal of reviewing our physical environment and its prospects is to provide a reasonably clean, safe, and healthful habitat for human and other desirable lifeforms.

(Within this context "health" is defined as the absence of disease, although our physical environment obviously plays a role in accidents.) Objectives therefore represent reasonable or practical attainments which are largely specified by existing legislation.

The objectives for all environmental areas studied here are:

1. To indicate current applicable standards and guidelines and their regulatory basis.

2. To outline our City's existing conditions relative to established standards and guidelines.

3. To project or estimate future conditions based on current and future requirements as known.

4. To cite needs based on current and future environmental considerations. These will be stated as "recommendations."

# III. WATER QUALITY

## A. Introduction

Water quality, like most environmental considerations, must be approached in a comprehensive fashion. This section will present the three major concerns of water management (watershed, supply and aftertreatment) and show their interrelationship. As with other natural environments, local water must be considered as a part of a regional larger system. The impact of water quality in Lakes Michigan, Superior and Huron will not be detailed although it should be considered in comprehensive planning.

The City of Flint has, in recent years, obtained its water from Lake Huron, through the Metropolitan Detroit Water Supply System. After use and treatment, the water is returned to the Flint River. In prior years the quality of this treated discharge was less than ideal, it along with other sources of pollution, caused poor water quality in that river. This has generally been true of surface water features (rivers and streams) forming the Saginaw River watershed and draining into Saginaw Bay and Lake Huron. Thus we have had to consume our own pollution along with the undesirable effluents of others. Dealing with pollution is expensive. Both the water we receive and the liquid wastes that we discharge require processing, which calls for very costly treatment plants and high operating expenses. In the summer of 1976 the sewer charge for an average family was increased from $4.56 to $15.51 for three month's service, largely to pay for the costs of an expanded wastewater treatment plant, whose improvement was expected to cost $50 million.

Part of the expense of water treatment is because of undesirable and often unnecessary components that we introduce. Phosphorus, like nitrogen, is considered to be a major form of pollution in water. It is a nutrient that encourages the growth of waterlife including weeds and and algae. Most phosphorus introduced to urban liquid wastes comes from synthetic detergents, which could be reduced greatly by the use of low-phosphorus formulations, or soap. By continuing to use high-phosphorus detergents taxpayers simply increase the cost of water treatment while degrading the environment.* Some phosphorus and nitrogen is introduced from fertilizer sprinkled on gardens, lawns and golf courses. That portion not immediately consumed by plants either runs off along the surface to creeks and streams, eventually to the Flint and Saginaw Rivers; or percolates into groundwater tables polluting our acquifers (groundwater sources). This is also true of insecticides or pesticides such as DDT which, unlike fertilizer and other "nutrients" are poisonous and generally highly resistant to natural breakdown.

*Both Congress and the state are acting to ban phosphate detergents.

certain others). These metal which are toxic, are common industrial wastes. Over time, ingestion (swallowing) could cause poisoning, even death. Bacteria and viruses are generally not analyzed except as the coliform group which is used as an indicator of potentially dangerous human wastes (especially fecal coliform). Coliform counts may be the most important factor relative to the safe human use of water. Most other parameters look at water as a living environment for various organisms including fish. These parameters are not irrelevant to man. Trout insist on cool, clean and clear water. So should we. (Water quality parameters are itemized in the Appendix.)

Water Quality Overview

Applicable water quality standards are in process of change. Proposed changes in administrative rules of the Michigan Water Resources Commission were released in 1976 but are expected to be adopted sometime in 1977. These water quality standards conform to Federal law (PL 92-500) and are applicable to the Great Lakes, their connecting waters and all other surface waters (including the Flint River and its tributaries). The revised standards seek more stringent dissolved oxygen standards for streams, generally protect all state waters for total body contact (recreational use) and public water supply, maintenance of the quality of all natural trout streams and lakes, adopt the US EPA "Quality Criteria for Water" for defining toxic materials standards, and adoption of the maximum chemical contaminant levels specified by the Federal Safe Drinking Water Act (PL 93-523) for all waters protected for public water supply. "Quality Criteria for Water," 1976, EPA, published under Section 304 (a) of PL 92-500, covers toxic chemicals, mainly heavy metals and synthetics including common insecticides such as DDT.

The Michigan State Water Resources Commission, a division of the Department of Natural Resources (DNR) has primary responsibility for enforcing water pollution controls in accordance with State Act 245, PA 1929 as amended. The Commission, in 1975, gave the City's role:

> "As regards to 'major polluters,' the City of Flint being the largest entity on the (Flint) river contributes the largest point source discharge of wastes and has the largest impact on water quality. The City of Flint has an obligation to properly treat its wastewaters and to police itself and its industrial and commercial users."

A current summary cites the principal local water quality deficiency to be the hydraulic overloading of the treatment plant, because of an undersized interceptor line and combined sanitary and storm drainage (runoff water). Precipitation (rain or snow) drainage from building roofs and streets is added to sanitary sewers

1. Water quality management planning -- Section 208 of the Federal Water Pollution Control Act has many implications.

2. Municipal water supply -- Our City supply providing for domestic residential, commerical, and industrial needs, via the Water Treatment Plant.

3. Municipal liquid waste -- All our municipal water is discharged for treatment via drains that leave our homes and businesses, enter a comprehensive City-wide system, and end up at the City wastewater treatment plant. Separate storm drains drain streets into the Flint River and other surface waters.

4. Surface water quality -- Our river and streams (and connected lakes or impoundments) are important, both for recreation and as part of our municipal water supply system.

Water Quality Management Planning

The principal legislation affecting comprehensive water quality control, is the Federal Water Pollution Control Act Amendments of 1972 (PL 92-500). As a recipient of Block Grant funds the City is required to comply with the provisions of the Act, as amended. Its mandate may be summarized in citing the three principal goals of the Act:

By 1977 -- best practicable control technology or pretreatment requirements for industrial and commercial discharges and secondary treatment effluent limitations for publicly-owned treatment works.

By 1983 -- swimmable and fishable waters, nationwide.

By 1985 -- elimination of excessive levels of pollutants into the nation's waterways.

Water pollution experts are more aware than ever of one thing: controlling land use may be an effective strategy in reducing the impact of many non-point pollution problems and in providing an alternative to constructing expensive sewers and treatment plants. The 1972 Act, emphasizing prevention of pollution at its source as well as treatment, declared as national policy an attack on water pollution. In section 208 of that Act, land use is seen as a major element in the water quality management strategy.

Land use techniques for reducing water pollution include zoning, subdivision regulations, floodplain controls, public facility development policy to induce development into more compact areas, urban stormwater controls, and sediment controls. Reduction in sediment and urban runoff alone would be an enormous benefit to the purity of our rivers and lakes.

planning that allows for expeditious implementation and coherent management. This requires a high order of interplan consonance or harmony. The EPA seems to suggest that if existing land uses plans do not interfere with attaining goals and meeting standards, they need not be revised and may continue as utilitarian plans. However, the 208 process requires that land use plans be considered relative to achieving water quality standards. While there is no mandatory requirement that existing land use plans must be changed if in apparent conflict with meeting water quality standards, local units of government such as the City of Flint could be asked to review their conflicting land use policies were it found that these would prevent meeting water quality standards. In such a case, it would be up to the City to develop alternatives that would best meet local needs and support Federal EPA and State objectives. This might be manifested as restrictions on development, such as limiting building permits in floodplains. In growing suburbs, this might represent tighter subdivision regulations. Within the City, redevelopment and other construction must be environmentally sensitive.

Region V Planning and Development Commission (PDC) activities on 208 planning, in addition to contact with public officials and citizens groups, includes:

1. A contract signed with the Michigan DNR's Environmental Protection Bureau, in July 1976, for three years, to provide water quality data and point discharge data, plus a variety of technical services for the PDC.

2. Listing of NPDES permit holders. In Flint, dischargers were primarily General Motors plants, a small number of other industrial facilities, plus the City Wastewater Treatment Plant (WWTP).*

3. Population growth was profiled, with projections given for five-year increments from 1980 to 2005. Such forecasts would assist in providing adequate future wastewater treatment facilities, and otherwise assist in planning.

4. Building permits data was compiled from 1970 to 1976. Flint City permits fell off sharply in 1974 and have continued at a very low rate.

5. Wastewater projections were begun in spring, to project 1980 and 1995 flow and load data and estimate the capabilities of municipal WWTPs including Flint's treatment plant. Review data was estimated to be available in May.

6. A regional watershed map was being developed, along with other forms of base data.

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*Local permit holders are listed in the Appendix E. (National Pollutant Discharge Elimination System.)

## Municipal Water Supply

### C-1 Existing Conditions

Although City residents originally used the Flint River, and later, wells for domestic water needs, development of a municipal water system brought virtually all users into a common supply.* Initially, the City used the Flint River for its water source. Irregular and relatively small flow throughout the year and other problems, suggested a more dependable source.

To provide a desirable minimum flow in the Flint River during the dry periods, the City of Flint in 1965 contracted with the City of Detroit to receive Lake Huron water. That permitted the City to stop using the Flint River as the source of municipal water supply. Reservoirs are still used to impound water for recreational use and to store water to flush river to meet environmental needs.

### C-2 Existing Conditions (revised)

The main 72-inch pipeline from the Detroit Plant at Port Huron has a rated capacity of 87 million gallons. Its high hourly rate of flow has remained under capacity except in 1971, and in 1976 was 72 million gallons. Its yearly daily rate has remained below 40 and was 38.9 million gallons in 1976. All flows peaked in 1971 and reached a minimum in 1975, but have since risen (see Illustration 1 for annual data). Pumpages within the City appear to have stabilized in general, but water sales to out-of-City users may be increasing. In 12 months 1975-76, the City provided 12,104,763.000 gallons of water to the system.

There is also an emergency intake at the Flint River which can, and has been used without any net impairment in water quality. The Flint River Purification Plant has been on a stand-by basis with only brief service since purchase of Detroit system water began December 17, 1967. That facility operated for 27 hours and processed 35.41 million gallons of water during a supply line break in February, 1974. By agreement with Detroit, the Flint Plant was also operated on a part-time basis in October, 1974. It processed 26 million gallons, which was blended with 112.8 million gallons from Detroit with no noticeable effect.

Water laboratory monitoring operates on a full-time basis, collecting samples, testing water and reporting the data. Effective June 24, all public and community water systems must be tested regularly for turbidity, bacteria and other contaminants, under the new National Interim Primary Drinking Water Regulations (which implement the Safe Drinking Water Act of 1974, PL 93-523).

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*Although there are a few wells in use in Flint, ground water was not assessed.

Regardless of quality, the Flint River's flow is inadequate as a City water source except as a supplementary or emergency supply. Its average discharge is 558 cfs, and has ranged from 9.0 cfs to 14,900 cfs.

There is no water shortage in Flint. However, because of rising costs it is desirable to conserve water. In 1974, the City paid to Detroit $2,565,788 for 1,589,935 million cubic feet or 11,892,721,280 gallons total. Detroit, April 1, 1976 raised water rates 39%, increasing local costs $1.2 million.

D-1 Projected Conditions

There do not appear to be any important problems with the City water supply. As noted, costs have risen, and consumption may be declining within the City. Water use by the County system is projected to grow so total pumpages will increase gradually. A current deficiency in the County system's capacity in supplying water to the western suburbs is expected to be corrected by construction of a new station drawing water from the east side of Flint. This may require City construction of two booster pumping stations within Flint. These are envisioned to be located at Mott Triangle (Kearsley and Longway), and in the area bounded by Norton, Wager, Industrial and Black Streets.

Municipal Liquid Waste

C-2 Existing Conditions

Liquid wastes represent an effluent commonly called "sewage" just as drain systems are known as sewers. These flows fall into two main categories: sanitary, from domestic drains; and storm, from drains that collect surface runoff from rain and snow. In earlier years, it was common to ignore storm drainage and not treat it. But environmental research shows that each recharge of storm drains and catch basins acts to flush out accumulated oils, bacteria and other undesirable materials that pollute surface waters such as the Flint River. Part of the City's drains system is separated, but part is combined, which adds to the load of the City wastewater treatment plant. During storm weather, runoff is quickly added to sanitary drainage in many areas and thus the system is overloaded. After a recent comprehensive study by Hubbel, Roth and Clark,* the consultants proposed a major drains improvement program which is now being carried to construction.

The City's first major treatment plant was completed in 1931. It was expanded in 1956 and again in 1964, and is currently being further expanded to properly service an area population of 444,000 persons. The plant offers both primary and secondary treatment of wastewaters. Incoming sewage is fed to comminuters and grit tanks,

*Facility Plan, 1976

The EPA also has approved the facilities plan as meeting the requirements of the Federal Water Pollution Control Act (PL 92-500). The State Department of Natural Resources is contributing 5% of the construction costs. The City share is provided for by accumulated water-sewer funds and bonds to be repaid by sewer charges. Sewer charges for the average Flint family have been increased from $4.56 to $15.51 for three months of service.

The new state-of-the-art plant will have a nominal capacity of 50 million gallons per day, with a peak capacity of 107 MGD for short periods of time. Plant construction is expected to be complete in fall, 1977 with wastewater collection system completion estimated at 1980. The latter project is expected to resolve the current Citywide problem of overloaded system drains.

## Surface Waters

### C-3 Existing Conditions

Comprehensive testing of surface waters in and around Flint over the years has shown a mixed situation. Water quality has ranged from good to poor, with numerous reports of point source pollution as well as non-point source contamination of waters. A major State DNR study in 1970 cited virtually every form of water pollution in Flint-area waters, both industrial wastes and residential contaminations. Subsequent data, including that developed by the City DPW Water Division, and a comprehensive surface water sampling program conducted by the Genesee County Health Department's Division of Environmental Health, indicated some improvement. The latter study concluded, in 1975;

> "The data contained in this report clearly reveals dramatic improvement in the water quality of lakes in Genesee County. While many point sources of pollutants have been eliminated over the past several years, water quality of surface waters such as streams, tributaries and creeks, however, has remained constant and substantially unimproved. This is primarily due to the quantity of pollutions having impact...."

Tributary sampling revealed that, "Only a few tributaries remained relatively uncontaminated...the Flint River has generally remained constant or has shown slight improvement." In contrast, local lakes and public bathing areas either remained good or showed significant improvement, the latter being true for C.S. Mott Lake and Bluebell Beach. This compared survey data from 1968 to 1975.

Within the City surface water quality has shown improvement in recent years, primarily because of vigorous monitoring of water and subsequent problem abatement by State DNR and local Health Department Personnel. Public bathing areas have been continually monitored by the Health Department and are in generally satisfactory

condition. The City has also added limited monitoring of Flint River water beyond that required at treatment facilities.

Flint River quality has remained generally unsatisfactory over the years, with the exception of some recent improvement. In 1969 various sources caused poor water quality, including three Flint-area wastewater treatment plants discharging into the river. The MDNR 1974 study showed that while upstream river quality had improved, downstream water quality was worse than in 1969 largely because of Flint treatment plant and industrial discharges. The 1977 MDNR data showed that in 1976 the difference in the Water Quality Index (WQI) between upstream and downstream data stations was an average of 20 points with a maximum range of 38. This deficiency was mainly attributed to the Flint wastewater treatment plant and collection system. Data readings taken at the center City, often from the Saginaw Street bridge, would provide WQI values somewhere between this range. In August, 1974 upstream water had a WQI of 78 ("good"), downtown readings indicated about 62 ("medium"), but below the City wastewater treatment plant the WQI fell to 36 ("poor"); a range of 42 WQI points. Caution is necessary when considering WQI readings, especially if only one or a few are involved, since they fluctuate with time and also change according to where taken. Downtown or other center City readings partially reflect upstream water conditions but ignore the poorer quality found downstream.

D-3 Projected Conditions

In May, 1976 Chinook salmon were planted in the Flint River some five years ahead of the State DNR's timetable, with additional stocking schedule to take place in 1977. This suggests new optimism after a long period of relatively stable poor surface water quality. The improved City wastewater treatment plant is only one factor in this water quality upgrading.

Future conditions for the City remain uncertain. The GLS Region V PDC has not yet released its 208 water management plan, so its impact must be unknown. Independently, the City has pursued a program of upgrading water quality, focusing on improvement of the municipal wastewater treatment plant, while addressing other sources of pollution. Treated effluents from the plant are improving in quality, which has resulted in better water quality in the receiving body, the Flint River. Study over the next year should show substantial improvement.

The principal remaining deficiency is the City's sewer system, especially combined (sanitary and storm) drain systems which tend to overload the treatment plant and discharge directly into the Flint River. The City of Flint recently received Environmental Protection Agency approval of a facilities plan to improve its entire sewer system. This plan satisfies the requirements of the Federal Water Pollution Control Act 92-500 and provides a

# IV. AIR QUALITY

## A. Introduction

Since air is constantly around us, its quality is of vital importance. Any obvious deficiencies become an immediate concern, as when air is polluted with dust, odors or other undesirable components. Our atmosphere has been burdened with an ever greater load of pollutants over the last century and more, the rate of which may be increasing. This is caused by rising human population and energy (fossil fuel) use, which may lead to climate modification. While such macroscopic issues are beyond this discussion, it is important to realize that this City's atmosphere is part of a highly developed industrial region. The precise implications of this are unclear, but some portion of Flint's air pollution is generated elsewhere (Genesee County, Saginaw and Bay City, Detroit area, the southern Michigan industrial belt and the Gary-Chicago megalopolis). Flint's problem is both local and a part of a regional problem. For although Michigan does not have true "smog" (the product of photochemical oxidants, characteristic of Los Angeles, California), most of this state's cities generate the same basic ingredients, largely from automotive use, and these chemicals combine to form a pollution product similar to smog.

Until relatively recently it was assumed that Michigan had no smog problem and only local air pollution deficiencies. However, in July, 1975 when oxidant levels (measured by ozone) exceeded Federal "primary" standards, an air pollution emergency was declared. This caused by an unusual period of stagnant air, which may take place during summer months, even though the Great Lakes encourage meterological effects that regularly move through air from west to east. This stagnation and emergency period only lasted five days, but it can be repeated. Any such repetition will be aggravated by the quality of existing air.

## B. Existing Conditions

Flint's air quality has improved greatly in recent years. This is clear from monitoring local air from 1969-70 to 1975 and more recently. In 1975 particulate concentrations (a form of dust) rose somewhat, probably because of an economic upturn, although the primary air standard was not exceeded. Much of the improvement occurred due to upgraded equipment at major industrial facilities in the Flint area. Concerted enforcement of air quality standards by the City reached a peak in 1974, which apparently addressed the principal offenders. Complaints and violations declined in 1975. Because of budget constraints, local enforcement largely disappeared by 1976, leaving only fragmented control of spot violations with the State DNR to monitor major point sources and overall atmospherics. (See Appendix G) There are continuing violations of incineration controls, but illegal burning is rigorously pursued by the Health Department and City Fire Marshal, even though staff is inadequate.

Most recent data (1976), while generally satisfactory, has some areas of concern. Air quality may have reached a plateau, hovering just below primary and secondary standards in parts of the City. Suspended particulates (dirt or dust, our most troublesome form of air pollution) were relatively high -- the secondary 24-hour standard was exceeded 38 times during 1976, with 12 such incidents recorded at the St. John site. Data from this site indicated that the more critical primary standard for 24 hours was exceeded twice, with the annual primary standard exceeded once (the most serious violation in the City). In addition to this one incident, the 24-hour primary standard was exceeded twice. The State DNR attributes these excursions at St. John to construction activities in the area whereby large amounts of dust was generated. This suggests that contractors active in the area were deficient in proper dust abatement practices, a violation of local permit requirements. Since the Buick facility appears to be in compliance with standards, were it not for construction dust air conditions in the St. John area, standards probably would have been met. The DNR Ozone Summary revealed that primary and secondary standards were exceeded at the City Air Pollution Control Office site, 420 E. Boulevard Drive. High ozone would aggravate the hazard of smog if an air stagnation also developed. Sulphur dioxide and nitrogen dioxide were comfortably below standards.

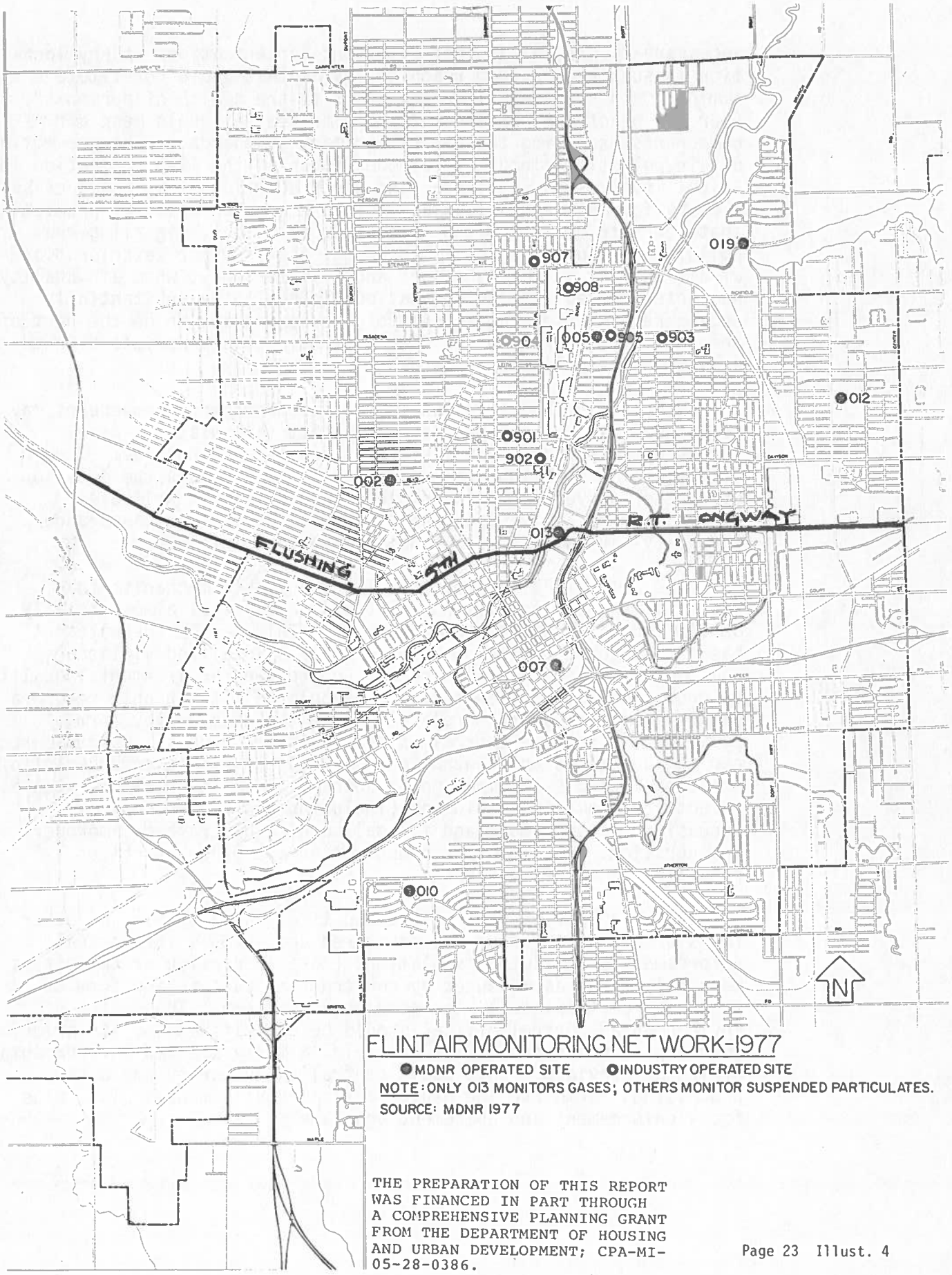
When 1977 data is available, which may show some improvement over 1976, it would be wise to study air pollution within this period of high economic activity. In 1974 it was estimated that the City would be in compliance with both primary and secondary standards in 1975. Yet, it would seem that in spite of fluctuations, air quality, especially as measured by suspended particulates, may not have improved consistently, and may have stabilized at a marginal level or worsened. The State DNR provides "hot-line" response to industrial violations reported by phone.* The County Health Department and City Fire Marshal respond to complaints as to residential sources (illegal back-yard trash burning, and so on). Since illegal incineration and other scattered local smoke sources can contribute 10-15% to overall air pollution, attacking such sources and improperly operated construction activities could result in significant improvements to air quality. This is important when air pollution exceeds standards, as it does today in some City areas.

Comparative data over several years shows that air pollution has varied considerably throughout the City, suspended particulates being generally highest on the north and east sides.** Although the City generally meets air quality standards, certain northeast sites do not, which effectively perpetuates an old problem.

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* 517 373-7660 to report pollution emergencies.

**See Appendix H for annual data from St. John site.




FLINT AIR MONITORING NETWORK-1977

● MDNR OPERATED SITE ○ INDUSTRY OPERATED SITE

NOTE: ONLY 013 MONITORS GASES; OTHERS MONITOR SUSPENDED PARTICULATES.

SOURCE: MDNR 1977

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D. Recommendations

1. The City should formulate a comprehensive contingency plan in conformance with the State DNR Implementation Plan as submitted to the Federal EPA January 30, 1972, in cooperation with the MDNR.

2. The City should reactivate its local pollution control program to identify and control effluents at two levels: (1) Large identified sources, mainly local manufacturers, which are monitored by the State DNR, to assure compliance; (2) Small, numerous and unidentified sources which in aggregate contribute to the local problem. Adequate City ordinances now exist, but budget and staff are not adequate. A strong program should be developed that features immediate response to minor as well as major spot problems.

3. The City is in need of an Environmental Control Officer at very least, and a fully staffed Environmental Office, ideally. Such a function would be responsible for identification of all applicable laws and guidelines, the formulation of any local controls more restrictive than state and federal, management of an environmental plan, plus enforcement and abatement; also, regular publication of local conditions in such form as is necessary to process environmental documentation by other departments, agencies and offices.

# V. SOIL AND WATERCOURSE MANAGEMENT

## A. Introduction

Flooding has been a historic problem to man since most human settlements were located near rivers and streams. After a century of development on the Flint River, City flooding was found to be a serious problem in 1943, 1947, 1948 and other years. The spring of 1947 flood swamped 400 homes requiring the relocation of 150 families, and the closing of Chevrolet plant which idled 14,000 workers. Damage estimates ran to $10 million.

Although local requests for flood relief assistance began in the 1930s, it was not until 1950s that federal help was possible. The Army Corp of Engineers reported the project favorably for action by Congress under the Flood Control Act of 1958. Planning funds were released in 1960 and construction began in 1964. In 1968 the City requested that the downtown sector work be delayed because of citizens' requests to develop the riverfront. In 1973 the Mayor's Advisory Committee was established. Prior beautification plans were considered and in 1974 further studies were conducted. Meanwhile, basic hydraulic features were being constructed and are now largely complete. Periods of high rainfall have apparently demonstrated that project design is sound. On April 15, 1975, when the Flint River reached 14.92 feet or the second highest level since City records have been kept, no major flooding was apparent. However, the flood control project is primarily designed to protect the center city and will not prevent some flooding at its periphery.

Incidental to flood control, riverfront beautification is currently a primary concern of citizen groups. Since basic project funding allowed for very limited beautification, citizens have been raising incremental funds including local foundation grants. The City has also constructed a bikeway along the riverfront. Beautification, including landscaping by the University of Michigan-Flint at their new riverfront campus, will be finished by the time basic flood control features are completed (now estimated to be spring, 1979). Projected conditions suggest a greatly enhanced environment along the Flint River. There remain some unresolved issues as to property ownership, maintenance and operation (including security and convenience facilities). But since the City has maintained active support of the project, no recommendations seem to be needed.

Floodplains are considered here for different reasons. A floodplain is a level area that is periodically covered by surface water. Man has historically built homes and other structures on floodplains, only to find them damaged or destroyed during periods of high waters. Such land areas are often characterized by hydraulic or otherwise unstable soils that are generally unsuitable for construction, quite apart from flood hazards. As local data suggests, such soils can be found in many Flint areas, along or near

3. To identify local needs as to flood plain management designed to protect housing and other development and to assure continued participation in flood insurance.

4. To examine the need for more data on topsoils and subsoils in the City, especially to identify those areas where soil conditions may limit development and construction.

Although the above considerations represent general constraints on land use, they have specific implications. The Environmental Review and Assessment System (ERAS) proposed in this element specifies that site soil conditions of any development be considered, which requires the formulation of appropriate controls which in turn requires data. The above also have some relationship to other environmental management programs such as 208 water quality, and air quality. Objective 3 specifically relates to implementing federal requirements.*

## C. Existing Conditions

### 1. Soil Erosion and Sedimentation

The erosion or loss of topsoil takes place whenever its natural protective cover of vegetation is damaged or removed, or major forces such as floods act upon the surface and wash away soil. Sedimentation occurs when such eroded soils are deposited into watercourses such as rivers, streams and lakes. Sedimentation is a normal and natural process, but it can be greatly accelerated by development and incidental construction practices. The most critical stage of sedimentation takes place during the early construction phases when topsoil is stripped and becomes subject to erosion from running water and air. While the loss of topsoil is a historic problem, it has become acute only in comparatively recent decades, mainly because of the development and use of land.

Soil's movement except when carried by the wind, is slow. Topsoil removed from the City comes to rest in ditches, creeks, the Flint River moving to Saginaw Bay and Lake Huron.* Meanwhile, in its movement soil tends to foul our surface waters. It chokes our streams, ponds, ditches, culverts, and storm drains with mud and silt known as sedimentation. When first falling on surface water it mixes and forms an unstable suspension known as "suspended solids" which is eventually deposited as sediments.

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+24 CFR Part 1910

*Hydrographic data studied for the flood control project revealed water runoff of 35% to 75% within the City.

The Pollution Control section, City Department of Public Works, is responsible for inspection and enforcement of Flint's soil erosion and sedmimentation control ordinance. Their staff is not adequate for monitoring and enforcement. Recent air quality data from the State suggests excessive dust from construction, which may mean non-compliance to the ordinance. This is especially important with new construction now starting. Soil erosion has undermined both air and water quality in Flint. The City should reassess its adequacy of enforcement of the Soil Erosion and Sedimentation Control Ordinance of 1975. Additional budget for staff is needed.

2. Sensitive Areas and Watercourses

Streams, creeks and lakes may be defined as "sensitive areas." This is because developmental activity within and adjacent to watercourses has profound effects on stream hydrology, channel and basin geometry and water quality. Desirable local regulation is either site-specific or nonsite-specific. The latter is represented by the City's Soil Erosion and Sedimentation Control Ordinance which regulates certain construction activities near watercourses. In itself, such control may not be adequate to maintain environmental standards, even when properly enforced. But in conjunction with watercourse zonal regulation, such control may be able to retain the area in a near-natural condition and buffer the adverse effects of development. Regulation may be broadened to assure flood plain, floodway, watercourse and wetland protection by ordinance (as was done by the West Bloomfield Township, Oakland County, Michigan).

If we assume that streams and possibly lakes are sensitive areas, site-specific regulation is necessary. This requires the designation of appropriate buffer zones or areas along such waterways that require special consideration. Definition of buffer zones may be difficult because a hard or fixed stream buffer is generally not ideal, while a "floating" zone (one that calls for a specific determineation of boundaries) will only be valid under a particular set of conditions at a specific time. This quandary is explored in Thurow, Toner and Erley (1975), which ASPO study is recommended for further reading.* Of the several existing appraoches to legislative control, the model Water course and Wetlands Protection ordinance of West Bloomfield, Oakland County bears special attention. This buffer zone is set at 25 feet but buffer zones have ranged to 300 feet elsewhere. When buffer zones are set given a choice between fixed-point boundaries and a floating

*Thurow, Charles, William Toner and Duncan Erley, Performance Control for Sensitive Lands (Chicago, Illinois: American Society of Planning Officials and U.S. Environmental Protection Agency, 1975) especially Chapter 3.

buffer zone--some trade-offs are necessary, as Thurow points out. Since the City of Flint is moving to the establishment of a defined flood plain (actually several, at various elevations), it may be best to delineate such a buffer zone broadly, for example, to utilize the 100-year or 500-year flood plain boundaries. This allows flexibility.

This discussion focuses on the physical dimension of flood plains, or land use. However, since if for no other reason than their relationship to air and water quality, including possible 208 water management restrictions, other considerations may be applicable including planning to protect the living systems whose habitat is involved. Biological evaluation is advisable. The principal handicap in addressing these sensitive areas, is the current lack of an appropriate management agency in the City, which deficiency might change were a local environmental control office instituted.

3. Flood Plain Management and Insurance

One of the less well known activities of HUD is their operation of the National Flood Insurance Program. The program was established by Congress in the National Flood Insurance Act of 1968 and expanded in the Flood Disaster Protection Act of 1973, to provide flood insurance at rates made affordable through a federal subsidy. In return, communities must adopt and administer local measures that protect lives and new construction from future flooding. The City of Flint established its eligibility for the "emergency" program August 20, 1973. However, since then few persons have taken advantage of the program in spite of the well-known risk of flood damage.

The range of losses covered by the program includes direct flood and flood-related losses such as mudflow and erosion. Sewer back-ups are also covered provided that a general condition of flooding exists and the sewer back-up is clearly a result of that condition. Any property owner whose building is located in the City may purchase a flood insurance policy. The owners or tenants of structures may also purchase contents coverage. Purchase is required where federal or federally-related financial assistance is involved.

In order to take advantage of the program, the City must commit itself to flood plain management. This means the operation of an overall program of corrective and preventive measures for reducing flood damage including, but not limited to, emergency preparedness plans, and any regulations aimed at the future use of the flood plain. Such regulations refer to specific local codes and ordinances which provide standards for the location and design of new development within flood-prone areas. These regulations may be adopted in any manner that is legally enforceable by the City, typically in the form

be July, 1979 if all steps are met. Map development is coordinated by the HUD-FIA agency, work being done by the U.S. Department of Interior's Geological Survey with local assistance by the City DPW. Program development is managed by the City DCD which acts as local coordinator for the flood insurance program. The City's Citizens' Action Center has generated publicity for the insurance program and currently handles public information and inquiry requirements.

Flood insurance may need stronger promotion. Reminders could be imprinted onto City tax bills. The owners of many properties located within a flood hazard area are not required to purchase insurance.

4. Soil Data Study

The City of Flint has a history of problems of deficiencies related to, or caused by, its soil systems; typically, conditions limiting construction, development or land use. Only general information is presently published on local soils, site-specific detail must be obtained by engineering studies conducted by testing engineers. A soil survey program that would identify, classify and publish data on topsoils and subsoils City-wide would be most useful for engineers, and contractors. Such a survey would not provide microscopic detail, or replace professional testing of sites, but would afford an invaluable planning tool for a wide range of potential users. Survey results would provide a product including a soil map of the City giving both a comprehensive map and a soil profile.

The Flint area is characterized by glacial soils which are unevenly distributed throughout the City, but which tend to be heavy in clay composition. Many of the soils most difficult to build upon occur in or adjacent to waterways or watercourses such as our river, creeks and lakes, and thus, approximate flood plains (which is why this subject is presented in this section of the Environment element). Because of the interactive effects that such soils have on water, the incidence of these soils are important to land use planners, builders, and developers of all kinds. Soils create problems in planning parks, recreation and other facilities and capital improvements. Lands that appear to be otherwise suitable for development often prove to be infeasible because of the hydraulic characteristics of their soils (apparent at several City lakes). Finally, such a inventory of local soils is necessary for a comprehensive review of development proposals (as is proposed in the Environmental Review and Assessment System detailed eslewhere).

Some data exists within the County Soil Survey, as published by the USDA Soil Conservation District, but this only

covers a small fraction of the City's area. Little study was conducted within the City since development creates "made" soils or mixture of imported black soil and fill. District studies are also superficial, seldom boring below the topmost layers and not reaching deep enough to provide useful data for builders of structures. Survey data is also generalized and too coarse to provide the site-specific data planners often require. However, the City DPW, and some other sources, have available data on subsoil conditions, generated incidental to engineering feasibility studies. These two data bases could be consolidated, along with additional field studies, to provide a comprehensive picture of local soils. Field sampling methodology should give priority to flood plains since these areas are most crticial relative to meeting current data needs.

E. Recommendations

1. Given apparent inadequate enforcement of the City's Soil Erosion and Sedimentation Ordinance, additional budget and staff should be provided the City DPW for enforcement.

2. Study should be given the need for watercourse regulation, and an ordinance be formulated and adopted by the City to tighten control of these sensitive areas.

3. The City DCD must formulate a flood plain management program, also an appropriate ordinance, addressing flood hazard and insurance, meeting state and federal standards.

4. The City DCD and DPW should encourage the development of a City-wide soils map.

# VI. SPECIAL ENVIRONMENTS - NOISE

## A. Introduction

Noise is defined as any undesirable, disturbing or injurious sound. The importance of noise control in industry, construction and other fields where high noise levels are commonly found is well established. This detailed by the standards issued by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA). There is some controversy as to acceptable limits, however, it is well accepted that levels above 90 dBA (dB or decibels are a measure of sound level) are dangerous and result in hearing loss. Community standards, particularly for residential areas, are of a more complex nature.

### Federal Regulation

Federal standards for noise control and abatement are relatively complicated, and primarily address new construction sites. (It is assumed that attempting to apply them to existing housing would raise many problems, since any land use data will indicate homes built overly close to high noise areas such as major roads and railroads.) The Housing and Urban Development Act provides that HUD may make rules and regulations as needed to implement proper community development.* The National Environmental Policy Act of 1969 (PL91-190) is also applicable. It is HUD's general policy to foster the creation of controls and standards for community noise abatement and control by state and local government and to support these activities by minimum national standards by which to protect citizens against the encroachment of noise into their communities and places of residence. HUD requires that noise exposures and sources of noise be given adequate consideration as an integral part of urban environments in connection with all HUD programs assisting planning. This consideration shall be of a form that provides assurances that new housing and other noise sensitive accomodations will not be planned for areas whose current or projected noise exposure exceed the standards given.

For new construction, HUD discourages building dwelling units on sites which have or are projected to have, "unacceptable noise exposures" for HUD-assisted units. For existing construction, including rehabilitation, HUD "encourages" noise control with qualifications. Environmental statements, where required, must address noise exposures, existing and projected. State standards are similar to federal.

The analysis of noise involves two different but related kinds of noise standards and measurements: external and internal to the structure. Most data is collected for site analysis based on

*Noise Abatement and Control: Departmental Policy, Implementation Responsibilities, and Standards, HUD Circular 1390.2 (1971).

B. Existing Conditions

The City of Flint has no ordinance that directly addresses noise abatement. Various ordinances do so indirectly and incidentally. All noise assessments have been on a site-specific basis incidental to State and Federal projects. A new ordinance has been proposed.

The City picture on noise exposure is unknown. Very little data exists and only limited and spot measurements have been made. Most existing data was developed by State and Federal agencies, mainly in connection with planning construction of I-475 expressway (data generally found in the I-475 environmental statement). Other data has been estimated by inferential techniques. Since noise study has only recently been required, relatively little data has been collected. Also, City priorities have not been supportive of noise control programs in past years. Programs envisioned originally were not adequately developed. There is some inferential evidence suggesting that noise is excessive in some areas, arterial roadways such as Dort Highway and railways, but this has not been quantified. The proposed ordinance may be deficient in the respect of not addressing railway noise. Excessive noise from autos and trucks may be controlled to some extent by oblique enforcement, police writing violation notices for "illegal equipment" or loud mufflers (State law violations). Railway trains, not on public ways, are difficult to control.

The City DPW has some of the basic equipment required to make noise assessments (a sound meter). However, an enforcement program is lacking, for need of staff, which is ultimately a funding deficiency.

C. Projected Conditions

No meaningful projection is possible since noise control requires quantification, and this is largely based on measurement. It might be speculated that a reduced population will result in less noise. However, increased commercial and industrial activity (relative to 1974-75) would probably largely offset this. Transportation remains the largest noise source, especially heavy trucks and railway trains. Increased volume here would increase noise.

A proposed ordinance serves to control noise within the City, providing for enforcement, violation penalties and repeal of Ordinances. The proposed ordinance limits construction noise between 7 a.m. and 6 p.m. by specific equipment (75 or 80 dBA except pile drivers at 95 dBA); and motor vehicles on public right of way (up to 86 or 90 dBA depending on size and speed), providing for designation of a truck route map for the City to control truck noise. It does not address rail or aircraft noise, a possible deficiency.

## VII. SPECIAL ENVIRONMENTS - LEAD HAZARDS

### A. Introduction

"Plumbism" in U.S. kills one child every 36 hours while an estimated 6,000 suffer permanent brain damage. The poisoning is caused by the continued habitation of old housing by families. This is not an indictment of older homes but an acknowledgement of their having been decorated with paint having excessive lead content (over .06% by weight of its non-volatile content). Certain kinds of small children ingest or swallow tiny chips or flakes carrying lead-base paint, which in a very few months poisons them. Children aged one to six are most susceptable but over 50% of deaths occur in two-year-olds. Disproportionately many are minorities, in poor housing. Adults can be affected. Although the death rate is small in numbers, nonlethal incidence is of concern because it often results in neurological problems: cerebral palsy and mental retardation. While there are other lead sources, housing built before 1940 or 1950 is high risk since paints formulated up to that period often used lead.

### B. Goals and Objectives

The goal is to protect public health by eliminating plumbism as an environmental intoxication in City housing. The immediate need is for identification of the problem's scope, and establishing corrective, control and treatment methods -- both for housing unit and tenant.

Objectives are:

1. An assessment of the extent of environmental lead in housing.

2. Description of an appropriate program to deal with the problem.

### C. Existing Conditions

The exact incidence of environmental lead -- like the incidence of lead poisoning - is generally unknown. Currently there are 25 cases identified with the City. It's likely that there is a much larger number that remains unidentified, which in itself represents a serious problem. Indirect or inferential data based on the age of housing suggests that a very large number of housing units probably have a substantial amount of lead-base paint, nearly one-half the units in the City.

The 1970 Census estimated 29,288 units in structures built 1939 or earlier (based on a 20% sample). By Census Tracts, such old units vary from 1% to 92% of an area. The number of families with small children living in such units is unknown.

these unknown for lack of identification. This assumes no major change in these existing conditions: A low rate of demolition of old buildings, a very limited number of new housing starts, federal and state emphasis on preservation, and large numbers of low-income families with small children.

While no new authority is necessary to enforce lead paint control, it may be desirable to encourage the drafting of a state act modeled after Illinois State Act 78-560 (P.A. of 1973); and an ordinance similar to the City of Chicago Lead Paint Ordinance enacted February 24, 1972. A local ordinance would serve to identify the problem, define the parameters such as specific lead content, specify City policy and regularize enforcement.

Limited efforts of control and abatement of lead hazards have been attempted by the City's Department of Public Works Building and Safety Inspection Division, and the Environmental Health Division of the County Health Department. It is clear that, literally, only the surface has been scratched on this problem.

Recommendations

1. The City cooperating with other units and agencies, should immediately launch an education program to enhance public knowledge and awareness of the lead paint hazard. While area-wide, such promotion should focus on high risk areas within the City, their residents and property owners.

2. Starting with estimates of high risk (probably lead-base paint treated) structures, the City should develop address-specific data on the incidence of lead hazard.

3. The City should encourage and support Building and Safety Inspection activities seeking to identify and control the incidence of lead-painted interiors in family housing, in cooperation with the Health Department.

4. The City should encourage the expansion of lead intoxication screening, diagnosis and treatment facilities, with active consideration given to satellite neighborhood clinics close to high or known risk areas.

5. The City should draft and enact a lead paint control ordinance.

## VIII. ENVIRONMENTAL POLICY

The City of Flint presently lacks a formal policy covering the broad and at times vaguely defined scope of "environment." Such a policy is useful and perhaps necessary as the basis of further action - a goal. The purpose of such a declaration would be to establish the general priorities that underlie and precede specific actions, which would typically be based on more specific statements taking the form of "objectives," such as those offered further in this element. This deficiency is also notable in considering various environmental groups at play, and so it may be appropriate to involve such quasi-public organizations. A representative declaration of environmental policy is offered as the possible basis of a community formulation.

The Charter of the City of Flint, adopted by the people on November 5, 1974, in the Declaration of Rights specifies that:

> City officers shall pledge themselves to assure residents decent housing; job opportunities; clean air, clean waterways and a sanitary city; health care; convenient public transportation; recreational activities and facilities; and cultural enrichment.

### Recommendation

The City should formulate, review and support by Council Resolution, a statement of environmental policy as the basis for more specific actions. Such a statement may require the convocation of a citizens task force.

A broad declaration of environmental policy may be given as:

1. It is the continuing responsibility of the City of Flint and all agencies of the City to use all practicable means, consistent with other essential considerations of State and Federal policy, to improve and coordinate plans, functions, programs and resources to the end that the City and its citizens may:

   (a) Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;

   (b) Assure for all people of Flint, safe, healthful, productive, and aesthetically and culturally pleasing surroundings;

   (c) Attain the widest range of beneficial uses of the environment without degradation, risk to unintended consequences;

   (d) Preserve important historic, cultural, and natural aspects of our national heritage;

# IX. ENVIRONMENTAL REVIEW AND ASSESSMENT SYSTEM

## A. Introduction

The historic development of human settlements has been largely unplanned and uncontrolled. Urban development is a process of cooperative conflict whereby the most influential factors within any community obtain the most desirable locations by applying large resources, mainly economic. In Flint, as elsewhere, these were industrial factors: the lumbering industry, railroads, wagon and buggy manufacturers and finally, automotive plants. The city grew up around these prime industrial facilities. Originally, within the compact "walking city" residential land bays grew in close proximity to the industrial facilities. With the fusion of technology and energy resources, the size of the city greatly increased because of vastly better human mobility. This centrifugal outflow of population is characteristic of the American city of the last century and has held true for Flint.

With less population pressure and also less pressure from industrial and commercial land consumers, it has become easier to emphasize the quality of growth and existence rather than compromising for continued residential, industrial and commercial expansion. Together with increasing emphasis on environmental controls, primarily from the federal level, local governments are increasingly concerned with the quality of environment. Recent experience nationally with environmental controls has been mixed and somewhat disappointing, which explains why federal legislation has greatly expanded and grown increasingly severe within the last decade. The federal partnership with states and local units of government has not been entirely successful in improving the quality of environment. This requires a much more active local role.

Any discussion of the environment includes three sets of actors: the federal government, the state and local units. In the case of Michigan, an additional set has been introduced by state action, the regional agency. The resolution of environmental and many other issues will involve these several actors; their roles will vary depending on the particular issue at hand.

This element's discussion on development seeks to coordinate and regularize the presently inconsistent demands of local, state and federal agencies. What follows is, therefore, a first step as opposed to a final statement, and should be considered to be a local effort to establish a rational environmental analysis process model. This is the Environmental Review and Assessment System (ERAS). It is intended to serve as an outline, or a framework for future local activities.

by the rising number of restrictions and other qualifications being imposed upon them by the various units of government. Any review process that is fair, consistent and reasonable, would be therefore desirable. Since human decisions tend to be arbitrary, it would be desirable to review potential actions in some way that allows for quantification and consistent measurement.

A local review process should therefore be internally consistent and externally applicable. The former would require a rational and dependable system of review that calls for reasonably precise measurements that can be applied to an established scale of values. Such a value system should be quantified to the greatest extent possible to reduce any possibilities of arbitrary or capricious evaluation. This approach is already being tested in other communities. The external aspect seeks to create a process that relates well to state and particularly federal environmental review process.

Flint's history, like that of most other communities, has resulted in mixed land use development, because uniform, consistent and comprehensive controls were not applied over time. This is easily demonstrated by considering many parts of the city, or reviewing land-use maps that indicate actual uses on a parcel-by-parcel basis. The results have been an uneven, often unattractive living environment. Similarly, housing maintenance standards have not been uniformly applied, resulting in a deterioration of neighborhoods because, in part, of the multiplier effects initiated by a relatively few deficient structures, or uses that were detrimental to an area. This broad problem has been discussed in some detail, and current attempts to revitalize older areas simply hope to arrest and reverse declines that may have been averted by earlier action by the city. Any general strategy that seeks to improve the physical quality of the city must address both the existing physical environment, and new construction. Improving the existing condition must be addressed elsewhere; this section deals with the future condition.

Since any developer review procedure requiring additional data processing would appear to be more clumsy, time- and cost-consuming than a simple permit procedure, it would be necessary to streamline the system as much as possible. The ideal condition would allow a developer or builder to obtain a preliminary evaluation of proposed construction simply and quickly. A "one-stop" procedure may not be possible. But the more difficultly and delay required, the less likely new construction in the City becomes.

Larger and more complex developments will require environmental review and assessment procedures be involved. Under current conditions, this creates a problem since no environmental office (or officer) exists, with environmental issues being resolved by various City departments.

- o Noise-sensitive zones (as those created by transportation and railroads), flood plains, air and water quality-sensitive areas, soils unsuitable for construction, natural hazards areas, man-made hazards areas, nuisances, historic and archeological areas; these are seen as potentially prejudicial to review.

- o ERAS evaluation and review shall also consider location relative to: parks and playgrounds, open space, transportation (mass and personal), water supplies, sanitary drain systems, storm drain systems, and other utilities, public and private. Review should also consider other related factors not appropriate to graphic appraisal and display such as radio-TV reception, and site-specific amenities and features.

The ERAS process is described in two sets of materials:

Format 1, which is the application and base review document, and which details the various considerations or parameters to be reviewed; and Format 2, which is the graphic materials that indicate critical zones and areas, to show quickly where any particular site in the city is located relative to critical features. These can be expanded to suit various needs, and data can be applied to microscopic areas as needed. Criteria for establishing and defining such zones and areas shall be federal and state, or local, whichever is applicable. For maximum utility, federal environmental standards and review-assessment guidelines shall prevail where conflicts occur. (See Appendix A for environmental assessment criteria and matrix).

E. Recommendations

1. The City should review and where necessary, refine the Environmental Review and Assessment System, and adopt ERAS by appropriate resolution and ordinance, within the period of time designated for third year 701 activities. This will also require development of a suitable ranking system to apply to proposals.

2. If deemed appropriate, the City should operate the ERAS process, with administrative support embracing the Planning Bureau, Planning Commission and Housing and Inspection, for a trial period not to exceed one year; after which time any necessary revisions are to be incorporated into the final City Ordinance.

# X. SOLID WASTES

## A. Introduction

In a nation threatened to choke in its own garbage, the question of solid wastes has become a popular topic. Recent polls, however, do not give this a very high ranking as to critical needs, because we are more sensitive to the quality of air and water, our constant companions. A principal problem shown in the literature relates to the relative nearness of wastes, "out of sight, out of mind". For as long as the garbage is picked up weekly by Flint's Waste Collection Division, it is of no concern to us. Actually, the problem of solid wastes may be our most important difficulty today.

Trash represents both a resource and a disposition problem. As a resource, typical trash has energy value, about half that of a comparable weight of coal. It is also "low sulphur" and relatively non-pollutive when burned. However, such burning must be done under controlled conditions. The City of Flint, like most other areas, rigidly shut down incineration including the trash burning by residents, because of the air pollution being created. What is the appropriate solution?

Proper incineration requires proper equipment, which is expensive but even such moves are really wasteful because of the heat value being lost and also the loss of paper and other resources that can be recycled. The community has expressed a desire to participate in such recoveries, but the limited recycling activities have not been adequately supported. There is a revival of "recycling centers" in and around the City, but it will require a vastly greater effort to make this into a full-time activity.

Centralized systems have been considered by the city agencies for roughly a decade, along with other local units of government. The principal handicap, aside from several others, is the high cost of building a facility to process solid wastes. At a minimum, a processing plant would cost several hundred thousand dollars. A collateral energy plant would raise the cost into the millions. It has been generally assumed that funding such facilities would require outside assistance, probably federal. This has only become a real prospect within the last year, although the outlook is uncertain.

Analysis of the general problem of solid wastes disposition was well done both in the 1968 County study and the 1974 update. Both deserve review and reconsideration before further action is taken and both can provide valuable data relating to the experiences of local units of government, including the City of Flint. In particular, conclusions and recommendations should be restudied.

"In 1975 the City of Flint showed a decrease in solid waste collection. In 1974 the collection amounted to 69,594 tons compared to 63,893 in 1975. There are several reasons for this decrease... the population in Flint has also decreased, more people live in apartments and the Waste Collection Division does not service apartments."

This volume of wastes, based on an estimated population of 175,000 persons indicates 730 pounds per capita per year or about two pounds per day average. This per capita amount is below national and Michigan State averages, but only includes residential collections.

In 1976, residential collections dropped still further, to 61,422 tons. Assuming a population of 170,650* persons, the per capita residential output also dropped to 719 pounds or 1.97 pounds per day (this may not be significant - the collection data is precise but the population is estimated). However, clean-up bulk collections of 3,500 tons was increased by two special drives for City trash. The bottom line or acceptable total depends on what is acceptable as "solid wastes," since there are several categories collected by the city, including dead animals. Another important category, private collections from commercial, institutional and industrial sources, was not measured.

In recent years, routine collections have required that all garbage be placed at the street curb within approved plastic bags. This practice has become fairly common and was already well established in many cities when adopted by Flint by advice of consultants. While a great improvement over prior methods, this approach has both advantages and disadvantages. The main disadvantage is that such wastes are not dependably delivered to City trucks. (Rodent and fly infestation is risked by premature curbside placement.) For a variety of reasons, ranging from overfilling of the bag to attack by hungry dogs, bag contents are sometimes scattered. The exact incidence of this problem is unknown but it has been identified as a deficiency by citizens. Although City collection crews apparently attempt to pick up spillage and even unbagged refuse, their present incentive system tends to work against meticulous collection efforts. Also, during severe and snowy winters, curbside bags become very difficult to collect and even get lost in snow banks. They also become vulnerable to snow plow blades working close to curbs. Since collection is the largest expense in dealing with solid wastes ($18.07 per ton in 1974, versus $4.44 per ton landfill charge), further study may be desirable to ways of reducing collection costs and also reducing spillage of wastes. Totally private collection should be considered.

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* Source: ECHO

the public health and provide for planning and conducting refuse management systems; to license and regulate garbage and refuse disposal facilities and transporting units; to regulate collection centers; and to provide a penalty for violations of this act.

Act 89 of 1971 required a report including proposals to meet present and future refuse disposal needs through 1990 be submitted to the State by July 1, 1973. The solid waste management section of the State Department of Public Health was transferred to the Natural Resources Department and the deadline was extended one year. The local health department is still delegated responsibility for enforcement of Act 89.

Act 366, Public Acts of 1974, the "resource recovery act" promoted conservation and management of solid wastes, requiring both a state and local municipal management plan. It also established the Resource Recovery Commission and provided for financial and other assistance to localities. But collateral funding was not made available, so relatively little has been accomplished beyond state solid wastes planning. This act may be amended to resolve some deficiencies and follow the model of the related 1976 federal act. But given PL 94-580, which has been funded, there may be no incentive to also fund the Michigan State Act.

In 1972 the Solid Waste Disposal Study, Genesee County, Michigan, dated June, 1968, was submitted to the State Solid Waste Management Section as the planning document. This proved to be acceptable, provided there was some minor updating and a comprehensive survey made to analyze the condition of County landfill sites. The 1968 study was actually completely rewritten and was released in June, 1974, as Solid Waste Study, Genesee County, Michigan, the current official document.

This County Drain Commission Plan proposed that the County:

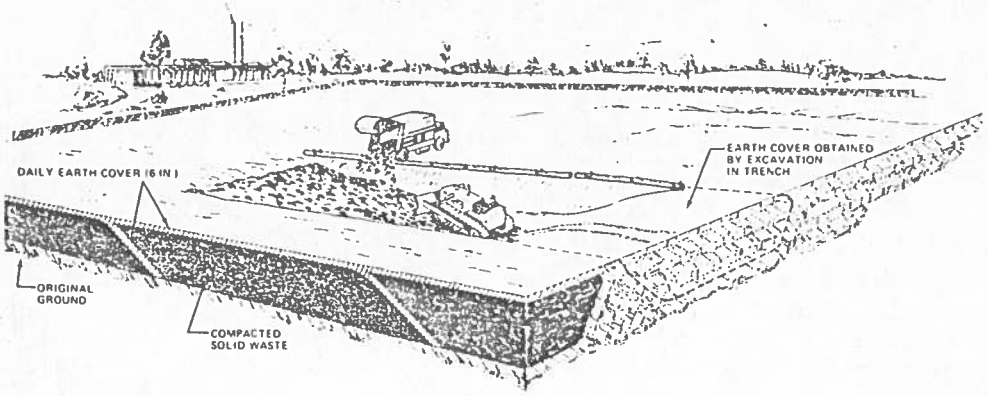
1. Implement a program to have one or two landfill sites secured and available for land disposal by July 1, 1976;

2. Establish a policy on recycling or reuse of materials salvaged from refuse;

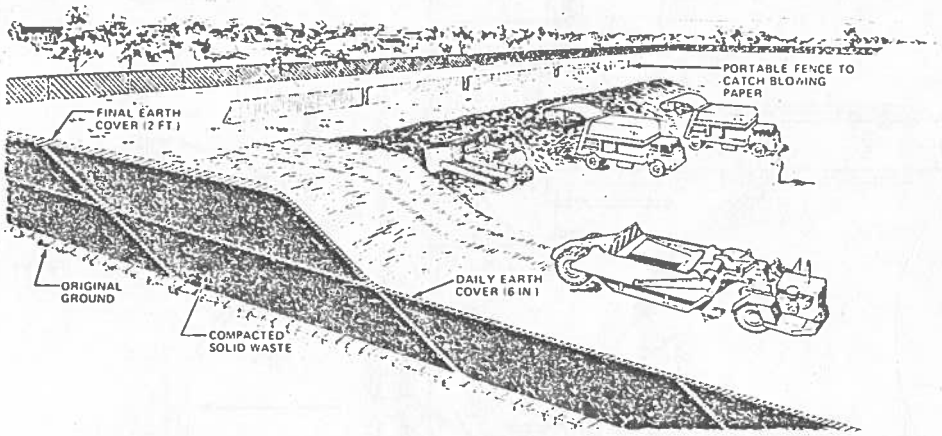
3. Cooperate with other counties that may desire to develop a jointly owned and operated waste disposal system.

These recommendations were not acted on, for a variety of reasons. The local situation now is that government wastes collection is totally dependent on private disposal, and no municipally owned landfill site or sites are available.

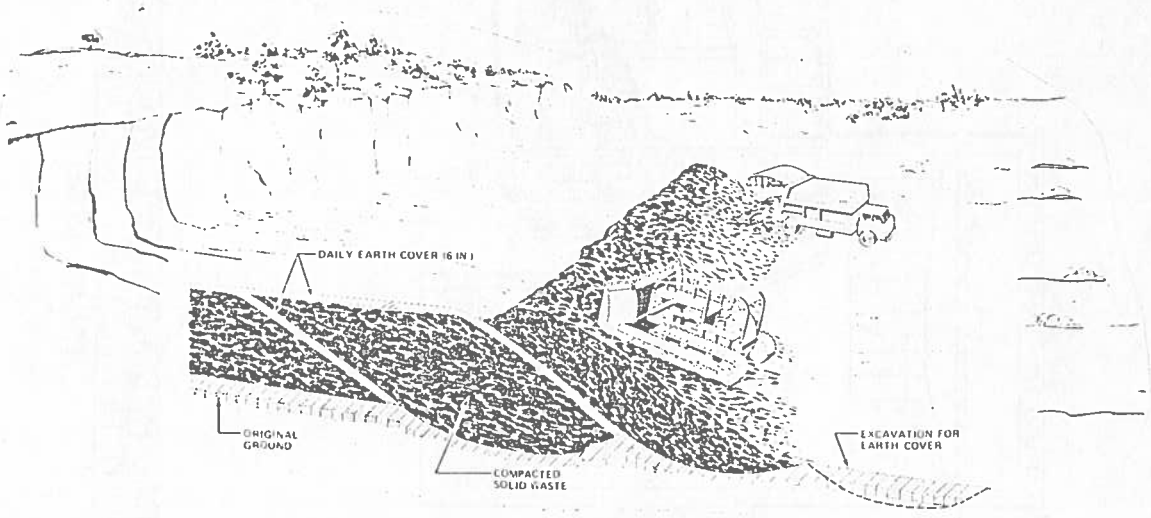
ILLUSTRATION 7




TRENCH METHOD. The waste collection truck deposits its load into the trench where the bulldozer spreads and compacts it. At the end of the day the dragline excavates soil from the future trench: this soil is used as the daily cover material. Trenches can also be excavated with a front-end loader, bulldozer, or scraper.



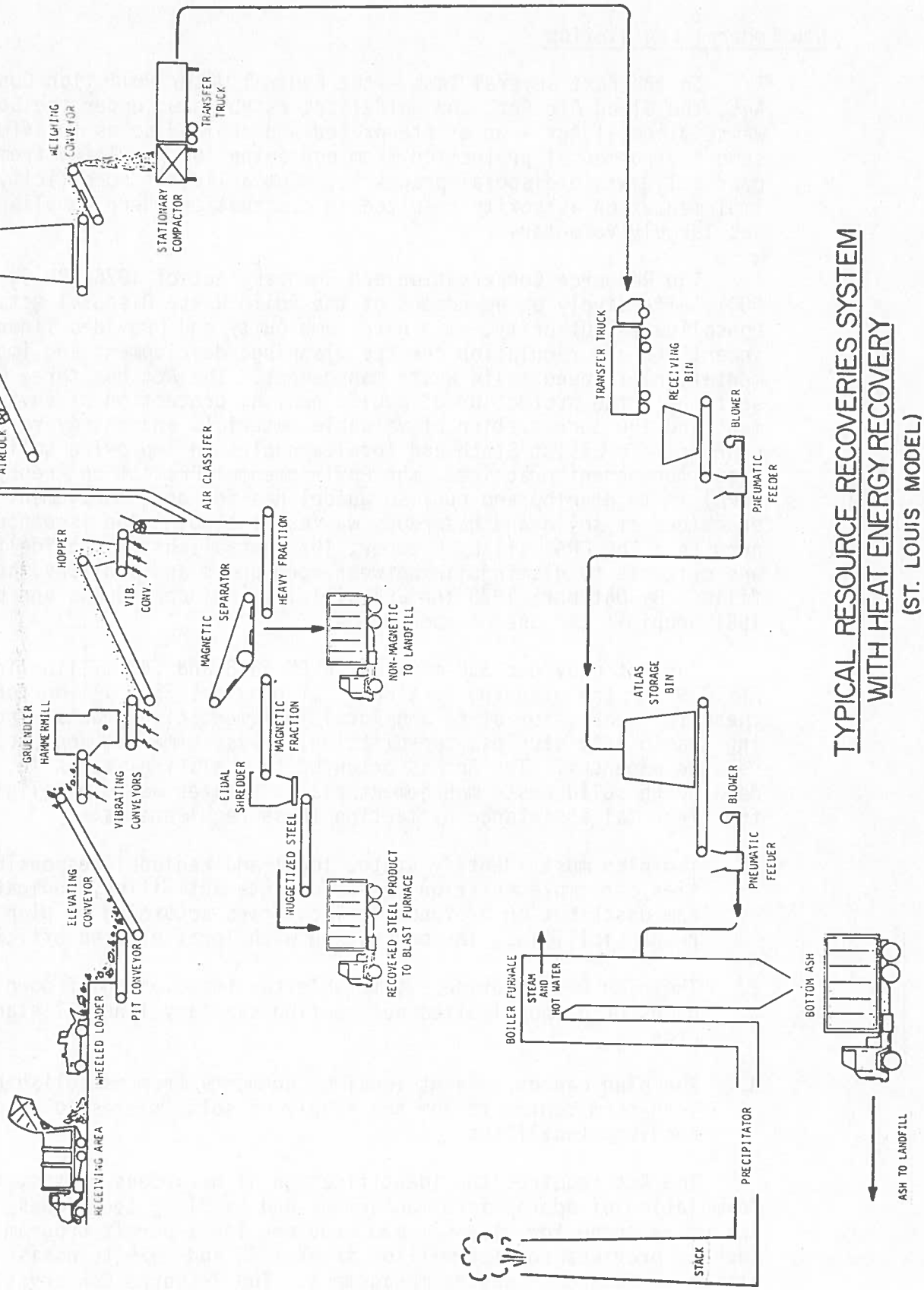

AREA METHOD. The bulldozer spreads and compacts solid wastes. The scraper (foreground) is used to haul the cover material at the end of the day's operations. Note the portable fence that catches any blowing debris. This is used with any landfill method.




RAMP VARIATION. Solid wastes are spread and compacted on a slope. The daily cell may be covered with earth scraped from the base of the ramp. This variation is used with either the area or trench method.

# SANITARY LANDFILL METHODS

**SOURCE:**
**Sanitary Landfill Facts, U.S. Dept. of Health, Education and Welfare, Bureau of Solid Waste Management – 1970 Publication SW-4ts.**




TYPICAL RESOURCE RECOVERIES SYSTEM
WITH HEAT ENERGY RECOVERY
(ST. LOUIS MODEL)

and Recovery Act, while providing seed money, does not authorize a high level of financial assistance, either loans or grants. There is emphasis on the use of other federal funds for resource management and a provision requiring federal agencies to purchase resource recoveries. The Act also emphasizes technical assistance, with the EPA cast in a principal role of data source. Resource Recovery Panels featuring expertise in financing, marketing, legal barriers and resource recoveries products have been established and will be available to visit local governments and provide technical assistance.

It is expected that the Michigan Department of Natural Resources will continue playing an important role but the critical function will be served by the local agency that is identified to act in the best interests of the City, County and possibly other counties. This may take the form of the present 208 water quality management planning agency, Region V PDC, since there is a functional similarity both in terms of regional needs and planning process. However, because of the predominantly agricultural-rural-non-industrial character of both Lapeer and Shiawassee counties, the designation of GLS Region V PDC as the key agency may not be appropriate. An alternative alignment of areas and counties, based on a similarity of problems, may be superior.

D. Projected Conditions

The City of Flint, both Department of Public Works (DPW) and Department of Community Development (DCD) have been studying various approaches to solid wastes and resource recoveries in a concerted manner since about 1975. A variety of proposals have been generated, some of which are mentioned in this document. While the scope and central thrust of the two involved Departments are similar, there have been differences of emphasis and other detail. This loose partnership is expected to continue for the time being.

The County (GCMPC) has placed significantly greater emphasis on solid waste and energy management studies over at least the last year, having designated two planners as responsible for these important and related areas of activity. Region V PDC agency has not announced any special allocation of resources. The County Drain Commission continues to play a role in formulation of policy and planning proposals. At this writing, all interested parties are seeking to learn exactly how legislation and funding will be applied locally. A critical issue will be where the prime responsibility for solid waste planning will be placed. The 1976 federal Act requires that the Governor in consultation with local elected officials identify regions within each state to do solid waste planning. This is not unlike the 208 Water Pollution Planning Program, and allows local elected officials to decide which agency should prepare the solid waste plan; failing in this the Governor will make the decision.

# XI. ENVIRONMENT AND ENERGY

## A. Introduction

The so-called "energy crisis" of the early 1970s had a profound effect on the City of Flint--as a transportation-based economy, it was sharply hit. City revenues fell, along with employment, and the population. The issue of energy is still very much with us, and it is important to note that the availability and cost of energy resources are not improving. As the supplies continue to tighten, prices will continue to rise. It has been proposed that the City in some manner enter into the energy business, possibly by the generation of energy from solid wastes suitably processed, and possibly by new ventures into solar energy collection. Both, however, require large development capital. Planning, including power plant site study, should begin immediately.

The energy equation has two parts: increasing the supply, the availability and consistency of energy; and energy conservation. The City has a variety of options to exercise relative to adding to the local supply of energy, as various proposals have detailed. Conservation is also necessary, as was pointed out by the McAllister master plan update of 1973. Up to now, relatively little has been done in either category.

## B. Goals and Objectives

The goal is to determine whether energy needs are and will be met, how they might be met and what alternatives are available.

The objectives are:

1. To provide an assessment of current and future (projected) energy supplies as available from public utilities.

2. To study and indicate which alternative energy sources are available and to identify the most attractive sources.

3. To consider the prospects for energy conservation and what standards might be applied locally to conserve energy.

## C. Existing Conditions

Energy needs and availability represent a critical issue to this and any other city. Practically the entire city is totally dependent on one public utility and a small number of fuel contractors (mainly providing fuel oil). After the first pinch of the "energy crisis", many homes bought space heaters and fireplaces designed to operate on wood. Even if there was sufficient supplies of suitable fuels available at reasonable prices, it is doubtful that more than a fraction of Flint households would find such prime heat sources adequate in lieu of regular furnace heating provided by oil or gas. In addition to sharply rising energy costs, there

Current city proposals covering the utilization of municipal solid wastes as an energy source must also be considered. As these proposals suggest, a substantial amount of the City's energy needs could be met by resource recoveries. Even if system design is oriented to maximum recoveries of heat energy (whatever its final form), solid wastes cannot serve as the total fuel and must be supplemented with conventional fuels such as coal. This raises the question of how far the City should go into the "energy business" it being entirely feasible to develop a major municipal power plant, given funding. Such a municipal source could effectively remove many of the constraints local businessmen are now subjected to, by assuring a continuing supply of energy. Further, a Total Energy System, one that recovers and uses most of the energy that ordinary systems or power plants now discard as waste heat, could provide useful heat to serve the community.

Conservation remains a highly attractive way of addressing the energy problem, and is almost universally accepted today, however, the city is limited as to what it can do to conserve energy, and has already adopted an energy policy. The technology of conservation is fairly well known and established. This is reflected in the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. proposal, "Energy Conservation in New Building Design". ASHRAE Standard 90-75 is being adopted by the State of Michigan as part of their State Energy Conservation Plan. This Standard, in some form, should be adopted by the city by ordinance. It may be to the city's advantage to adopt a code, such as the BOCA Energy Code (which is based on ASHRAE 90-75) rather than a Standard as part of the Building Code. None of this, however, addresses the problem of existing structures including older homes that were constructed in an earlier time when energy costs were a small part of total housing costs. Older homes, particularly those occupied by persons of limited income, will continue to be a problem. Several local organizations have taken steps to introduce conservation measures. The Genesee County Community Action Agency "Energy Program" has provided training, technical and other assistance to residents but local conservation measures are very small relative to the need. This suggests a need for more active promotion of conservation.

## D. Projected Conditions

Relative to meeting energy needs, utilities have hesitated making projections and understandably so. It is known that supplies of fossil fuels are declining while demand is increasing, which requires higher prices. It is assumed that our supply of natural gas will decline more quickly than oil, while both will largely disappear as mass energy sources possibly by the next century. This suggests that Flint will have to begin shifting to some sort of coal-fueled energy system in future decades. Solar energy will probably become important concurrently, and begin to provide a large amount of residential heating needs in time. However, solar

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## FORMAT 1 - TYPICAL ASSESSMENT CRITERIA

A. (1) APPLICANT:

(2) CHIEF EXECUTIVE OFFICER:

(3) ARCHITECT, ENGINEER OR LANDSCAPE ARCHITECT:

B. PROJECT DATA:

(1) Proposed Development Name
(2) Location and principal streets abutting
(3) Development summary (uses)
(4) Legal description (attachment)
(5) Owner's name and address
(6) Designer-Engineer-Surveyor
(7) Size (Sq. Ft.-Acres) and plat (attachment)
(8) Present uses and condition and use changes
(9) Existing easements including utilities
(10) Abutting or contained waterways
(11) Adjacent uses including plats
(12) Owner(s) of record and deed restrictions
(13) Project funding (specify any government funds)
(14) Site plan (attachment)
(15) Time phasing of major steps
(16) Are there any other or further construction stages planned on or adjacent to this site (outline, giving time phasing)
(17) What alternative sites are available

C. EXISTING ENVIRONMENTAL CONDITIONS AND TRENDS:

D. RELEVANT A-95 AND OTHER INTERGOVERNMENT OR OTHER AGENCY REVIEWS:

F. SITE-STRUCTURE-DESIGN SUITABILITY: PHYSICAL FACTORS. (Matters Affecting the Project) The project has been examined with reference to the effect on the project of each of the factors indicated below, with the following results:

| FACTOR: | RATING | SOURCE/ DOCUMENTATION |
|---|---|---|
| (1) Slope Stability | | |
| (2) Foundation Conditions | | |
| (3) Terrain | | |
| (4) Soil Permeability | | |
| (5) Ground Water | | |
| (6) Natural Hazards | | |
| (7) Man-Made Hazards | | |
| (8) Nuisances | | |
| (9) Compatability in use and scale with environment | | |
| (10) Neighborhood Character | | |
| (11) Sunfall or solar energy deliveries to on-site collectors* | | |
| (12) Optimization of design for natural ventilation, sun shading, other energy considerations* | | |

*Energy conservation and solar utilization are suggested for inclusion here even though not traditionally considered.

H. IMPACTS ON SURROUNDING ENVIRONMENT: PHYSICAL FACTORS. (Matters Affected by the Project. The project has been examined with respect to each of the factors listed below, with reference to whether or not the project will have any effect on the surrounding environment, with the following results:

| FACTOR | RATING | SOURCE/ DOCUMENTATION |
|---|---|---|
| (1) Impact on unique geological features or resources | | |
| (2) Impact on rock and soil stability | | |
| (3) Impact on soil erodability | | |
| (4) Impact on ground water (level, flow, quality) | | |
| (5) Impact on open streams and lakes | | |
| (6) Impact on plant and animal life, mature trees | | |
| (7) Impact on energy resources* | | |
| (8) Impact on aesthetics and urban design | | |
| (9) Impact on adjacent solar energy collections (solar shading)** | | |

* Energy conservation practices, including conformance to standards, existing and programmed; also energy collection if applicable.

**Suggested for inclusion.

J. IMPACTS ON SURROUNDING ENVIRONMENTAL: SPECIAL FACTORS: (Matters Affected by the Project) The project has been examined with respect to each of the special factors listed below, with reference to the effect of the project on such special factors, with the following results:

| FACTOR: | AFFECTED BY PROJECT YES* | NO | NOT APPLICABLE |
|---|---|---|---|
| (1) (a) Historic Properties | | | |
| (b) Archeological properties | | | |

Carry out and document procedures

* Document this conclusion

| FACTOR: | RATING | SOURCE/ DOCUMENTATION |
|---|---|---|
| (2) Individuals and Families: | | |
| (a) Displaced | | |
| (b) Emplaced | | |
| (3) Impact on Social Fabric and Community Structures | | |
| (4) Other Special Factors (specify) | | |
| (5) Socio-economic and racial impacts | | |
| (a) Low-income households (%) | | |
| (b) Moderate income households (%) | | |
| (c) Minorities households (%) | | |
| (6) Citizens' Participation | | |

# THE WATER QUALITY INDEX

Michigan uses a Water Quality Index (WQI) to compare relative water quality throughout the state. The Water Quality Index is a method of reporting general water quality data as a single number or index. Water quality is indicated on a scale of 0 to 100. The higher the WQI, the better the water quality. The WQI is a result of research done by the National Sanitation Foundation (NSF). The basis of the WQI is an equation that summarizes the research results. The research included a survey of water pollution control professionals.

There are nine chemical, physical and bacteriological water quality parameters which are used to compute the WQI for any given situation. Each of the nine parameters is given a weighting in the WQI formula. Listed below are the parameters and their weighting factors. Water quality values are obtained for each parameter from rating curves developed by the NSF. The individual values reflect the differences between optimal and actual water quality conditions. A mathematical formula combines the values and their weights yielding the WQI.

| Water Quality Parameter | Weighting Factor |
|---|---|
| Dissolved Oxygen | 0.17 |
| Fecal Coliform Density | 0.16 |
| pH | 0.11 |
| Biochemical Oxygen Demand (5-day) | 0.11 |
| Nitrates | o.10 |
| Temperature | 0.10 |
| Turbidity | 0.08 |
| Total Soilds | 0.07 |
| TOTAL = | 1.00 |

Descriptions of water quality associated with the ranges of the WQI are as follows:

| Water Quality | WQI Values |
|---|---|
| Good | 71-100 |
| Medium | 51- 70 |
| Poor | 0- 50 |

The water quality index is very sensitive to change in water quality. Therefore a change of 5 or 10 units over time can be significant, depending on the importance placed on the parameter producing the change.

The WQI does not address toxic substances directly, but any Index number may be reduced by excessive toxic concentrations. Source: MDNR, 1974.

## SEWAGE FLOWS

DAILY AVERAGES IN MILLION GALLONS PER DAY

| Year | MGD |
|---|---|
| 1928 | 9.6 |
| 1929 | 10.1 |
| 1930 | 9.7 |
| 1931 | 10.0 |
| 1932 | 11.8 |
| 1933 | 9.7 |
| 1934 | 9.3 |
| 1935 | 9.9 |
| 1936 | 10.1 |
| 1937 | 11.1 |
| 1938 | 12.1 |
| 1939 | 11.7 |
| 1940 | 13.2 |
| 1941 | 14.3 |
| 1942 | 14.2 |
| 1943 | 14.8 |
| 1944 | 16.8 |
| 1951 | 18.9 |
| 1952 | 24.1 |
| 1953 | 22.1 |
| 1954 | 21.3 |

| Year | MGD |
|---|---|
| 1955 | 22.2 |
| 1956 | 23.0 |
| 1957 | 23.8 |
| 1958 | 22.4 |
| 1959 | 25.6 |
| 1960 | 21.9 |
| 1961 | 23.4 |
| 1962 | 23.2 |
| 1963 | 24.7 |
| 1964 | 25.8 |
| 1965 | 27.0 |
| 1966 | 27.2 |
| 1967 | 30.1 |
| 1968 | 32.6 |
| 1969 | 31.6 |
| 1970 | 35.2 |
| 1971 | 37.3 |
| 1972 | 42.3 |
| 1973 | 42.4 |
| 1974 | 41.7 |
| 1975 | 44.5 |
| 1976 | 35.9 |

# FACILITY PLAN

## SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

### SUMMARY

The overall plan of the study area as established by the State of Michigan encompasses some 368 square miles of Genesee County, including the City of Flint. This Facility Plan is for the City of Flint segment of the area. The City of Flint area of 31 square miles has a population of some 190,000 people supported by substantial industrial and commercial development. The residential, industrial, and commercial development of the City is served by separate sanitary and storm sewer systems. The wastewater flow of the City is treated at the City of Flint treatment plant, which is currently undergoing expansion and improvement to tertiary treatment. When completed, this plant will provide adequate treatment to the wastewater prior to discharge to the Flint River, except during periods of precipitation. During these periods of precipitation, flow in the sanitary sewer system exceeds the capacity of the sewers and wastewater treatment plant resulting in overflows to the River and sewerage backup in basements, creating pollution and health hazards. The resolution of these problems is addressed in this facility planning with the salient features contained in the following conclusions and recommendations.

### CONCLUSIONS

1. During storm conditions and spring snow melts, the City of Flint experiences a serious overloading of their separate sanitary sewer system causing wastewater spills to the Flint River for sustained periods at numerous locations and widespread backups into basements. Also, during these conditions the storm sewer system is overloaded causing ponding in the streets and other surface areas.

2. Based upon the infiltration-inflow analysis conducted, the principal cause of the sanitary sewer system overloading is in the flow from basement footing drains which are connected to the sanitary sewer system throughout the City.

3. Previous planning and current wastewater treatment plant construction implementation have substantially established the City of Flint Wastewater Treatment Plant service area as a distinct segment separate from the balance of the plan of study area.

4. Completion of the current expansion and upgrading of the wastewater treatment plant and pump stations will reduce the volume and frequency of the spills to the river but they will still be of a magnitude that is detrimental to maintaining water quality in the Flint River.

Alternative III - Four storage-treatment tanks, one of 3.5 million gallons located at the wastewater treatment plant, a 9.1 million gallon tank adjacent to the Third Avenue Pump Station, a 2.7 million gallon tank in Dayton Park, and a 2.5 million gallon tank in Whaley Park, a system of sanitary relief sewers affording 2.2 million gallons of "in line" storage, pumping facilities at the storage tanks, 33 MGD in Dayton Park, 30 MGD in Whaley Park and additional pumping capacity at Third Avenue of 75 MGD.

11. The capital cost of the three storage retention alternatives for the proposed sanitary facilities range from $46,010,000 to $53,290.000.

12. In order to reduce flooding and ponding in streets and other surface areas, a system of storm relief sewers is required. The direct and indirect costs of possible damage to property and inconvenience to the public over a long period of years in urban areas have made storm drainage systems designed for a ten year storm frequency a generally accepted standard in the area. The storm drainage system, both existing and proposed, are designed for the runoff from the largest rain likely to occur once in ten years. The estimated cost of the relief storm sewers is $38,000,000.

13. The total capital cost of improvements to the sanitary sewer system and the storm sewer system will be in the range of 84 to 91 million dollars. This size project will undoubtedly need to be programmed over a period of years. If so, the sanitary sewer system improvements should have the initial priority with the storm sewer improvements following in stages.

RECOMMENDATIONS

It is recommended that Alternative I be the selected plan to effectively eliminate the untreated wastewater discharges into the Flint River. The proposed construction consists of:

1. 125,000 l.f. of trunk sanitary sewers

2 72,000 l.f. of lateral relief sewers.

3. 10 million gallons retention-treatment structure located at the wastewater treatment plant site.

4. 26 MGD peak load auxiliary pumping station.

5. Complete sewer separation in the remaining 210 acres combined sewer area.

6. New sanitary sewers in the unsewered areas of the City adjacent to Dort Highway.

# AIR QUALITY

## SUSPENDED PARTICULATE CONCENTRATION - ST. JOHN SITE

ST. JOHN MONITORS - 005, - 905 HAVE INDICATED THE HIGHEST CONCENTRATION IN FLINT




A - 12 MONTH MOVING GEOMETRIC MEAN

B - ANNUAL GEOMETRIC MEAN

SOURCE: MDNR

APPENDIX H



# HISTORICAL PRESERVATION

PREPARED BY THE DEPARTMENT
OF COMMUNITY DEVELOPMENT,
CITY OF FLINT, MICHIGAN

THE PREPARATION OF THIS REPORT WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; CPA-MI-05-28-0386.

# ABSTRACT

TITLE: HISTORICAL PRESERVATION ELEMENT

PREPARED BY: CITY OF FLINT, DEPARTMENT OF COMMUNITY DEVELOPMENT, DEPARTMENT OF PLANNING & PROGRAM DEVELOPMENT

SUBJECT: COMPREHENSIVE PROGRAM FOR HISTORICAL PRESERVATION & IDENTIFICATION

DATE: NOVEMBER, 1977

NUMBER OF PAGES: 37

ABSTRACT: THE INTENT OF THIS REPORT IS TO IDENTIFY GOALS, OBJECTIVES, CONDITIONS, PROCESSES AND SPECIFIC AREAS FOR HISTORIC PRESERVATION. THIS INFORMATION WILL BE AVAILABLE TO THOSE GROUPS, CITIZENS OR AGENCIES INTERESTED IN PROMOTING HISTORICAL PRESERVATION. INCLUDED IN THIS REPORT IS THE DEVELOPMENT OF PRESERVATION POLICY, EDUCATION PROCESSES, TECHNIQUES TO ASSIST IN THE ESTABLISHMENT OF A COMPREHENSIVE PROGRAM FOR HISTORICAL PRESERVATION AND IDENTIFICATION OF TOOLS FOR IMPLEMENTING THE PROGRAM. THE RECOMMENDATIONS EMPHASIZE THE DEVELOPMENT OF A PROCESS WHICH ALLOWS FOR REVIEW AND APPROVAL OF HISTORIC AREAS, DESIGNATION OF AN OFFICIAL CLEARINGHOUSE FOR HISTORICAL LAND USE ACTIVITY, INVENTORY OF ALL POTENTIALLY HISTORICAL ELEMENTS, A MONITORING PROCESS TO ASSURE THE COMPLIANCE OF THE HISTORICAL PRESERVATION GOAL AND THE COORDINATION OF HISTORIC DISTRICTS WITH CURRENT REHABILITATION PROGRAM. THE RECOMMENDATION ALSO SPECIFIES STUDIES TO BE UNDERTAKEN PROMOTING HISTORIC PRESERVATION METHODS FOR CITIZENS INVOLVEMENT, AND A DRAFT OF A PROPOSED HISTORIC DISTRICT ORDINANCE.

THE PREPARATION OF THIS REPORT
WAS FINANCED IN PART THROUGH
A COMPREHENSIVE PLANNING GRANT
FROM THE
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

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# I. INTRODUCTION

Cities today are composed of many physical shapes and urban patterns, and when combined, reflect a community's historic and cultural past.

Viewed as a whole, the city is constantly changing as new concepts and events permeate the old, leaving in their place monuments to future generations. These changes are often swift and complete with very little thought given to the effect upon the surrounding areas, and even less consideration to the past ideals and identities that a particular area contributed to the total community.

On a smaller scale, neighborhoods not only represent the city's overall developmental stages, but also reflect the social and economic characteristics unique to a specific period of development or cultural identity. These areas, once fully developed, change at a much slower rate and appear for the most part, very stable. Modification, even minor, can affect this seemingly tranquil environment, causing concern and apprehension. Drastic or unfamiliar changes which happen too quickly, may have profound effect and result in total change, or even abandonment, of once stable neighborhoods.

Our past heritage plays an important role in the urban scene by allowing us not only aesthetic enjoyment, fulfilling our need to be linked with the past, but also provides the building blocks for present and future values.

The need for preservation of our American heritage is becoming a national concern and gaining momentum in many communities throughout the country. This awareness is part of an even broader concern to better the quality of life and preserve our limited resources. The familiar phrase "down with the old, up with the new" is being replaced by the new concept of the selective reuse of the "best of the old."

Congress has reinforced this approach by providing communities new era of community and historical pride. The National Historic Preservation Act of 1949 created the National Advisory Council on Preservation and authorized matching grants, while the Demonstration Cities and Metropolitan Act of 1966 strengthened preservation opportunities. In September of 1976, President Ford signed legislation that authorized increases in levels of spending from 24 million to 100 million dollars, thus providing a strong committment for perservation. The State of Michigan has also provided the necessary legislation to allow communities the necessary tools to implement Historic Districts.

Flint, like many similar communities, is in the early stages of an awareness of historic preservation. Although a few structures have been recognized for their historical significance, no really comprehensive plan has been made and no procedure initiated, as a guideline to provide various interest groups or agencies with the means for preserving the "best of the old."

## II. HISTORIC PRESERVATION

The term "historic preservation" can be defined in several ways, by the interpreter. One definition may refer to a specific period of time such as colonial or to an architectural style, such as Gothic, or to an age.

Care must be taken, however, not to limit the definition too narrowly; many worthy structures could be lost as a result. It should be flexible, encompassing many interests in the community if programs and projects are to be effective. The intent must appeal not only to the environmental sector, but also to the greater segment, further promoting historic preservation as a valuable community asset. Included also in this definition should be the means to evaluate surrounding areas which have a pronounced influence on the ultimate success of perservation efforts.

With this in mind, Historic Preservation may be defined as:

"the protection, rehabilitation, restoration, and reconstruction of districts, sites, buildings, structures and objects significant in American history, architectural archeology or culture" and the conservation of adjacent or surrounding environs that have an immediate or intense affect upon this heritage.[1]

---

[1]Public Law 89-665, National Historic Preservation Act, United States Congress, 1966.

## III. GOALS AND OBJECTIVES

### A. Historic Preservation Goal Statement

The Historic Preservation goal was briefly stated in the introduction of this section:

> "To provide further impetus towards preservation and neighborhood conservation."

Although the intent of this goal is to promote preservation, we should go beyond this. It is a well-known fact that our generation is fast becoming a "throw away society" with little or no concern for the long-range effect on our environment, not only in dollars, but in our values, ideals, and the quality of life.

We must "communicate the lesson of history in order the present and future may learn from the past." This goal, then, must also encompass and reinforce the educational element if it is to become a viable means for future use.

In order to achieve the goals of preservation and conservation mentioned earlier, basic objectives must be developed. These objectives (short-range goals) serve as basic guidelines to those persons, groups or agencies assigned the task of implementing preservation programs. The next section of this report is devoted to enumerating but a few of these basic guidelines. Caution must be taken, however, not to rely totally on those guidelines to be suggested, but to utilize them as a beginning point for the development of on going processes.

### B. Historic Preservation Objectives

1. Develop a preservation policy which expresses support of the Historic Concept and suggests approaches to its implementation.

   (a) Authorize procedures which mandate closer cooperation between various city departments as well as other public agencies. This will allow for proper planning between the various public entities, preventing the future loss of historic landmarks. This can be accomplished through effective local legislation which directs governmental or public agencies to submit plans per the redevelopment, movement, demolition or alteration of public property to a Preservation Commission for review and approval.

   (b) Develop inventories which indicate not only significantly identified historic landmarks throughout the community,

(c) Evaluation: The inventory will contain factual data based on site visitation, old records, mapping, photographs, etc. This can be completed by volunteers or other lay persons. Once completed, each item must be evaluated as to its historic significance. This will require professional expertise and should be handled by qualified persons with the necessary educational background or experience. Criteria must be established which will be based on the community's attitudes towards historic preservation and will allow for final determination of historic significance[4]. A sample checklist or guide can be found in Appendix C.

(d) Program Development: Once the inventories and evaluations have been completed, a plan must be formulated to allow for the implementation of an appropriate preservation program. An assessment must be made of the available tools already existing which would allow immediate action. This could consist of existing ordinances, zoning laws, state legislation, etc. After this assessment is complete, a plan of action can be outlined which reflects the community attitudes and goals for historic preservation.

(e) Implementation: Once a plan of action has been completed, implementation becomes a vital concern. Without some type of immediate action, those involved in the initial program activities will lose interest and enthusiasm will deteriorate rapidly. Implementation can be as little as communication with the local representative to initiate cooperation or assistance in the development and promotion of proper legislation.

4. Develop tools which will allow for the implementation of preservation and conservation programs.

(a) Zoning: This can provide some basic, although limited, protection of historic areas. The City of Flint's Zoning Ordinance deals with proper land use, density, building heights, lot coverage, yards, parking requirement, buffering, signs, etc. These definitely have an influence on the overall make-up of an area. They, however, apply only in a very broad sense and will not prevent an owner from altering, or literally destroying, the historic value of a structure. Controls that restrict alterations or demolition of historic areas are lacking in the zoning ordinances.

---

[4] Information provided by "Conservation of Historic and Cultural Resources," by Ralph W. Minor, Planning Advisory Service, Report #244.

## IV. CURRENT PRESERVATION ACTIVITY

During the last few years there has been a a growing interest in preservation in the City of Flint as well as in the metropolitan area. Several active groups have been formed which have been instrumental in enabling several sites to be included in the state and federal historical records. The following summarizes the activities accomplished to date and proposed future goals.

### A. Flint Historical Preservation Study Committee

The Flint Historical Preservation Study Committee was formed in 1975 in response to the State Enabling Act 169 which allows cities to appoint legislatively a study committee to conduct research and compile a report on the historic significance of certain buildings, structures, features, and sites in the area.

The goal of this committee is to produce a workable document which will recommend specific areas and sites for historical district designation and an ordinance which will:[5]

- Safeguard the heritage of the local unit by preserving a district in a local government which reflects elements of its cultural, social, economic, political or architectural history
- Stabilize and improve property values in such districts
- Foster civic beauty
- Strengthen the local economy
- Promote the use of historic districts for education, pleasure and welfare of the citizens

### B. Historic District Concept

A district is "a geographically definable area, urban or rural, possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects which are united by past events or, aesthetically, by plan or physical development. A district may also be comprised of individual elements which are separated geographically but are linked by association or history.[6]

---

[5] State of Michigan Public Acts 1970, No. 169, 399.202, Pg. 157.

[6] The National Register Program, "How to Complete National Register Forms," Volume 2, Washington, D.C. National Park Service, U.S. Department of the Interior, 1975.

5. Whaley House (about 1885)
   624 E. Kearsley

6. Elks Club (1913)
   142 W. Second Street

7. Vehicle City Marker located
   at Flint City Hall

Presently, only two buildings, the Durant-Dort Office on Water Street and the Superintendent's House are on the Federal Register of Historic Properties. The Durant-Dort Office on Water and the Superintendent's House are on the Federal Register of Historic Properties. The Durant-Dort building is rapidly deteriorating for lack of maintenance and needs immediate attention if it is to be preserved. The State Historical Register has also defined the Durant-Dort-Nash Historical District (See illustration 5). Future redevelopment in the Water Street area is probable because of its downtown location and proximity to the Riverbank Park Project. The area is zoned D-5 (metropolitan commercial) and E (heavy commercial-limited manufacturing). New Development will probably generate commercial or institutional uses which could either negatively impact the Durant-Dort-Nash Historic District and buildings or conversely preserve and reinforce the district if carefully designed.

The second National Registry Property, the Superintendent's House, is in good condition and is currently a private residence in a C-1 (multifamily) zoned area. No negative impacts are anticipated for the property. For educational purposes, a historic market should be erected at the site.

The other core areas currently under study, East and Grand Traverse Streets, will require attention as pressures increase for development in the central area of the city. Commercial or institutional uses will generate demands for increased parking and new construction, impinging the large older homes. Excellent examples of adaptive preservation exist on both streets which could be furthered by the historic district designation.

The fourth area, Delmar and Forest Hill Streets, as part of Civic Park, retains its original single family use and residential character. Although the buildings are intact, minor facade alterations have occurred, demonstrating neighborhood "improvements" but also a possible lack of awareness of the original architectural significance of the area. Here an appropriate opportunity exists for professional advice to homeowners.

Properties on state and federal registers can be protected by local ordinances which establish review of building permits and site plans for exterior modification to historic properties.

The Crossroads project was designated as the official 1973 county bicentennial project. During the following year, plans were developed which expanded the original concept to encompass some thirty-seven historical structures and began a "Living Village." Also unique to this village is the recent addition of the "Huckleberry Railroad," complete with an historical train, tracks and stations.

Of the several structures that are already a part of this village, three are directly associated with the City of Flint's early heritage. The K. Buzzell House, M. Durant Barn, and the F. Wisner Carriage Barn serve as excellent examples of Flint's early development.

Although the idea of an historical village is not a new concept, it is one of many excellent ways to preserve a community's heritage, becoming a valuable educational tool as well as an economic asset.

## V. RECOMMENDATIONS

If the historical preservation effort is to become an effective tool, if it is to promote historical renovation, conservation, and economic rejuvenation, and if it is to build community pride, then local initiative, both private and public, must be encouraged. This effort must take the form of firm policies and commitments.

The following recommendations serve as basic guidelines for historical preservation. The five basic areas (not necessarily in the order of priority) are: policy, proposed studies, citizen action, and ordinances.

### A. Policy

1. Establish a commission or board to review and approve redevelopment projects or plans within historic areas. In accordance with State Enabling Act 169, a local unit of government may create a seven (7) member commission. The intent of this commission is to review plans and building applications in order to maintain the historical integrity of a district or area and prevent inappropriate intrusions.

   The formation of this commission is one of the major steps in a process currently underway by the Flint's Historical Preservation Study Committee. (See illustration 7).

2. Designate a city department (Planning or Research & Analysis) as the official clearinghouse for all historical land use activities. This department would be responsible for:

   a. Compiling and maintaining historical land use data

   b. Monitoring and evaluating historical land uses

   c. Developing historically related land use programs

   d. Coordinating land use activities with other departments and agencies

   e. Working with private and public historically oriented interest groups

3. Compile complete inventories of all historically significant landmarks, structures, sites, areas, etc., by using existing inventories and the Environmental Block Assessment (EBA).[7]

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[7] Environmental Block Assessment in a survey of structural conditions completed by Genesee County.

2. Coordinate historical preservation activities with existing citizen participation programs as a means of disseminating and receiving information.

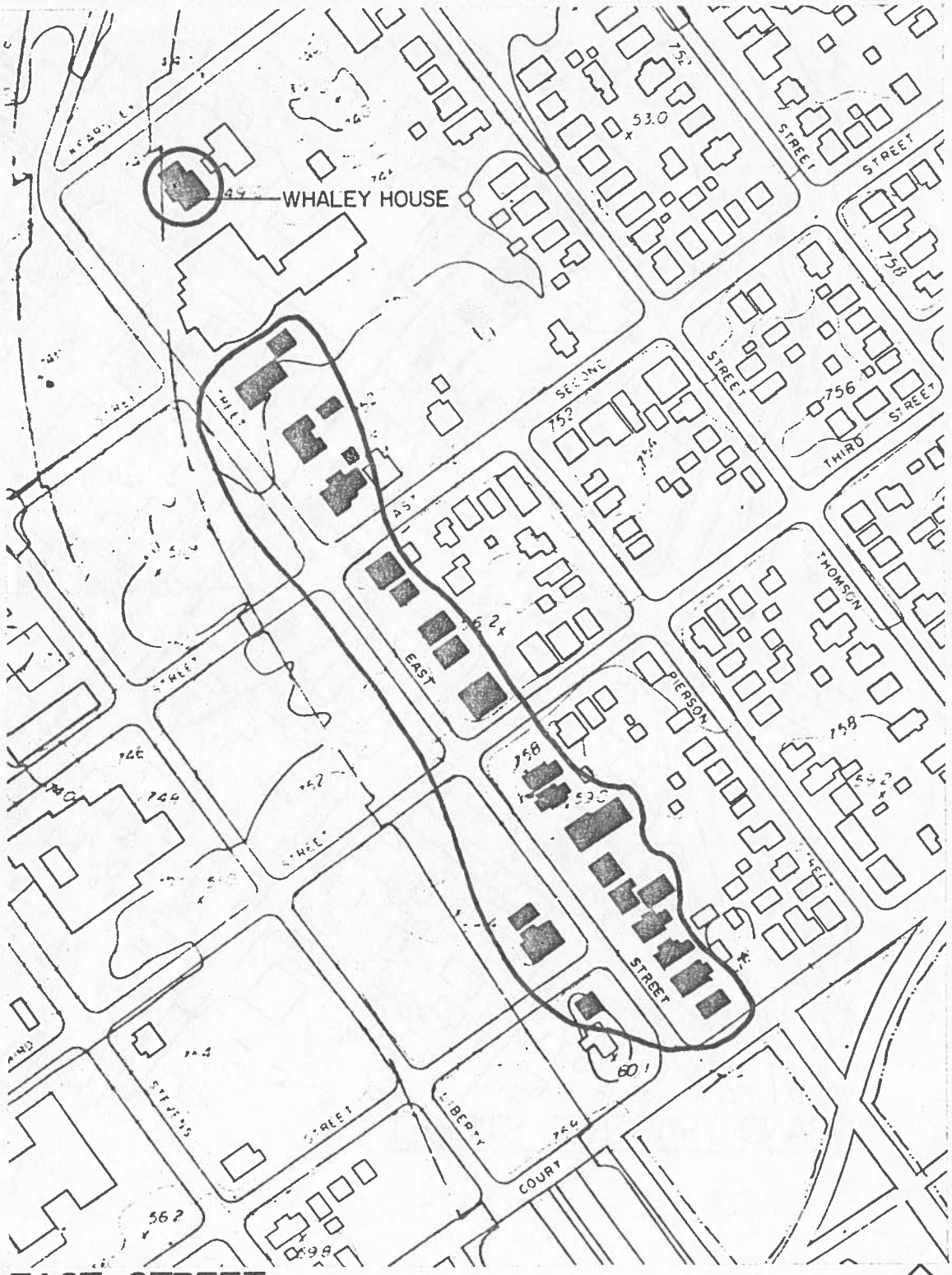
D. Ordinance

Assist the Historical Preservation Study Committee in developing and implementing a historical district ordinance. This ordinance should establish the basic framework for designating district standards for redevelopment, architectural guidelines and administrative policy.



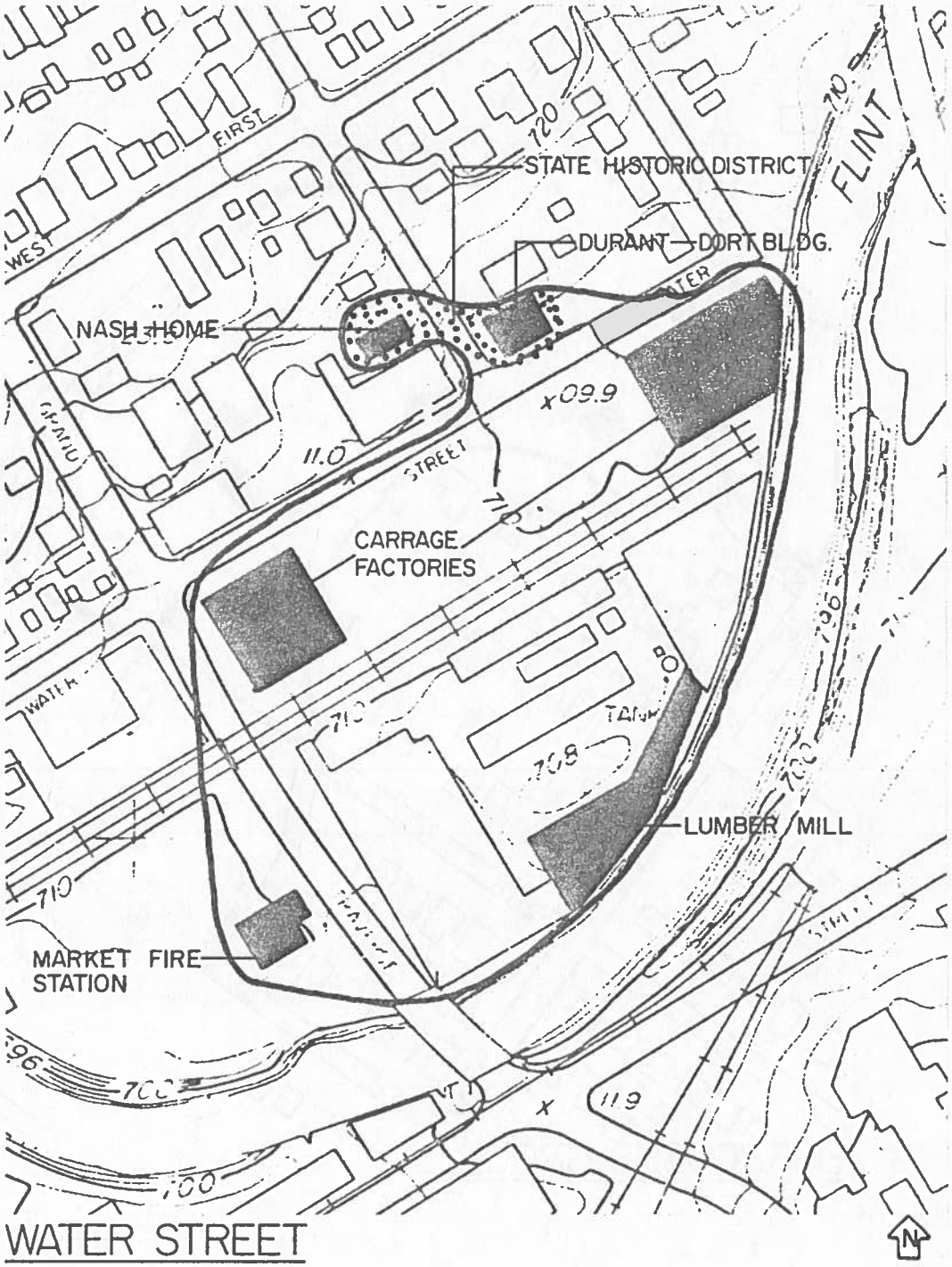

HISTORIC PRESERVATION STUDY PROPERTIES

THE PREPARATION OF THIS REPORT WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; CPA-MI-05-28-0386.



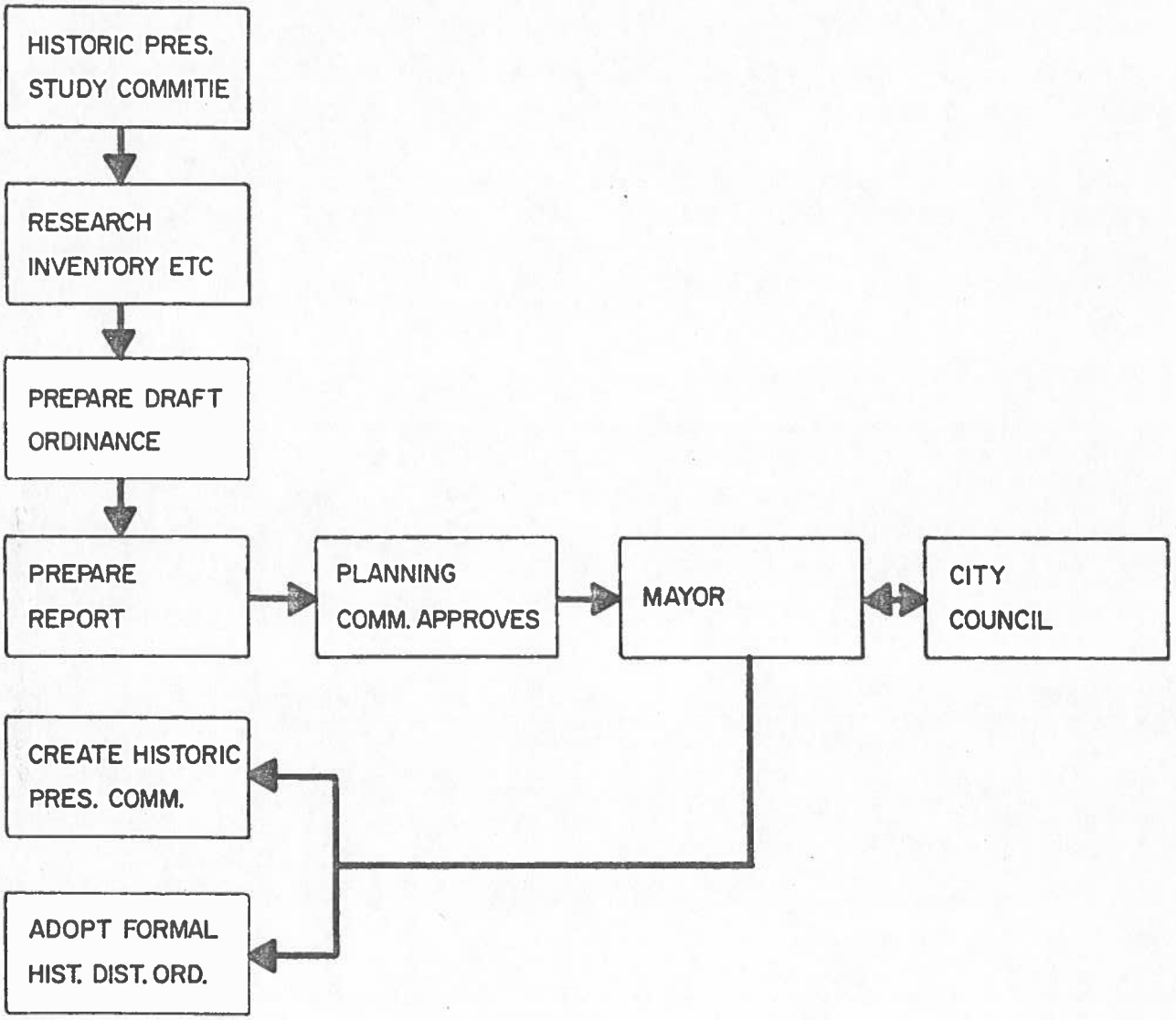

EAST STREET

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# HISTORIC PRESERVATION PROCESS



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1. American Society of Planning Officials, Conservation of Historical and Cultural Resources, Report No. 244, March 1969.

2. City of Flint, Historical Preservation Study Committee, District Boundary Subcommittee Report.

3. City of Grand Rapids, Historic Preservation Inventory, Draft Report, July 1973, Grand Rapids, Michigan.

4. City of Marshall, A Plan for Preservation, Marshall Historical Society, 1973, Marshall, Michigan.

5. State of Michigan, Public Acts 1970, No. 169.

6. United States Congress, National Historic Preservation Act of 1966, Public Law 89-665.

7. Urban Land, Historic Preservation, July/August 1975.

Province

Town or Township

House Number

Concession #

Street

(Urban)

Lot #

(Rural)

Office Use Only

Building Name

Present Owner

Address of Owner

Tenant

Original Owner or Tenant

Recorder

Recorder

Date

Total No. of Photos taken

Film Roll No.

GRID

**8 MASSING OF UNITS**



1. SINGLE DETACHED | 2. DOUBLE SEMI-DETACHED, RELATED | 3. DOUBLE SEMI-DETACHED NON-RELATED | 4. ROW, RELATED, END | 5. ROW, RELATED, INTERMEDIATE | 6. ROW, NON-RELATED, END | 7. ROW, NON-RELATED, INTERMEDIATE | 8. ATTACHED, IRREGULAR | 9. OTHER

COMMENTS

**9 PLAN**

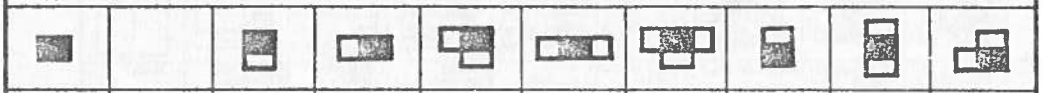


1. SQUARE | 2. RECTANGULAR | 3. RECTANGULAR | 4. L | 5. U | 6. T | 7. H | 8. CIRCULAR | 9. POLYGONAL | 10. CENTRE SPACE



11. PAVILLION | 12. IRREGULAR | 13. CRUCIFORM | 14. APSIDAL | 15. APSE AND TRANSEPT | 16. APSE AND NARTHEX | 17. NARTHEX AND TRANSEPT | 18. OTHER

**10 WINGS**



1. NONE | 2. UNKNOWN | 3. FRONT | 4. EITHER SIDE | 5. FRONT AND EITHER SIDE | 6. BOTH SIDES | 7. FRONT AND BOTH SIDES | 8. REAR | 9. FRONT AND REAR | 10. REAR AND EITHER SIDE



11. REAR AND BOTH SIDES | 12. FRONT, REAR & EITHER SIDE | 13. FRONT, REAR & BOTH SIDES | 14. IRREGULAR | 15. OTHER

**11 FOR CHURCHES ONLY - CHURCH TOWERS & SPIRES**



1. NONE | 2. SINGLE, CENTRE | 3. SINGLE, EITHER SIDE | 4. PAIR, EACH SIDE | 5. TWO, CENTRE & SIDE | 6. THREE, CENTRE & BOTH SIDES | 7. MULTI | 8. OTHER

**12 CHURCH TOWERS & SPIRES - LOCATION (Multiple choice)**



1. NONE | 2. INSET | 3. FACADE | 4. EXTENSION | 5. WINGS | 6. OTHER

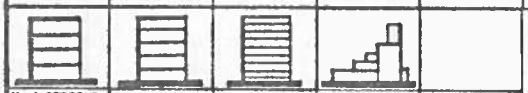
**13 PLOT AREA** Frontage ____ Unknown ____ Depth ____ Unknown ____

**14 BUILDING AREA** Width ____ Unknown ____ Depth ____ Unknown ____

**15 STOREYS**



1. UNKNOWN | 2. 1 STOREY | 3. 1 1/2 STOREY | 4. 1 SPLIT | 5. 1 FRONT, 2 REAR | 6. 2 STOREYS | 7. 2 STOREYS, OVERSAIL | 8. 2 1/2 STOREY | 9. 2 SPLIT | 10. 3 STOREYS



11. 4 STOREYS | 12. 5 STOREYS | 13. MULTI | 14. IRREGULAR | 15. OTHER

**16 BAYS - MAIN FACADE**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | multi | other |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | |

**17 BASEMENT**



1. NONE | 2. UNKNOWN | 3. CRAWL SPACE | 4. PARTIAL | 5. FULL | 6. OTHER

**18 BASEMENT WALL MATERIAL**

| NONE | UNKNOWN | WOOD POST | LOG SILL | MASONRY PIER | RUBBLE | CUT STONE | CONCRETE BLOCK | POURED CONCRETE | BRICK | OTHER | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |

RECORDER SHEET - 3

**29 EXTERIOR SHEATHING-MAIN FACADE-MORE THAN ONE- Multiple Choice**

COMMENTS

| NONE | WOOD | TILE OR TERRA-COTTA | PLASTER OR STUCCO | STONE | BRICK | METAL | COMPOSITION | OTHER | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | |

**30 EXTERIOR SHEATHING-OTHER FACADES**

SAME AS MAIN [ 1 ] DIFFERENT FROM MAIN [ 2 ]

**31 WALL DESIGN & DETAIL** Multiple Choice



| 1. NONE | 2. RECESSED PANEL (S) | 3. ARCADING | 4. ENGAGED COLUMN OR PILASTER | 5. PIER AND SPANDREL | 6. QUOINS | 7. ENTABLATURE AND/OR FREEZE | 8. STRING OR BELT COURSE | 9. CORBELING | 10. PLINTH |
|---|---|---|---|---|---|---|---|---|---|



| 11. DECORATIVE PANEL OR CARVING | 12. INSCRIPTION OR DATE STONE | 13. DECORATIVE DESIGN OR PAINTING | 14. OTHER |
|---|---|---|---|

**32 ROOF SHAPE**



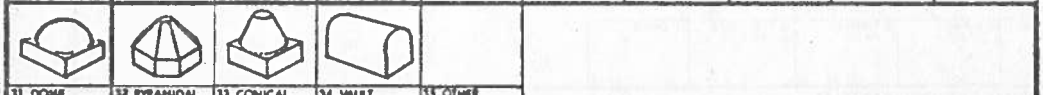
| 1. LOW GABLE | 2. MEDIUM GABLE | 3. HIGH GABLE | 4. CENTRE GABLE | 5. CROSS GABLE | 6. HIPPED GABLE | 7. HIPPED, CROSS GABLE | 8. BELLCAST GABLE | 9. BELLCAST HIPPED GABLE | 10. LOW HIP |
|---|---|---|---|---|---|---|---|---|---|



| 11. MEDIUM HIP | 12. HIGH HIP | 13. TRUNCATED HIP | 14. HIPPED WITH CENTRE GABLE | 15. BELLCAST HIP | 16. GABLED HIP OR GABLET | 17. GAMBREL | 18. HIPPED GAMBREL | 19. BELLCAST GAMBREL | 20. BELLCAST HIPPED GAMBREL |
|---|---|---|---|---|---|---|---|---|---|



| 21. MANSARD | 22. GABLED MANSARD | 23. BELLCAST MANSARD | 24. HALIFAX | 25. SHED | 26. SALTBOX | 27. BOOMTOWN | 28. FLAT | 29. SAWTOOTH | 30. MONITOR |
|---|---|---|---|---|---|---|---|---|---|



| 31. DOME | 32. PYRAMIDAL | 33. CONICAL | 34. VAULT | 35. OTHER |
|---|---|---|---|---|

**33 ROOF MATERIAL**

| UNKNOWN | THATCH OR SOD | WOOD | TILE | METAL | SLATE | COMPOSITION | GLASS | CONCRETE | TAR & GRAVEL | OTHER |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |

**34 CHIMNEY LOCATION-PLAN- Multiple Choice**



| 1. NONE | 2. CENTRE | 3. OFFSET LEFT | 4. OFFSET RIGHT | 5. SIDE, LEFT | 6. SIDE, RIGHT | 7. CLUSTER | 8. OTHER |
|---|---|---|---|---|---|---|---|

**35 CHIMNEY LOCATION- Multiple Choice**



| 1. NONE | 2. STRADDLE RIDGE | 3. FRONT SLOPE | 4. REAR SLOPE | 5. SIDE SLOPE | 6. EXTERIOR | 7. OTHER |
|---|---|---|---|---|---|---|

**36 CHIMNEY STACK MATERIAL**

| NONE | UNKNOWN | TILE | METAL | RUBBLE | CUT STONE | BRICK | PARGE | CONCRETE | OTHER |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

**37 CHIMNEY STACK UNITS- Multiple Choice**



| 1. NONE | 2. SINGLE | 3. LINKED, TOP | 4. LINKED, AT BASE | 5. PIERCED | 6. JOINED | 7. OTHER |
|---|---|---|---|---|---|---|

RECORDER SHEET -5

**44 MAIN WINDOW STRUCTURAL OPENING SHAPE - GROUND OR FIRST FLOOR**



1. FLAT | 2. SEGMENTAL | 3. SEMI-ELLIPTICAL | 4. SEMI-CIRCULAR | 5. 4 CENTRE OGEE | 6. 2 CENTRE POINTED | 7. TRIANGULAR | 8. OTHER

**45 MAIN WINDOW SURROUND - HEAD - GROUND OR FIRST FLOOR**

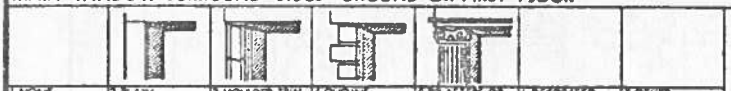


1. NONE | 2. PLAIN MOULDING | 3. LINTEL | 4. LINTEL, DECORATED | 5. LINTEL, SHAPED | 6. LABEL | 7. FLAT ARCH, VERTICAL JOINT | 8. ARCH, RADIATING VOUSSOIRS | 9. ARCH, RADIATING VOUSSOIRS WITH KEYSTONE | 10. ARCH, ALTERNATING RADIATING VOUSSOIRS



11. ARCH, STEPPED, RADIATING VOUSSOIRS | 12. SHELF OR ENTABLATURE | 13. PEDIMENT, PLAIN | 14. PEDIMENT, SEGMENTAL | 15. PEDIMENT, DOUBLE CURVE | 16. PEDIMENT, BROKEN | 17. HOOD, FLAT, PLAIN OR BRACKETED | 18. HOOD, CURVED, PLAIN OR BRACKETED | 19. OTHER

**46 MAIN WINDOW SURROUND - SIDES - GROUND OR FIRST FLOOR**



1. NONE | 2. PLAIN | 3. MOULDED TRIM | 4. QUOINS | 5. PILASTERS OR ENGAGED COLUMNS | 6. DECORATED OTHER | 7. OTHER

**47 MAIN WINDOW SURROUND - MATERIAL**

| NONE | WOOD | RUBBLE | CUT STONE | BRICK | TILE OR TERRA-COTTA | CONCRETE OR CAST STONE | PLASTER OR STUCCO | METAL | UNKNOWN | OTHER |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |

**48 MAIN WINDOW SURROUND - SILLS - GROUND OR FIRST FLOOR**

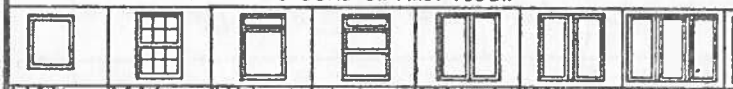


1. NONE | 2. SLIPSILL | 3. LUGSILL | 4. DECORATED SLIPSILL | 5. DECORATED BAGSILL | 6. OTHER

**49 MAIN WINDOW SURROUND - SILLS MATERIAL**

| NONE | WOOD | RUBBLE | CUT STONE | BRICK | TILE OR TERRA-COTTA | CONCRETE OR CAST STONE | PLASTER OR STUCCO | METAL | UNKNOWN | OTHER |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |

**50 MAIN WINDOW DIVISIONS - GROUND OR FIRST FLOOR**



1. 1 SASH | 2. 2 SASH | 3. 1 SASH AND TRANSOM | 4. 2 SASH AND TRANSOM | 5. 2 SASH, NO MULLION | 6. 2 SASH WITH MULLION | 7. 3 SASH OR MORE WITH MULLION | 8. SASH WITH SIDELIGHTS | 9. OTHER

**51 MAIN WINDOW SWING or SLIDE - GROUND OR FIRST FLOOR**



1. UNKNOWN | 2. DOUBLE HUNG | 3. CASEMENT | 4. HINGED | 5. PIVOTED | 6. HORIZONTAL SLIDING | 7. FIXED | 8. OTHER

**52 MAIN WINDOW PANES OR LIGHTS - GROUND OR FIRST FLOOR**

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| UPPER OR LEFT SASH | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | MULTI | OTHER |
| LOWER OR RIGHT SASH | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | MULTI | OTHER |

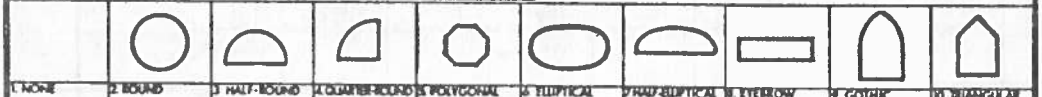
**53 WINDOWS - SECOND FLOOR - Multiple Choice**

| DIFFERENT FROM FIRST FLOOR | OPENING | HEAD | SIDE | SILLS | | SAME AS FIRST FLOOR | | NONE |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | 5 | | 6 |

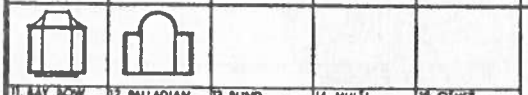
**54 WINDOWS - THIRD FLOOR - Multiple Choice**

| DIFFERENT FROM FIRST FLOOR | OPENING | HEAD | SIDE | SILLS | | SAME AS FIRST FLOOR | | NONE |
|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 3 | 4 | | 5 | | 6 |

**55 SPECIAL WINDOW TYPES - ANY FACADE - Multiple Choice**



1. NONE | 2. ROUND | 3. HALF-ROUND | 4. QUARTER-ROUND | 5. POLYGONAL | 6. ELLIPTICAL | 7. HALF-ELLIPTICAL | 8. EYEBROW | 9. GOTHIC | 10. TRIANGULAR

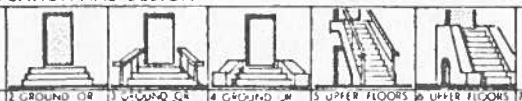


11. BAY, BOW OR ORIEL | 12. PALLADIAN | 13. BLIND | 14. MULTI | 15. OTHER

**COMMENTS**

RECORDER SHEET - 7

| | | COMMENTS |
|---|---|---|
| 67 | STAIRS - LOCATION AND DESIGN | |



1 NONE | 2 GROUND OR FIRST FLOOR PLAIN | 3 GROUND OR FIRST FLOOR WITH RAILING | 4 GROUND OR FIRST FLOOR WITH SOLID RAILING | 5 UPPER FLOORS WITH RAILING | 6 UPPER FLOORS WITH SOLID RAILING | 7 OTHER

| | | |
|---|---|---|
| 68 | STAIRS - SHAPE | |



1 NONE | 2 STRAIGHT | 3 STRAIGHT, SIDE | 4 STRAIGHT REVERSED | 5 CURVED | 6 DOUBLE | 7 SPIRAL | 8 OTHER

| | | |
|---|---|---|
| 69 | PORCHES AND GALLERIES | |



1 NONE | 2 PLATFORM OR STOOP | 3 UMBRAGE | 4 OPEN PORCH | 5 CLOSED PORCH | 6 PORTICO | 7 VERANDAH OR GALLERY | 8 OTHER

| | | |
|---|---|---|
| 70 | PORCHES AND GALLERIES - SUPPORTS | |



1 NONE | 2 POSTS | 3 TRELLAGE | 4 PIERS | 5 COLUMNS | 6 ARCADE (OPEN) | 7 OTHER

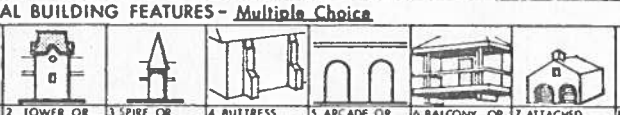
| | | |
|---|---|---|
| 71 | PORCHES AND GALLERIES - SUPPORTS MATERIAL | |

| NONE 1 | UNKNOWN 2 | WOOD 3 | RUBBLE 4 | CUT STONE 5 | BRICK 6 | TILE OR TERRA-COTTA 7 | CONCRETE OR CAST STONE 8 | PLASTER OR STUCCO 9 | METAL 10 | OTHER 11 |
|---|---|---|---|---|---|---|---|---|---|---|

| | | |
|---|---|---|
| 72 | PORCHES AND GALLERIES - HEIGHT | |

| NONE 1 | 1st STOREY 2 | 1st & 2nd STOREYS 3 | MULTI STOREYS 4 | OTHER 5 |
|---|---|---|---|---|

| | | |
|---|---|---|
| 73 | ADDITIONAL BUILDING FEATURES - Multiple Choice | |



1 NONE | 2 TOWER OR TURRET | 3 SPIRE OR STEEPLE | 4. BUTTRESS | 5 ARCADE OR COLONNADE | 6 BALCONY OR ADDITIONAL PORCH | 7 ATTACHED BARN OR GARAGE | 8 OTHER

| | | |
|---|---|---|
| 74 | INTERIOR ITEMS OF INTEREST - Multiple Choice | |

| NONE 1 | UNKNOWN 2 | STAIRS 3 | HALL 4 | MAIN ROOMS 5 | FIREPLACE AND MANTEL 6 | DOOR TRIM 7 | WINDOW TRIM 8 | DECORATIVE COMPONENTS 9 | OTHER 10 |
|---|---|---|---|---|---|---|---|---|---|

| | | |
|---|---|---|
| 75 | APPARENT ALTERATIONS AND/OR ADDITIONS 1-YES 2-NO Multiple Choice | |

| NONE 1 2 | WALL 1 2 | WINDOWS 1 2 | DOORS 1 2 | ROOF 1 2 | CHIMNEY 1 2 | STAIR-PORCH 1 2 | ADD. STOREY 1 2 | OTHER |
|---|---|---|---|---|---|---|---|---|

| | | |
|---|---|---|
| 76 | CONDITION OF BUILDING 1-GOOD 2-FAIR 3-POOR Multiple Choice | |

| WALL 1 2 3 | WINDOWS 1 2 3 | DOORS 1 2 3 | ROOF 1 2 3 | CHIMNEY 1 2 3 | STAIR-PORCH 1 2 3 | OTHER |
|---|---|---|---|---|---|---|

| | | |
|---|---|---|
| 77 | PROPERTY FEATURES - Multiple Choice | |

| NONE 1 | GARAGE OR COACH HOUSE 2 | STABLE OR BARN 3 | OUT-BUILDING 4 | FENCE 5 | GARDEN FEATURE 6 | WATER FEATURE 7 | OTHER 8 |
|---|---|---|---|---|---|---|---|

| | | |
|---|---|---|
| 78 | PRESENT STATUS | |

| INHABITED | ABANDONED | OTHER |
|---|---|---|

RECORDER SHEET - 9

# BUILDING–STRUCTURE INVENTORY FORM

For Office Use

Theme _____

_____

_____

Michigan History Division
Michigan Department of State
Lansing, Michigan 48918

## IDENTIFICATION

1. Building name _____
2. County _____ Town/City _____ Village _____
3. Street Location _____
4. Ownership: a. Public ☐ b. Private ☐
5. Present Owner _____ Address _____
6. Use: Original _____ Present _____
7. Accessibility to Public: Exterior visible from public road: Yes ☐ No ☐
   Interior accessible: Explain _____

## DESCRIPTION

8. Building Material: a. clapboard ☐ b. stone ☐ c. brick ☐ d. board and batten ☐
   e. cobblestone ☐ f. shingles ☐ g. stucco ☐ h. other _____
9. Structural Material: a. wood frame with interlocking joints ☐ b. wood frame with light members (balloon frame) ☐
   c. masonry load-bearing walls ☐ d. iron frame ☐ e. steel frame with curtain walls ☐
   f. reinforced concrete ☐ g. other _____
10. Condition: a. excellent ☐ b. good ☐ c. fair ☐ d. deteriorated ☐
11. Integrity: a. original site ☐ b. moved ☐ if so, when? _____
    Notes on alterations and additions, with dates and architect.

12. Related Outbuildings and Property
    a. barn ☐ b. carriage house ☐ c. garage ☐ d. privy ☐ e. shed ☐
    f. shop ☐ g. greenhouse ☐ h. landscape features ☐ i. other _____
13. Surroundings of the Building
    a. open land ☐ b. woodland ☐ c. scattered outbuildings ☐ d. densely built-up ☐
    e. commercial ☐ f. industrial ☐ g. residential ☐ h. other _____
14. Photo
15. Map

# SAMPLE ATTITUDE SURVEY

## Historic Considerations

Is the structure associated with the life or activities of a major historic person (more than the "slept here" type of association)?

Is it associated with a major group or organization in the history of the nation, state, or community (including significant ethnic groups)?

Is it associated with a major historic event (whether cultural, economic, military, social, or political)?

Is the building associated with a major recurring event in the history of the community (such as an annual celebration)?

Is it associated with a past or continuing institution which has contributed substantially to the life of the city?

## Architectural Considerations

Is the structure one of few of its age remaining in the city?

Is it a unique example in the city of a particular architectural style or period?

Is it one of a few remaining examples in the city of a particular architectural style or period?

Is it one of many good examples in the city of a particular architectural style or period?

Is the building the work of a nationally famous architect?

Is it a notable work of a major local architect or master builder?

Is it an architectural curiosity or picturesque work of particular artistic merit?

Does it evidence original materials and/or workmanship which can be valued in themselves?

Has the integrity of the original design been retained or has it been altered?

Appendix D

## HISTORIC DISTRICT AND THEMES

| CORE DISTRICT | GENERAL STUDY AREA | SIGNIFICANCE THEME |
|---|---|---|
| Delmar Street and Forest Hill (Parkhurst to Dayton) includes Civic Park School and Haskell Recreation Center. About 60 buildings | Civic Park About 950 buildings | First Flint planned residential neighborhood. Social, architectural theme. |
| East Street (Court to First St.) 20 buildings | Central Park About 190 buildings | One of the older residential neighborhoods. Social, architectural theme. |
| Grand Traverse St. (First to Third St.) 10 buildings | Grand Traverse South About 250 buildings | One of the older residential neighborhoods. Social, architectural theme. |
| Water Street (Grand Traverse to Lyon Street) Five buildings | Water Street Area six buildings State historic district registered as the Durant-Dort-Nash Historic District. (315 Water to 307 Mason Street) 1894 construction. General site of Jacob Smith Trading Post as beginning of Flint. Location of Saginaw Indial Trail. | Dort-Durant Carriage Office and Carriage Factories, Nash House, site of first trading post. Economic, technology and archeology theme. |
| | Burroughs Group consists of five structures. | Grouping of former residences of Flint's prominent citizens. |
| | Manning St. Group several residential structures. | Example of early Flint residences. |

# 9

# TRANSPORTATION

PREPARED BY THE DEPARTMENT
OF COMMUNITY DEVELOPMENT,
CITY OF FLINT, MICHIGAN

# ABSTRACT

TITLE: TRANSPORTATION ELEMENT

PREPARED BY: CITY OF FLINT, DEPARTMENT OF COMMUNITY DEVELOPMENT, DIVISION OF PLANNING AND PROGRAMMING

SUBJECT: TRANSPORTATION FACILITIES OF FLINT BY MODE

DATE: JANUARY, 1979

NUMBER OF PAGES: 109

ABSTRACT: THE REPORT EXPLAINS THE PRESENT TRANSPORTATION SYSTEM AND GIVES SHORT AND LONG RANGE SOLUTIONS TO PRESENT AND PROJECTED NEEDS. THE BASIC STRATEGY OF THE ELEMENT IS DEVELOPED WITH REVIEW OF THE SOCIAL, ECONOMIC AND ENVIRONMENTAL FACTORS IN THE CITY OF FLINT, SPECIFICALLY THE GOALS AND OBJECTIVES, AND GENERAL CONSIDERATIONS AS SUGGESTED BY THE CITY ADMINISTRATION, PLANNING DIVISION AND CITIZEN INPUT THROUGH THE 701 MASTER PLAN EFFORTS. THE REPORT IS SUPPLEMENTED WITH LAY NARRATIVES DESCRIBING CURRENT TRANSPORTATION PLANNING TECHNIQUES, FUNDING SOURCES, AND LAND USE IMPACTS.

THE PREPARATION OF THIS REPORT
WAS FINANCED IN PART THROUGH
A COMPREHENSIVE PLANNING GRANT
FROM THE
DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
AND THE
DEPARTMENT OF TRANSPORTATION,
FEDERAL HIGHWAY ADMINISTRATION

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# I. INTRODUCTION

## Introduction and Historical Perspective

Transportation is a major factor in urban growth and development. Conversely, the urban environment influences the character of its transportation systems. Those who have witnessed metropolitan transportation development and planning over the last decades know the large transformation that has taken place. Priorities change quickly, one day the user is most important, the next day the nonuser is equal. Then travel time, cost, and safety or air pollution, the national economy and the worldwide energy situation gain public attention. This report will give a brief history of metropolitan transportation planning and then show the need for a more stable but modular process to deal with the changing concerns of all parts of the transportation system.

## Early Approaches to Transportation Planning

Before the early 1950's, the prime concern in planning transportation in urban areas was costs for, and benefits to, the user. There was little "planning" for transportation in urban areas. "Planning" consisted primarily was making straight-line projections of traffic counts and comparing the forecasted volumes with existing capacities. "Transportation" systems referred almost exclusively to highways.

## Transportation Planning in the 1950's

The early 1950's saw the advent of large-scale urban transportation studies. The study in Detroit, and a later more elaborate effort in Chicago, was the most significant. The development of the digital computer which allowed for manipulation and analysis of large masses of data made both possible. Improving the technical side of the planning process was emphasized. Data collection methods were developed that cost millions of dollars in large metro areas. The data were used to develop models for forecasting travel in highways and mass transit networks for as much as 25 years into the future. Prime consideration was given to accidents, congestion and investment issues. Others such as air pollution, noise, and discomfort were considered later. The process focused on metropolitan areas, addressed transit, and resulted in fixed plans for capital investment.

## Changes in the 1960's

The Highway Act of 1962 recognizing the significance of the new processes required all large metro areas to have a comprehensive, coordinated and continuous (3C) transportation plan to get federal funds. City governments hurried to complete comprehensive transportation planning programs. The studies revealed the deficiencies in the mass transit systems. The Urban Mass Transit Acts of 1964 and 1966 tried to help the poor financial state of urban transit, by allocating $375 million for a program of grants, loans and studies.

Two results of these acts were significant. First, there was a renewed interest in transit technology; a variety of innovative technologies were identified and some tested. The second and more significant result, was the revelation that many people in urban areas were not being served by the dominant form of transportation, automobiles. If mass transit were allowed to deteriorate, many individuals, primarily the poor, black, young and old would suffer disproportionately. These acts helped to expand the areas in transportation planning and give the metro or regions a review-and-consent power over spending on federal urban transportation projects.

## The 1970's and the Future

The National Environmental Policy Act (NEPA) of 1969 required that environmental impact statements be developed and approved for all federal-aid projects. The word "environmental" here includes not only air, water and noise pollution but also social, economic, aesthetic and other related impacts. The NEPA forced planners and designers to consider all the significant environmental impacts. Some plan, strategy or design had to be developed to alleviate the problems or the project could be halted. Paradoxically, many impacts were difficult to identify and define, much less reduce to a quantify. Thus, until new technologies appear, it will be difficult to have more comfortable and convenient travel with less air or noise pollution and energy consumption.

Manheim and Suhrbier have outlined a set of basic "principles" that indicate of the kinds of things which will have to be considered in future planning programs. They provide a basis for discussion of future direction as they relate to broad goals and objectives in succeeding chapters. These principles are:

1. Single Multimodal Transportation System

   An organization should work to provide transportation as a service, using all modes and options, including investment in fixed facilities and operating and pricing policies.

2. Alternatives and Options

   A range of options are available, and should be developed to bring out the issues and assist the community in clarifying its objectives and decision-making ability.

3. Effects

   Identification and prediction of social, economic and environmental effects should be based on the group(s) affected.

4. Analysis Tools

   The technical analysis tools should be responsive to the principles of supply and demand and to community-environmental impacts.

5. Evaluation

Evaluation of a planning process should appear periodically throughout the course of study.

6. Public Involvement

Interaction between the technical team and potentially affected communities should occur at all planning levels and provide opportunities for negotiation among affected interest groups.

7. Institutions

The arrangement and organizational structure of political and public institutions influence the degree to which social and environmental considerations are incorporated in transportation decision-making.

These changes will likely alter the context but not the purpose of metropolitan transportation planning. There is a need for a modular framework or process for planning so that changes and modifications can be added without restructuring the system. Fixed resources and energy considerations dictate this approach.

Resource Management

The City of Flint, like many metropolitan areas, is in a significant period in its history. The "boom town" atmosphere of much of this century has been evaporating in the last two decades. Since 1960 Flints population has dropped by almost 30,000 people, mostly through migration to suburban areas and lowered birth rates. While some city residents may applaud this as reduction of urban congestion, fewer taxpayers are available to support transportation services. The problem is more significant when two other factors are considered.

Since 1960, the population of the out-county areas of Genesee County has increased more than 40 per cent, while the City's has dropped 13 per cent. The population of Grand Blanc, Davison, Fenton, Flint and Mundy Townships has increased more than 60 per cent. The population of Grand Blanc township has more than doubled in the last 17 years.

The stabilizing of population growth coupled with changing population patterns (migration between regions or counties, from rural to urban areas, or from cities to suburbs) has continued to alter the needs for travel in urbanized areas. The energy situation, with rising prices and fears of scarcity, has created concern about the dependence on automobile transportation for trips that can be made by other means.

While population shifts have been relatively severe, employment has been relatively stable in amounts and places. Over 75 per cent of the jobs in the county are still in the City of Flint. The City remains a place to work, but not necessarily a place to live.

This concentration of jobs and dispersal of population means that more workers are commuting from areas in the out-county to employment centers in the City.

The impact on Flint is two-fold. Fewer Flint residents are available to support City services, yet more individuals from the suburban areas are using the City's transportation systems for work and through trips. To compound this situation recent population and employment projections for Genesee County indicate only minute increases over the next 30 years, all in the out-county. The leveling off has already begun to be felt in the area.

Economic recession in much of the world has reduced the capital available for large-scale transportation developments, and countries and states have found it impossible to finance all the projects once planned. The priority in some areas is now to assure the survival of systems and find better techniques to operate them.

Because little growth is projected, the local planners must give priority to providing quality of existence rather than the number of systems or facilities. In planning for this future, only fixed resources will be available to pay the inflationary costs of a high quality services. The planning and development of transportation systems must be consistant with goals and objectives set by the community determining acceptable alternatives must be balanced against standards which were set in previous growth periods.

## Land and Transportation

What moves in a transportation system is determined by how the land near it is used. Residential neighborhoods generate one type, commercial and industrial areas another. Concurrently, a transportation system also affects the use of the land. Increased traffic flow and changes in travel purpose can modify or obliterate one land use and promote another. Street modifications (widening, re-alignment, etc.) designed to improve vehicle flow in residential areas often leads to creeping strip commercial development.

It is no longer acceptable to view transportation systems or problems strictly from the viewpoint of the user and the associated geometrics involved. Strict engineering considerations (pavement widths, curb design, horizontal and vertical alignment, intersection configurations, turn lanes and radii) have to be balanced against how they affect the way land is used. What effects will a proposed major street have on a residential area? Will access and egress to the neighborhood be enhanced by the transportation system or will too much unrelated traffic be funneled through? Does the proposed system segregate an area from nearby shopping, recreational, or educational facilities that it once enjoyed? Will precious greenbelt or natural foliage areas have to be sacrificed to change streets? Will orderly, appropriate development in an area be stunted by subsequent transportation development? These problems must be dealt with in any planned transportation program.

Paradoxically, while transportation systems can change land uses, they also can conserve and maintain certain types if well planned. A solid, viable residential area can be strengthened by maintaining the local character of the street system. Improvements and signs can be designed to limit the use of a system to local residents. Buffering and noise abatement techniques can reduce traffic interference. Commercial and industrial uses can be aided by providing adequate curb cuts and service roads for customer access.

These techniques require careful, analytical planning that addresses all the possible impacts on an area and attempts to isolate the alternative least damaging to the viability of the social, and economic fabric and to land uses.

## Planning and Programming Functions

Transportation planning is no longer the step-child of the urban planning process. More planners, engineers, and city administrators are realizing that planning for transportation projects and improvements requires thorough analysis and participation from all areas of government from the local to federal level. Transportation is not a supportive "service" responding to demands. It is an element of the City which shapes urban form and environment. As such, the transportation planning process must be sensitive to the social, economic and environmental impacts of any change as well as the user of the system. The decisions based on the process may involve major expenditures of funds and cause in land use, population and environmental quality which can seldom be reversed.

Planning for transportation systems must be predicated on two premises - the users needs for the transportation system and the effects of the system on the surrounding people and land uses. The first is direct and traditionally the most objective. It includes the problem of congestion, safety, capacity, user costs, facility costs, comfort, and user disabilities. The second is more difficult to quantify but no less important. Air pollution, noise, visual intrusion, right-of-way needs, relocation, land values and land use changes are important measures of the impact of the transportation system on the area it may intersect or affect.

The transportation planning process requires a broad description of a future transportation system, its needs and impacts. The major thrust of any planning study is determining the demand for travel in wide "corridors" of a region or city. Then an attempt is made to identify those systems, present and future, that can meet the travel demands in an acceptable manner. Then the plan is detailed, route locations are determined, proposed budget allocations are made, etc. - until the plan becomes reality. More specifically, the "steps" are:

(1) The planning and design process begins with an attempt to define the types of problems that do or will exist in the area where they are found. The factors affecting or effected by these problems usually are a significant part of the man-made and natural habitat.

(2) From the description of the problem and general problem domain, objectives and constraints can be identified to guide in the search for solutions. An objective may be to minimize travel time or reduce impact on contigious land uses.

(3) The third step is to set up model to simulate the proposed system impacts on: (a) the user, (b) the mode of transportation, i.e. auto, rail, bus, etc., and (c) the effects on the social, economic and land use environment (land use development, air pollution, noise, neighborhood disruption, etc.)

(4) Step four is to collect data, which is structured to provide the information necessary to establish the constraints for each model variable. This step also allows for the development of more definitive statements of the problems, problem domains and objectives. After analyzing data what may have appeared as a general intersection congestion problem, becomes only a problem at certain hours during the day.

(5) The fifth step feeds all the data to the model and predicts the future state of environmental and transportation service factors <u>if no changes in the transportation system are made!</u>

At this point serious alternatives can be formulated based on the objectives and constraints outlined in the second step of the planning process. These separate alternatives can then be added directly to the model and further considerations made.

Most transportation problems do not need the sophistication of this modeling process to produce acceptable solutions. Curb repair, or roadway widening to reduce congestion can generally be done without going through all the modeling steps. Planning for new transit systems, corridor networks, and street realignments need this type of analysis to determine their impacts on both the user and the individuals and land near the system.

The transportation planning process for the City of Flint, Genesee County, and Region V (Genesee-Lapeer-Shiawassee Counties) is a structural, co-operative effort made up of various local government officials, administrators, and planners. The following list indicates those organizations which form the backbone of the planning process for the area.

U.S. Department of Transportation (DOT)
Federal Highway Administration (FHWA)
Michigan Department of State Highways and Transportation (MDSH&T)
Region V Planning and Development Commission (PDC)
Genesee County Metropolitan Planning Commission (GCMPC)
Mass Transportation Authority (MTA)
City of Flint
  Department of Public Works (DPW)
  Division of Traffic Engineering (TE)
  Department of Community Development (DCD)
  Department of Parks and Recreation (PR)
Local Units of government in Genesee, Lapeer and Shiawassee Counties

Representatives from these public bodies have formed subsidiary committees to deal with specific transportation problems and issues. The Technical Advisory Committee (TAC) and Transportation Systems Management (TSM) are the principle committees.

Transportation planning activities for the Flint-Genesee County area are guided by the Unified Work Program (UWP) under the United States Department of Transportation (DOT) Order 1120.15., and based on the premise of a continuing, comprehensive and cooperative (3C) process. Planning continuity (and federal funding) is assured through the UWP. Consequently the thrust of the unified approach is to consolidate and coordinate all transportation planning efforts in metropolitan areas such as Flint-Genesee County.

Various internal procedures have been developed to supplement and facilitate the decision-process for transportation planning and improvements. These include cost-benefit analysis, cost effectiveness evaluation, capital improvements budgeting, capacity analysis, and neighborhood impact.

(1) The cost-benefit analysis methodology is based on the "willingness to pay" premise. How much of a given product people are willing to purchase at a given unit cost? In transportation terms this means that user costs (savings in time, energy usage, maintenance, etc.) are balanced against the cost of building the system (land acquisition, debt service and annual maintenance, etc.). The cost-benefit approach offers the advantage of neutrality. The data used leads to an exact determination of the best alternative, without the involvement of political, personal or environmental biases. On the other hand, this form of analysis can not identify and quantify all possible benefits to either the user or the system. Perceived costs of the individuals affected by the proposed system are also difficult to reduce to a dollars-and-cents basis because a benefit to one person may not be perceived as great a benefit to another. Most importantly this approach fails to support the carefully devised goals and objectives that formed the basis for the analysis.

(2) The cost-effectiveness evaluation techique is closer to a goal-oriented approach - in that - costs are balanced against indicators of effectiveness. Effectiveness measures the degree to which an alternative achieves its objectives - are the alternative systems compatible with present systems, do these systems materially reduce noise and pollution, do they present visual obstructions, do they require great amounts of land acquisition and relocation of residents? Thus, cost-effectiveness is the way in which information is presented to clarify relationships between alternatives and to outline tradeoffs or compromises that must be made to choose one alternative over others.

(3) The capital improvement budgeting (CIB) process is a method of allocating resources toward major, non-recurring, physical facility expenditures. Rather than establishing relationships among alternatives as in the first two processes, the CIB attempts to determine allocation of money to areas of the city that are most in need. Similar to the modeling process, goals

and objectives are established and data and information collected for all planning districts. "Desirability scores" and city averages are computed the each district is compared to these to determine their priority for improvements. A planning district with a great need based on the quantitative rankings would be placed high on the capital improvement list. Once priorities are set, alternatives can be priced and judged on their impact on the planning district and their impact on Flint.

(4) Capacity analysis is a basic tool used by traffic engineers and planners to determine the carrying capacity of any stretch of roadway or intersection. This process is predicated on analysis of those factors that impede the flow of motorized vehicles, such as the volume of traffic, width of roadway, proportion of autos, trucks and buses using the road, number of left-turn movements across traffic, driveways and intermediate intersections along the segment. Empirical traffic studies provide objective, quantifiable factor weights that allow an analyst to compute whether a part of a transportation system is able to carry adequate traffic volumes if it needs relief to reduce congestion. This type of analysis is especially critical for those urbanized areas of heavy use where modifications in the transportation system could impair the integrity of the social environment and land uses abutting it.

It is not suggested that the processes and techniques discussed in this section are the ways transportation planning should be or is being done. In different situations new steps could be added, deleted, or mixed to lead to a process and solutions more effective than portrayed here. However, there is a need to focus on one type of process so that approaches to transportation problems can be systemitized.

Data Sources

One of the major sources of data and information used for transportation planning is the Origin Destination Survey (OD). This valuable tool provides data on the origin and destination of all trips (i.e. where trips are coming from, where they're going), the purpose (work, school, shopping, etc.) travel time, and length of trip, the mode of travel (auto, bus, rail, etc.), and how the land is used at the points of origin and destination. This is the basis for predicting, through the use of computer modeling, the demand and flow patterns of future travel.

The OD survey measures a representative sample of the trips that originate or pass through an urban area. There are three types of vehicular and person trips in an area - those made by people and vehicles from outside the area (external trips), those made by people and commercial vehicles in the area (internal trips); and those needs by persons who reside in the area (internal residential). Each requires a different type of sampling, interview technique, and listing.

A cordon survey is used to inventory external travel. A cordon line is drawn around the study area, usually some distance from the population center, where the density of the roads is not too great. All roads which cross the cordon line are listed and traffic volumes are measured. Interviewing stations at the cordon line, vehicles stopped, and drivers questioned as to their origin, destination, trip purpose and so on. Trucks and other commercial vehicles are also stopped and their drivers questioned. The home interview survey measures the largest form of movement in an urban area, internal residential-based travel, which generally is about 85 per cent of all trips. People from a sample of one to 25 per cent of the households in the area are interviewed and data is collected to include both characteristics of the household and information about trips made by household members. House characteristics that are determined include such things as the number and ages of people, occupation, car ownership and income. Travel data includes origin and destination of trips, trip purpose, mode of travel, time of day, car loading, and land use at origin and destination. Using this information, trip making can be related to land use and then forecast as a function of land use type and intensity.

In 1966 the MDSH&T conducted an origin destination study in Genesee County from which much information was developed to use in the planning process. A more detailed discussion will be presented in Section III, Street Systems.

The Traffic Engineering Division of the Department of Public Works, City of Flint, produce data for their operations which are useful for the modeling and planning process.

From early spring until late fall the division conducts its traffic counts on the major streets and roadways throughout the City. Traffic counting devices are set up generally for one-week periods to record the volumes of traffic passing a particular point. Volumes can range from 2000 vehicles per day on a collector street to over 30,000 on a major arterial such as Dort Highway. Safety considerations are included Intersection accident rates are compiled from Police Department records as well as train volumes across roadway-railroad intersections for example.

The Department of Public Works maintains files on the surface condition of all city streets and uses these to establish priorities for street resurfacing projects and for capacity analysis.

Other data sources such as Genesee County's ECHO (Evidence for Community Health Organization) Program and the U.S. Bureau of the Census supply important demographic and socio-economic information. ECHO provides information on characteristics of the resident population and land use and housing quality for all census tracts in the city. The 1970 Census of Population and ECHO data are used in the computer modeling process to establish a base for population and travel demand projections.

## Funding Sources

Funding for transportation systems and projects can come from many diverse and varied sources. The funds can cover roadway construction; acquisition of needed right-of-way; modifications and installations of traffic signs and signals; curb, gutter and storm drain maintenance and repair; street resurfacing and roadway-railroad crossing improvements. The following list of some of the funding sources available for transportation system projects.

Federal Highway Safety Acts:

203, 209 & 230 - Railroad Crossing Improvements
Federal Aid to Urban Systems (FAUS)
Federal Revenue Sharing
Federal Aid to Secondary Roadways
Urban Mass Transportation Administration
State of Michigan Act 51 (Gas and Weight)
State of Michigan, High Hazard Intersection Safety
City of Flint Bond Funds
City of Flint General Funds

The City of Flint recieves the major portion of street maintenance funds through the State of Michigan Act 51, known as the Gas and Weight Tax. The State receives revenue from the nine cent per gallon gasoline tax and receipts from the sale of license plates and driving licenses and allocates these to the cities and towns of Michigan based on population and number of miles of major and local streets.

Flint receives about $2.6 million a year from this source. The amount varies from quarter to quarter because the factors are constantly being revised. The Gas and Weight Tax funds are used by the city for street-connected activities such as street resurfacing, curb and gutter repair, storm drain and catch basin maintenance, signs and signals, snow plowing. In addition, the administrative, operations and engineering costs for the Department of Public Works and Traffic Engineering Division are financed by money from Act 51. These funds can be used only for maintenance and repair of existing streets and administration and must be allocated both to major and local streets.

For each mile of major street the city receives $3,000 and for each mile of local, $800. The City also receives $7.50 per resident for the major street fund and $2.50 per resident for the local street fund.

Major street funds must be used on major streets and with local street funds on local streets - one reason why the major streets are resurfaced more often and are plowed sooner after a snowfall. Although local streets account for almost 70 per cent of the street-miles within the City, they get less than 30 per cent of the money. Due to this funding structure the city is generally hard-pressed to meet the needs of repair and maintenance for local streets. This is not altogether unfair since the major streets carry the majority of the city's auto and truck traffic and are corridors for cross-town movements.

Capital improvement projects such as railroad grade separations, roadway widenings, bridge construction and new street construction are paid for from sources other than Act 51 funds. These sources come under the general heading of public improvement funds and are not limited to transportation projects. The Public Improvement Funds are derived from a 2.5 mil assessment as part of the general 8.15 mil property tax assessment for the City of Flint. Most of the funds from this source are used for retirement and debt service on the city's general obligation bonds issued for other capital projects. About $800,000 annually is retained for use on various transportation capital improvement projects.

Federal revenue sharing funds are also widely used for transportation improvements and related projects. It has been the policy of city administrators to use a large part of the $4 million annually allocated for capital projects rather than as operating funds. The allocation process is complex but is based generally on population, per capita income and the city's adjusted tax effort from sources such as property and personal income tax.

Various federal and state agencies provide funds to municipalities for transportation system projects. A major source is Federal Aid to Urban Systems (FAUS) provided by the Federal Highway Administration and administered by the Michigan Department of State Highways and Transportation (MDSH&T). These funds are supplied on a local match basis (70 per cent federal - 30 per cent local) and can be used for major roadway construction projects, and various projects designed to increase traffic flow and mass transit options. Both the proposed Center Road and Lapeer Road widening projects will use the funding source. FAUS funds are allocated on a county wide basis through the 3C Transportation Planning Process and require that project applications be subjected to a rigorous evaluation process to determine their priority rating in the Flint-Genesee County area.

The Federal Highway Safety Act, through articles 203, 209 and 230, provide more money to modify high accident intersections and substandard railroad crossings. Crossing improvements on Averill Avenue, Longway Boulevard and Davison Road are being evaluated and specifications set to provide construction funding under the Highway Safety Act.

A potentially larger source of funds for roadway improvements are the Federal Economic Development Administration grants. The City recently received almost $3 million for major and local resurfacing projects - funds which will be spent in 1978 throughout Flint.

As can be seen from the previous narrative, funds are available from many sources for transportation systems and related projects. Each source has its own set of guidelines and spending constraints which are too numerous to detail here. Suffice to say that each source can be tailored to meet the needs of a particular project and that each project has to be analyzed individually when seeking funds.

## II. GOALS AND OBJECTIVES

The starting point of all planning and programming is to define where you are going. "Goals" are desired ends expressed in the broadest sense, derived from a consideration of "values" and condusive to objectives, alternative approaches, and definitive plans and schedules of action. "Objectives" are specific statements denoting a measureable end to be reached or achieved for a particular group of people for a particular time period.

Transportation programs have generally been characterized by a lack of clear statements of broad overall goals, probably because of the complexity of transportation problems and because programs generally have been designed to meet a specific problem, such as congestion, alignment, etc. Transportation is such an important element of the urban structure and so pervasive in its influence that it must be considered a big decision-making area in the shaping of urban form and environment.

The following goal-objective statements reflect a distillation of ideas and concepts generated over the last two years through the 701 Master Planning Citizen Workshops and recommendations from planners and various administrators throughout the city and county. This is by no means an exhaustive or final listing, it is amenable to change or modification as future events dictate. The vagaries of funding sources and uncertainties of energy availability dictate a flexible approach to goal-objective planning.

### General Goal

Develop a multi-model transportation system that compliments land use and affords mobility for the community; balance the need for accessibility with the need for a habitable urban environment.

1. GOAL: Provide a safe transportation system.

   OBJECTIVES: (To be quantified and evaluated on an annual basis through Transportation System Management (TSM) Program.

   A. Reduce accident rate.

   B. Reduce fatalities.

   C. Reduce conflicts between different modes of transportation.

2. GOAL: Provide an efficient, and economical transportation system.

   OBJECTIVES: (To be quantified and evaluated on an annual basis through the TSM)

A. Reduce congestion.

B. Minimize energy costs.

C. Minimize travel time.

D. Improve coordination of traffic signalization system citywide.

E. Reduce travel distances.

F. Distribute peak period assignments of work trips.

G. Minimize costs for transportation improvements by implementing low cost TSM options.

H. Minimize operating costs.

3. GOAL: Assure environmental, ecological, and aesthetic values in the design, routing, landscaping, and buffering of transportation improvements.

OBJECTIVES:

A. Minimize air pollutions (emissions).

B. Minimize noise levels.

C. Reduce visual intrusions to existing land uses, such as residential.

D. Minimize loss of street trees.

E. Incorporate sufficient landscaping into street project budgets to include appropriate trees, shrubs, grass.

F. Preserve visual vistas.

G. Minimize disruption of recreational lands.

H. Improve buffering of parking lots. Adopt stronger buffering ordinance (see appendix).

4. GOAL: Preserve and stabilize neighborhoods.

OBJECTIVES:

A. Avoid disruption of housing.

B. Minimize disruption of businesses, hospitals, and schools.

C. Avoid displacement of people leading to loss of population and tax base.

D. Reduce physical barriers within elementry school boundaries.

E. Maintain effective citizen input.

F. Restrict through traffic on local streets by design and routing.

G. Avoid one-way streets which limit local circulation while increasing through traffic in residential areas.

H. Avoid disruption of historic sites (See historical chapter).

5. GOAL: Coordinate transportation with land use development

OBJECTIVE:

A. Provide accessibility between major traffic generators.

B. Maintain effective communications with agencies and individuals affecting or affected by transportation improvements.

C. Avoid adverse impacts of street improvements which tend to promote land use changes, i.e. conversion of residential to commercial uses.

6. GOAL: Improve maintenance of street system

OBJECTIVES:

A. Continue annual citywide identification system to set priorities. Develop a cyclic program that will schedule street resurfacing by <u>greatest need</u> on a periodic basis.

B. Identify more funding sources for street resurfacing, curb and gutter replacement.

C. Increase amount of street resurfacing to bring all streets below a deficiency rating of _____

D. Revise FAUS project evaluation system to place more weight on street maintenance projects to compete with street improvements countywide.

7. GOAL: Encourage the use of mass transit (i.e. bus services, carpooling and vanpooling).

   OBJECTIVES:

   A. Increase ridership.

   B. Improve Mass Transit Authority (M.T.A.) bus services.

   C. Conserve energy.

   D. Reduce congestion.

   E. Afford opportunities for movement to economically and physically disadvantaged.

8. GOAL: Integrate transportation improvement planning with planning for other capital improvements through a capital budgeting and programming process.

   OBJECTIVES:

   A. Eliminate duplication or repetition of effort, minimize overall capital investment and replacement costs by adopting a single, six-year capital improvement program for all improvements.

   B. Coordinate street improvements in neighborhoods with scheduled work in housing rehabilitation, sewer and water, parks.

   C. Coordinate routine street maintenance and other scheduled work with major physical development projects (Urban Renewal, et al).

   D. Coordinate improvements necessary for the promotion of non-motorized transportation with other proposed capital projects.

9. GOAL: Assist in the improvement of railroad facilities to maintain a competitive position for rail services and reduce conflicts with other modes of travel.

   OBJECTIVES:

   A. Reduce number of railroad crossings at grade with major traffic arteries. Program construction of separations based on the Hazard Index Formula.

   B. Improve surfaces and signals at railroad crossings. Rubberized surfaces providing an average ten-year life should be used and constructed to time this replacement with grade separation projects.

C. Maintain communication with C&O, GTW, AMTRAC to identify problems and opportunities on a continuing basis.

10. GOAL: Upgrade air transportation facilities to meet forecasts for increased demands in passenger and cargo movement.

OBJECTIVES:

A. Meet objectives of the Bishop Airport Master Plan.

B. Reduce effects of noise on suburban communities created by expanding facility.

11. GOAL: Encourage non-motorized movement between high-use areas and in neighborhoods.

OBJECTIVES:

A. Increase bicycle facilities (such as sidewalk ramps, exclusive lanes, designated routes and storage areas).

B. Increase barrier-free design for pedestrians

C. Minimize conflicts between motorized vehicles, pedestrians, and bicycles.

## III. RECOMMENDATIONS

The preceding section of this element, Section II. Goals and Objectives, presented a distillation of various group and individual concerns in the transportation area.

Recommendations based on the goals and objectives present a paradoxical situation, inasmuch as the measures to be addressed are often mutually exclusive. That is, a recommendation or measure formulated to meet one problem may increase the severity of another problem in an area of general concern. For example, widening a roadway to reduce congestion may create excessive noise and air pollution levels on the abutting land uses. In another case, expansion of mass transit activities may reduce direct user costs but also may increase roadway congestion and retard efficient traffic flow.

The complexity and interrelation of transportation systems with the social, economic and environmental fabric of our community precludes simple, clear-cut solutions or recommendations to transportation problems and concerns. Consequently, transportation system improvements and policy must be based on a clear understanding of the various effects and trade-offs involved.

The following list of recommendations represents consideration of the implicit and explicit effects generated by transportation system modifications on both the user and nonuser and attempts to offer solutions that deal with both the positive and negative issues.

The recommendations are grouped under various subcategories to cover the general goal and objective statements previously listed.

### RECOMMENDATIONS

A. Safety

1. Preference should be given to improvements at major roadway intersections in the form of turn-lanes and a modification of signals to reduce intersection accidents.

2. Study various vehicle preemptive techniques at intersections to reduce emergency and fire vehicle response times and reduce accidents between emergency vehicles and other traffic.

3. All posted speed limit restrictions should be studied to determine appropriate vehicle speed levels.

4. Analyze all major railroad crossings and appropriate measures taken to modify unsafe crossings through signal or roadbed projects.

5. Analyze horizontal and vertical alignments of major roadways to determine deficiencies and steps taken to alleviate them.

B. Efficiency and Economy

1. Begin analysis of collector and arterial roadway capacity to determine improvements needed such as parking prohibitions and/or pavement widenings.

2. Promote mass transit option in high-density areas to reduce traffic congestion and pollution. Investigate such options as vanpools, jitneys and MTA bus service.

3. Investigate feasibility of staggering manufacturing plant hours to relieve congestion on major roadway corridors serving these facilities during morning and afternoon peaks.

4. Investigate feasibility of reversing lanes to increase capacity of roadway during "rush-hours".

5. Implement computer-controlled signal network to increase traffic carrying ability and improve flow characteristics of major arterial roadways for both 24-hour and peak periods.

C. Environmental Concerns

1. Evaluate projected air and noise levels of major transportation system improvements to determine potential adverse impacts upon surrounding land uses prior to planned construction.

2. Include Environmental assessment in preliminary planning for major transportation systems improvements in project area(s).

3. Include appropriate, tasteful, organic or inorganic buffering techniques along major transportation system improvements such as the form of landscaping, terracing, berming, etc.

4. Avoid unnecessary removal of street trees in system improvements and replace with appropriate types and sizes if necessary.

5. Avoid unnecessary removal of ground cover and turf patches.

6. Provide for aesthetic buffering of all off-street parking areas to minimize visual intrusion on surrounding land uses.

D. Neighborhood Stability

1. Avoid acquisition and relocation of individuals, families and commercial establishments for major transportation system improvements or modifications.

2. Avoid impartion and/or physical segregation of viable neighborhood units, public and institutional functions.

3. Avoid establishment of one-way pair systems through residential neighborhoods.

4. Implement a program of citizen input and participation in the planning and conceptualization stages of transportation system improvements.

E. Street Maintenance

1. Actively seek alternate funding for major and local street maintenance to include federal Economic Development Administration and Public Works sources.

2. Engage private firms under contractual agreements for street maintenance projects when Department of Public Works manpower is insufficient.

3. Coordinate street maintenance efforts with Department of Community Development in Rehabilitation Target Areas.

4. Continue to set priorities for street resurfacing to provide maintenance in areas of greatest need.

F. Planning and Programming Functions

1. Establish modeling and alternative testing processess to evaluate impact of all proposed transportation system improvements on transportation and land use systems citywide.

2. Continue coordination with Genesee County Metropolitan Planning Commission and Flint-Genesee County 3c planning process to formulate short and long-range transportation goals and improvements.

3. Continue participation in the development of the Unified Work Program (UWP) for intermodal transportation planning.

4. Develop short, medium and long-range proposals for achieving improved circulation and land-use patterns in the Central Business District consistant with current downtown project proposals.

5. Encourage coordination and data proliferation among all the legislative and governmental agencies involved in transportation planning, i.e. federal, state, regional, county and municipal.

6. Adopt a single six-year capital improvements budgeting process through the office of the city administrator.

G. Non-Motorized Activities

1. Investigate potential of using FAUS and other federal sources for building "people mover" types of transit systems, especially near Riverfront Center and Central City Plaza development projects.

2. Promote implementation of bike-paths and other non-motorized projects through FAUS funding sources.

# IV. THE STREET SYSTEM

## A. INTRODUCTION

Streets are the framework in which the city develops. They determine the flow of people, goods and services essential to the city's functioning. The streets also heavily influence how land is developed. Any change in street patterns or dimensions creates a ripple effect through the city which will benefit some people and adversely affect others. The critical questions raised by each proposed change is "who will benefit and what is the social and economic cost?"

Traditionally, street improvement programs have placed the major emphasis on ease of mobility and maximum holding space for automobiles. Although these remain important priorities, considerations of environmental quality and neighborhood integrity must be given more stress if the city is to remain a viable place to live.

A successful street system maximizes service to the user while minimizing the impact of the system on the surrounding areas. For example, widening a particular street may reduce congestion and delay but it may increase use with the accompanying increase in noise and pollution, thus eroding the adjoining neighborhoods.

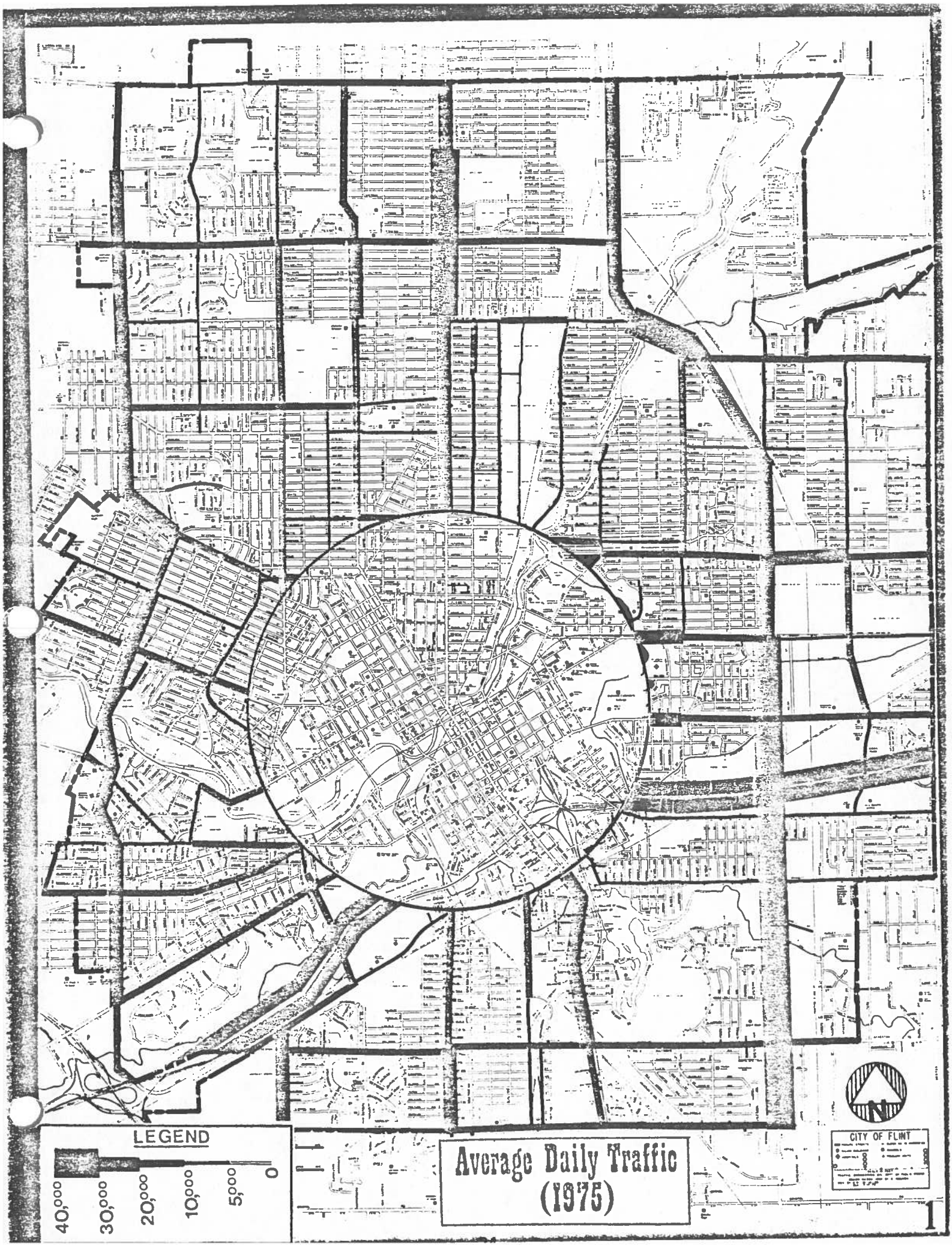
Factors that directly increase the value of streets to the user include: Increasing the capacity where needed; improving the safety; reducing congestion and delays, increasing flexibility; anticipating and designing methods of expediting the flow during these periods; and, anticipating population shifts.

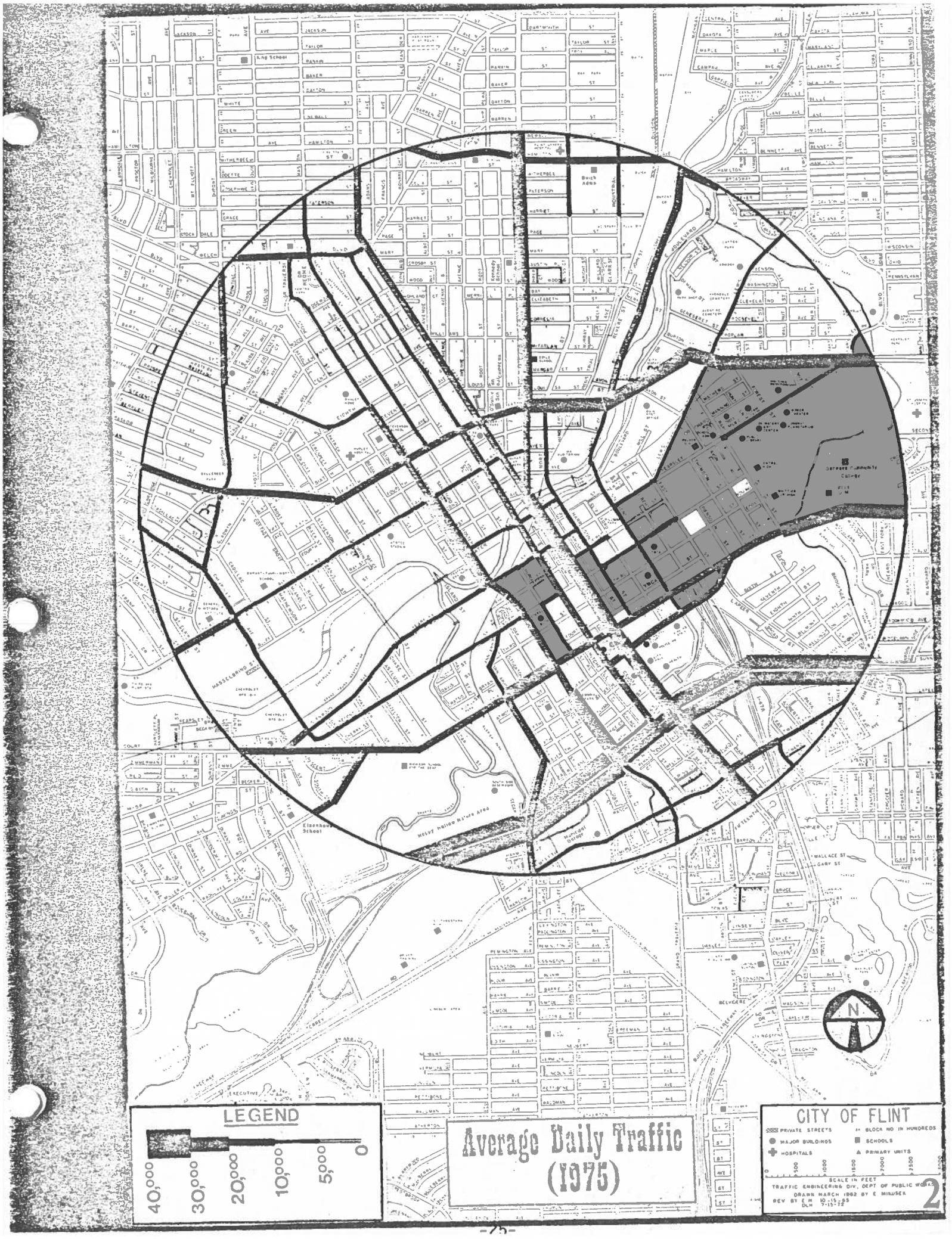
Factors which minimize the impact of streets on surrounding areas include: Reducing pollution; improving safety of pedestrians; preserving the neighborhoods; preserving the natural amenities; preserving historic sites; improving the physical appearance; and, improving land use.

### Current and Projected Conditions

The Flint street network is principally a grid system; one-way traffic patterns predominate in the downtown area while two-way flows are the rule elsewhere.

A major interstate freeway, I-75, carries north-south through traffic immediately west of Flint. The Chevrolet expressway, I-69, facilitates east-west movements through Flint south of the Central Business District. A north-south freeway loop, I-475 penetrates the central city and, after completion, should perform a function similar to I-69. North-south streets such as Saginaw, Beach, Harrison and Dort, carry large volume of local as well as through traffic not destined for the downtown area. After completion, I-475 should siphon off some through trips and provide direct access to city areas.


LEGEND
40,000
30,000
20,000
10,000
5,000
0
CITY OF FLINT
Average Daily Traffic
(1975)
1


LEGEND
40,000
30,000
20,000
10,000
5,000
0
Average Daily Traffic
(1975)
CITY OF FLINT
PRIVATE STREETS
BLOCK NO IN HUNDREDS
MAJOR BUILDINGS
SCHOOLS
HOSPITALS
PRIMARY UNITS
SCALE IN FEET
TRAFFIC ENGINEERING DIV., DEPT OF PUBLIC WORKS
DRAWN MARCH 1962 BY E MILLISER
REV BY EM 10-15-65
DLH 7-15-72
2

Pierson Road-Richfield Road, Pasadena-Leith, Hamilton-Davison, Flushing-5th Avenue-Robert T. Longway, and Corunna-Miller-Court all function as high volume east-west corridor through the city. These, in concert with the major north-south corridor such as, Ballenger-Clio, Dupont, Fenton, Grand Traverse, Detroit-Saginaw, Dort-Western and Center form a high capacity grid network traversing the city and largely determining primary travel patterns. Generally, all are four-lane thoroughfares with on-street parking prohibitions serving a wide variety of land uses from residential to industrial. With few exceptions, all also experience moderate to severe capacity problems (see section on Problems, Current and Projected).

Two major factors have or will affect the present roadway system; (a) the increasing amount of suburban-based traffic generation and, (b) the imminent completion of I-475.

A regeneration of the 1966 Origin-Destination (O-D) Study from MDSH&T's computer model calibrated for 1976, indicates that the city is experiencing increased amounts of suburban-based travel into and through the corporate area. All are aware, at least subjectively, of the growth of the out-county areas adjacent to Flint, but for the first time the impact has been measured on the existing transportation system. Using a variety of contemporary socio-economic and demographic propulation factors, the model has generated data that indicates an increase in both average trip length (TLD) and average trip times since 1966.

The average trip length (TLD) is a critical component of any analysis of travel patterns in an area. The TLD is derived from the models by accumulating all trips in an area by the actual travel time in minutes and then displaying them in a frequency distribution. This has been done for all trips in the area by travel purpose and at specific locations in Flint.

From an efficiency standpoint, fewer and shorter trips are better for a community for time and energy concerns. Also, different trip purposes as well as different types of modes have different distributions.

Because of their economic necessity, work trips are the most accurately reported and least elastic in any O-D study. A significant growth of the average work trip length since the 1966 O-D from 15.3 minutes to 16.08 minutes reflects the population shifts discussed in preceding sections. Obviously, people are traveling further to get to work because of the outward migration from the central city. Work trips in Flint account for fully one-sixth of the total trips, contributing greatly to the congestion problems on many corridors.

The long distance necessary to get to work is further accentuated by the fact that of the total work trips, only 50 per cent are less than 15 minutes, while 10 per cent are 26 minutes.

Analysis of other trips purposes (social-recreational, shipping, etc.), show only minute increases (less than 1 per cent) in travel times from 1966 to 1976 indicating that work trips to the city still predominate above all other trips.

Another method for observing changes in travel through an area, cut-line analysis, again points out the increased suburban orientation to travel patterns. Cut-line analysis is a technique where travel is monitored at various locations with a count program. These locations cut the major travel corridors in the city, thus cut-line. The analysis shows that travel has increased at the city limits 64 per cent since 1966. This is further confirmation of travel pattern changes caused by the spread of population and the relative centralization of the major employment centers.

The cut-line around the Central Business District indicates a 53 per cent increase over 1966, reflecting largely through movements along I-69, east to west, and I-475 to the south.

A final source of travel change information for Flint is a comparison of vehicle miles traveled (VMT) and vehicle hours traveled (VHT). These figures show a 46 per cent increase in total VMT for Genesee County to 8,130,310 miles of travel. A 30 per cent increase in VHT is also recorded for 1966 to 1976. Comparisons between VMT and VHT indicate that although the trips are longer in distance the time spent for each trip is less. The decrease in minutes per mile of travel is a result of the growth of expressway travel, up 430 per cent since 1966, and a decrease in arterial travel, down 22 per cent in 1966 to 1976. Flint has also experienced growth in VMT, 23 per cent over 1966, but this is considerably less than the average for the whole county - again reflecting population shifts to the out-county or suburban areas.

Continued projected growth of the out-county areas will further strain the capacity of the city's roadway network, provided the major employment centers remain in the city. A shift of large-scale employment to areas outside Flint, would reverse the trends.

The other significant influence on Flint's travel patterns is tied to the completion of the northern section of I-475 from Court Street to Saginaw Street near Coldwater Road. Full operation, scheduled for 1979-80, will allow unrestricted, high-speed vehicular movement through the city in a north-south direction. While this will facilitate access and egress to the city from the out-county areas, the direct impact will be felt more strongly on some of the major non-expressway, north-south corridors.

The Saginaw Street and Dort Highway corridors should experience a marked reduction in vehicular volumes. The MDSH&T computer network model indicates that volumes on both Saginaw and Dort should fall appreciably, to as much as 30 to 60 per cent of present

levels. The effect will be most strongly felt on North Saginaw from Coldwater Road to the Flint River. Interchanges at Coldwater, Carpenter, Pierson, Stewart, Broadway and Fifth Avenue-Robert T. Longway will provide ready access to the expressway for north-south movements and pull much of the existing traffic off Saginaw Street. South Saginaw will be similarly affected as much of the traffic south of the I-69 Interchange moves to I-475. The Central Business District area along Saginaw from the river to the I-69 underpass is relatively unchanged on the model. The trip destinations in this area are related primarily to local shopping and socio-recreation uses so I-475 should have little impact. This part of the model will be reviewed periodically as developments such as the River-front Center Hotel-Convention and Doyle Residential Redevelopment projects become closer to reality. The movement of traffic down-town also has implications for the proposed Center City Plaza which would either close-off a portion of Saginaw Street downtown or restrict through movements to two lanes. A proposed Autoworld Center located near the river would create additional demands on the system and force new travel patterns in and around the Central Business District.

The I-475 influence on traffic and flow patterns would seem to have a lesser effect on Dort Highway than on Saginaw Street. The simulation model indicates that traffic volumes on Dort could drop by as much as 30 to 40 per cent. The traffic shunted to the expressway would be non-local in character, that is, those 30 to 40 per cent would be primarily motorists using the corridor for through travel rather than for an immediate local need.

East-west travelers through the city will find little solace in the completion of I-475. Traffic effect on these corridors will be minimal except at the interchanges where heavy, concentrated volumes can be projected. With the exception of the A.C. electronics complex along Dort Highway, the major employment centers generally are contiguous to the new I-475 expressway route. Travel demand will be heaviest at those interchanges serving the major manu-facturing complexes - Chevrolet, Buick and Fisher Body.

Taken together, the completion of I-475 should result in a decrease of through-trip volumes on some of the city's major north-south arterials. East-west movements will not be enhanced to the degree seen on the other corridors.

Movement of vehicles from low-density suburban areas to high-density urban areas and the resultant concentration of traffic must be addressed for future planning in the city.

## Functional Classification

### 1. Federal Highway Functional Classification System

One tool for planning the use of the street system is the classification of streets by primary service function. Under Federal guidelines (1) streets must be identified as "major arterials", "minor arterials", "collectors" or "locals." This classification of streets is primarily used for federal funding and regulation purposes but also can serve to identify where major street improvements will affect land uses within the city. The system identifies progressive levels of traffic accessibility and volume in land bays when properly applied.

For example, an identified land use such as residential, would be considered a land bay. In that land bay, a great number of two-lane streets for local use would be planned. A few wider streets lying outside the residential area land bay would support these local streets. These peripheral streets would connect land bays and provide passage for through traffic around the land bay.

The map above represents a typically well-planned land use bay street system.

Street classifications and their functions are detailed in Appendix A while Maps 3 and 4 show current designations for the city's streets. Information for these classifications of Flint streets was obtained from the Genesee County Metropolitan Planning Commission and the Flint Department of Public Works in 1976.

2. Major and Local Street Criteria

A second street classification system used by the city is authorized by State Act 51, P.A. 1951 (Gas and Weight Tax Allocations). It categorizes streets as "major" or "local". Major streets are defined as "city and village streets of greatest general importance to the municipality." All other streets except expressways and state trunk lines (which are excluded from the system) are local streets.

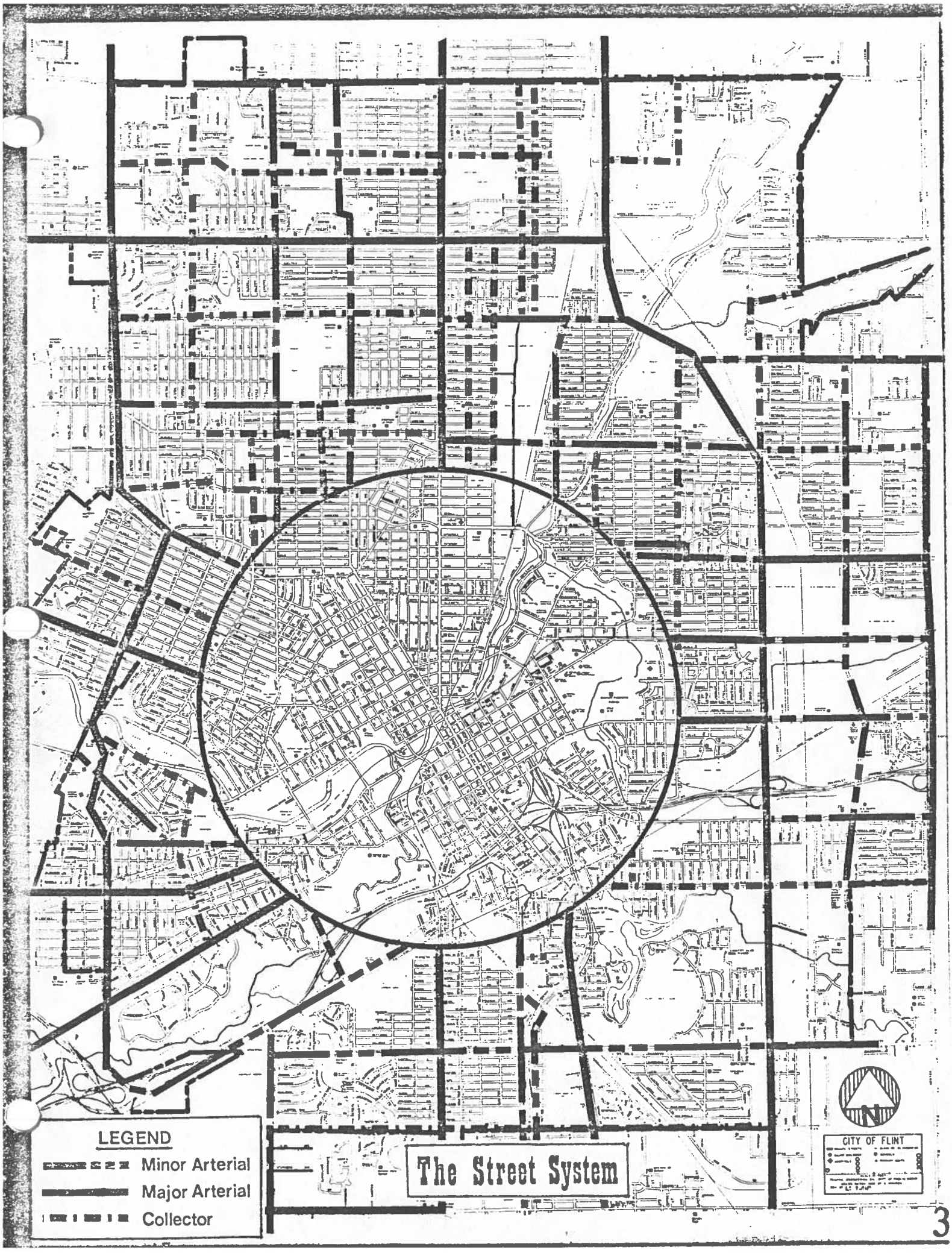
To be classified as a major street, it must be one of the following: (1) A street that provides extensions to state trunk lines or county primary roads and facilitates through traffic; (2) A street that is an integral part of a network that services the traffic demands created by industrial, commercial, educational or other traffic-generating centers; (3) A street that provides for the circulation of traffic in and around the central business district; (4) A street that is designated as part of a truck route; Or (5) A street that collects traffic from an area served by an extensive network of local streets.

Under this system, local governments may use state funds to build streets classified as major streets. Those classified as local streets can be builtwith the cost split evenly between local and state funds. State routes are built and maintained entirely by the state.

Flint generally uses funds supplied by the state under Act 51 for street resurfacing projects rather than new construction because of the small amount of money available. Streets are field-inspected periodically by the Department of Public Works which uses three criteria to determine when each type of street will be resurfaced. For major streets the criterion is: (1) Surface deterioration; (2) Use as determined by a daily traffic count; And (3) The length of time the street has been deficient.

(Resurfacing factors are detailed in Appendix B. Streets designated for resurfacing are listed in Appendix C).

After the factors are evaluated and the streets are selected for resurfacing, the Department of Public Works schedules the projects according to areas of need throughout the city.


LEGEND
Minor Arterial
Major Arterial
Collector
The Street System
CITY OF FLINT


LEGEND
Minor Arterial
Major Arterial
Collector
The Street System
CITY OF FLINT
PRIVATE STREETS
BLOCK NO IN HUNDREDS
MAJOR BUILDINGS
SCHOOLS
HOSPITALS
PRIMARY UNITS
SCALE IN FEET
TRAFFIC ENGINEERING DIV., DEPT OF PUBLIC WORKS
DRAWN MARCH 1962 BY E. MEUSER
REV BY E.M. 10-15-65
DLH 7-18-72
4
147

3. State Trunklines Classification System

Designation as a state trunkline is an administrative rather than a functional classification. It indicates that the street is under sole jurisdiction of the Michigan State Highway Department. Functionally, "state trunklines" are roads which have an interregional or state-wide significance.

Included in this classification are Saginaw Street, Dort Highway, Corunna Road and parts of Court, Fifth and Beach Streets. Freeways (I-69 and I-475) are also included in this classification. They are almost entirely constructed and maintained with state funds, including snow removal, salting, installation and maintenance of traffic signals.

The state may declassify a state trunkline on its own initiative or on a request from the city after an interagency study. After the freeway system is completed, all other state trunklines in the city may be declassified.

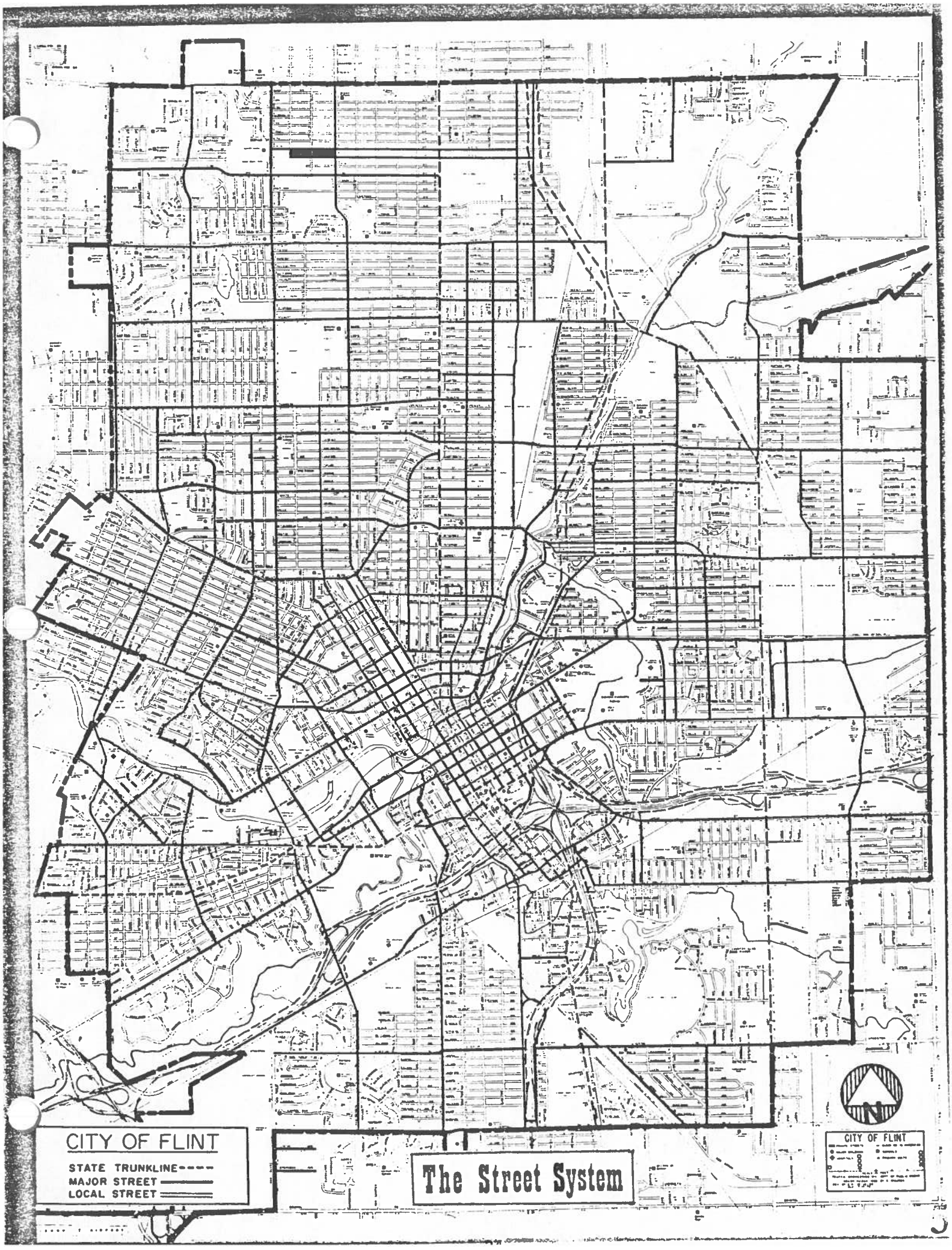
About 67 per cent of the miles of streets and roads in the city are classified as local streets while 27 per cent are major streets, and 6 per cent are state trunklines (including expressways). Map 5 shows the classification of each street.

Analysis and Problem Identification

General Considerations

In line with management of finite resources, planners are giving added weight to environmental and energy conservation factors. This shifting of orientation is in large part due to increasing public interest in the "quality of life". Transportation system modifications are no longer governed solely by the wishes of the traffic engineer, as witnessed by the success of various neighborhood and citizen groups who have been able to influence traffic decisions. The City has a responsibility not only to anticipate traffic demand but to coordinate system improvements with comprehensive land-use planning.

Almost all attempts to improve a situation start with the recognition and statement of a problem. Where and when the problem first emerges is difficult to tell; many are uncovered through the mass media; others are verbalized by citizen groups reporting to local officials; still others surface in discussions between local officials or administrators. It is clear that certain ones come to be held as more important or of broader scope than others and thus are given consideration.


CITY OF FLINT
STATE TRUNKLINE
MAJOR STREET
LOCAL STREET
The Street System
N
CITY OF FLINT

Some transportation problems surfaced on a formal basis as an outgrowth of the 701 Master Plan process, initiated under federal grant, in the Spring of 1976. Extensive citizen input was elicited to determine problem areas as perceived by residents in the city's 12 planning districts. Significantly, when totalled, the problem of greatest concern to the participants centered around transportation issues and their relationship to land use. As a whole, circulation and congestion were singled out in the problem identification process as being of critical concern to the citizens. The negative impact of thru-traffic and commercially - oriented vehicular movements in residential neighborhoods was noted as a special land use related problem. Deficiencies in the capital improvements implementation process were also noted, especially as they applied to the maintenance and construction of city streets and sidewalks.

The identification of transportation problem areas by the 701 participants, reinforced knowledge that transportation planners and city administrators held for a long time. The 701 process firmly established the concerns as being of paramount importance to the residents and in the future would shape transportation decisions.

A listing of all transportation problems could fill an entire book and still not be assured of covering all individual cases. A general listing of transportation is presented under three broad categories. The approach here is to divide all related problems into the areas of: (1) those that affect mainly the transportation system user, (2) those that are affected by the transportation system and (3) those that affect the transportation system.

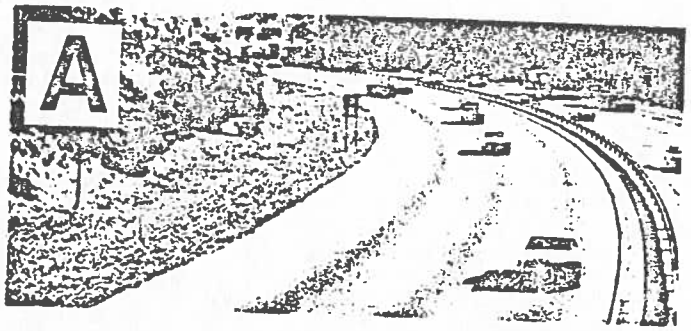
## Transportation User Problems

### 1. Congestion and Capacity

Two major traffic considerations constantly plague the city. Flow, congestion problems and land use impacts are significant areas of concern and will continue to be so.

People actively dislike congestion, presumably because congestion represents two significant wastes - time and money. Waste of money and excessive operating costs can be objectively determined. A vehicle being driven at an average speed of five miles per hour in stop-and-go traffic costs about five cents per mile to operate; the same vehicle moving at an average speed of 30 miles per hour costs half as much to operate. Estimating the value of a person's time is much more difficult. There is clear evidence, that given a choice, people will pay for higher speed, and hence time.

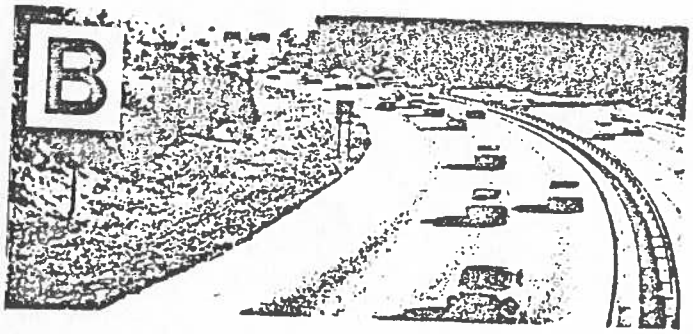
# LEVEL OF SERVICE



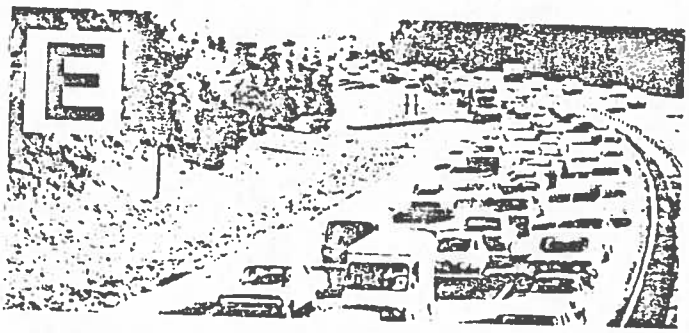

NO RESTRICTION ON OPERATING SPEED



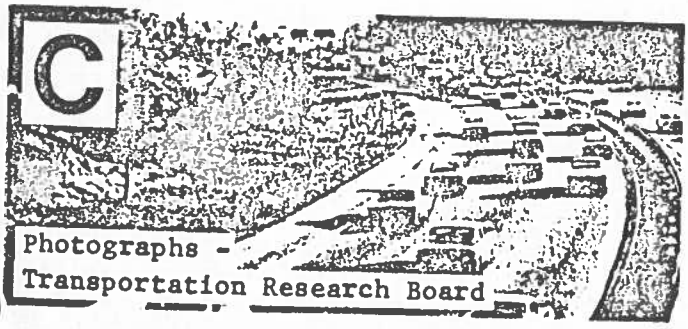

APPROACHING UNSTABLE FLOW - LITTLE FREEDOM TO MANEUVER




STABLE FLOW - FEW SPEED RESTRICTIONS




UNSTABLE FLOW - LOWER SPEED - SOME STOPS

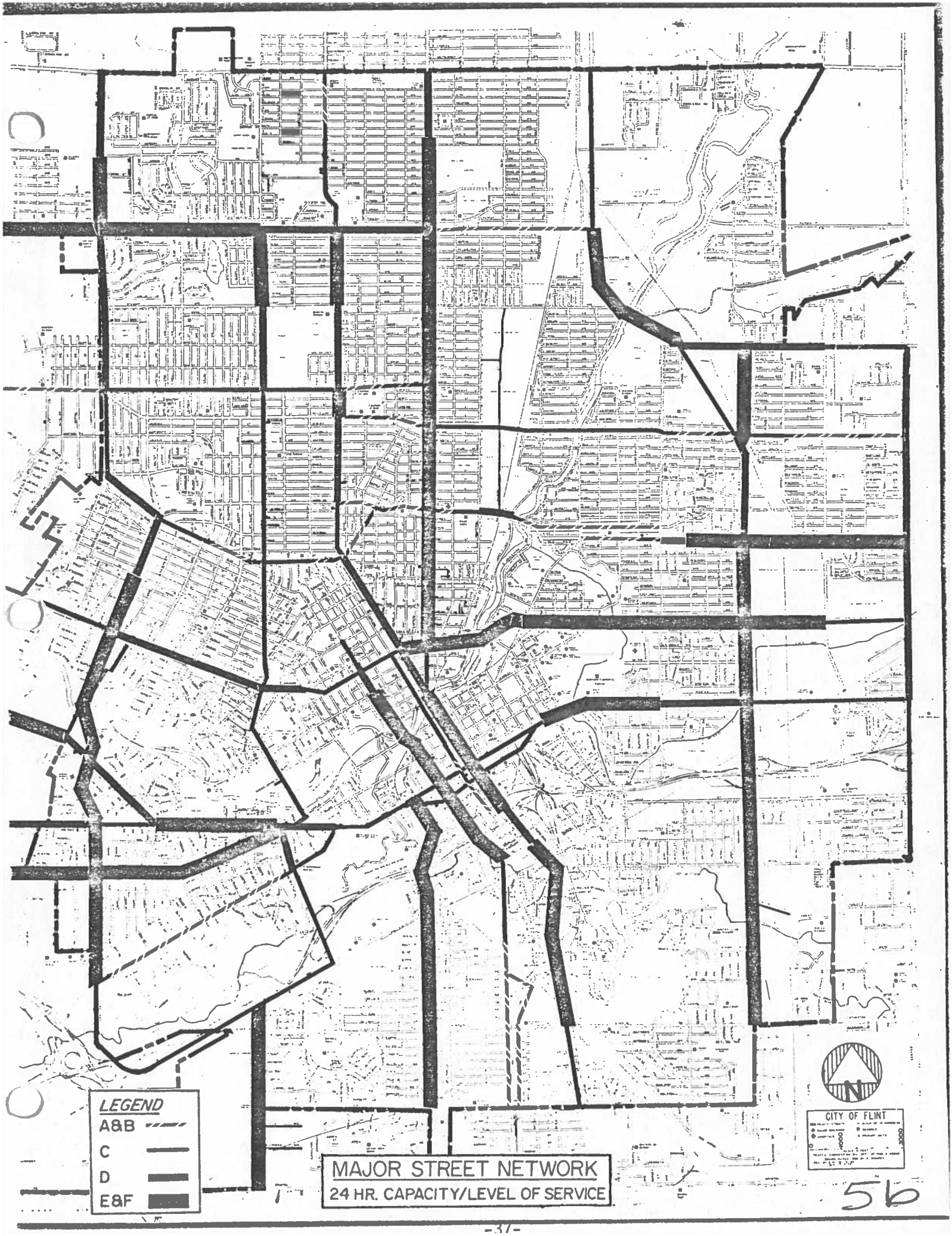



STABLE FLOW - HIGHER VOLUMES - RESTRICTED SPEED and LANE CHANGING




FORCED FLOW OPERATION AT LOW SPEEDS - MANY STOPS

5a




MAJOR STREET NETWORK
24 HR. CAPACITY/LEVEL OF SERVICE

5b

A glance at the map 5b. shows the problems of congestion in Flint. The capacity-level of service legend indicates the relative ability of a stretch of roadway to carry vehicles in an orderly, efficient manner, as discussed in Section I. For comparison, table 5a. indicates the level of service and the traffic flow characteristics associated with the level.

The Traffic Engineering Division of the City of Flint strives to design roadways to a level of service "C". A roadway operating at this service level could be said to be operating at design capacity. Operating levels above "C" ("D, E or F") would be over capacity and exhibiting congestion problems. Operation at levels of service "A" or "B" would exhibit little or no congestion.

The level of service ratings for the map were generated on a 24-hour basis, that is, traffic count volumes for a seven-day period were averaged over 24 hours, or one day. Other factors such as, truck and bus volumes, number of intersecting streets, left-turn movements, rail crossings, etc., all serve to decrease the carrying capacity of the roadways.

On-street parking and visual obstructions are also elements of a capacity analysis that have a direct effect on the flow of traffic. Vehicle parking along either or both sides of a street creates a psychological impediment to sustained, stable movement. The anxiety produced by the movement past parked vehicles causes drivers to reduce speed and avoid lane changes. A similar effect occurs when poles or buildings are close to the street. This forms a kind of tunnel effect which restricts vision to the sides and again reduces speed and lane changing.

The existence of transit vehicles and large trucks, especially on narrow streets, causes interruption in traffic flow due to the mass of those vehicles and their need for generous turning movements.

One of the most important elements in a capacity analysis is the total width of the roadway segment and the widths of the individual lanes. Two roadways, one having four, 12-foot lanes and the other having four, nine-foot lanes can have totally different traffic carrying abilities. Narrow lanes streets operate much like the visual obstructions discussed earlier, creating a psychological impediment to sustained speed and lane changing. East Court Street and portions of Flushing Road carry high traffic volumes on narrow four-lane pavement.

Obvious solutions to a capacity problem would be to simply eliminate parking and widen the roadway. The former definitely can have an effect: elimination of parking on one

side of the street alone can increase flow by 20 per cent; a 50 per cent increase in capacity can be realized by eliminating on-street parking from both sides! The second solution presents some problems in execution. On most of the major north-south and east-west street networks little or no right-of-way is available for widening. In many cases where it is, present residential or commercial uses are located so close to the right-of-way-property lines that widening would jeopardize the usability of the structures and impair the integrity of the land uses.

2. Safety

One problem which often has a great deal of personal agony involved is that of safety. It is unfortunate that few of us become concerned about safety until a situation strikes close to home. Although safety begins with an individuals own personally responsible action, the city of Flint is actively engaged in insuring safety for the area's transportation users.

The Traffic Engineering Division uses data complied by the Flint Police Department to pinpoint problem areas requiring redesign, signal installation or other physical solution.

The data includes information on accidents by month, eight-hour periods and time of day statistics. The greatest number of accidents in the city are at intersections. The 20 worst intersections for 1976-1978 have been analyzed to identify their specific problems (capacity, flow, physical design, signalization, etc.) and design alternatives proposed in the 1976 Transportation Systems Management (T.S.M.) Report available through the Genesee County Metropolitan Planning Commission. Appendix D lists these intersections.

3. User Operation

The problems of congestion, cost and safety confront us every time we travel. Many others are not as obvious but still are important to various individuals or sub-groups.

The auto-highway dominant form of transportation places certain operational requirements on the user. If a transportation system is created which necessitates an active, physical role from the user, then many physically or economically disabled people will not be able to of participate in the system. The unfortunate ones are already disadvantaged in some way - the poor, young, elderly, handicapped, and so on.

The increasing attractiveness of suburban living will preclude certain parts of the population. Mass transit service is virtually non-existent in the outcounty areas

making the ownership or availability of a least one automobile a necessity for shopping and recreational trips. The inability to own and maintain a car is a problem faced by the young, handicapped and elderly. As the proportion of elderly population rises in the succeeding decades more attention will have to be directed to less user-participatory types of transportation systems.

Problems Affected By Transportation

1. Air Pollution

The problem of air pollution is one that affects all of us. It is significant that various air pollutants such as sulphur oxides and carbon monoxide can cause acute and chronic plant injury, irritate the eyes and upper respiratory tract, may be cancer producing, and in some cases impair mental processes. These, in addition to corrision of metals, obviously are serious problems. Transportation, especially automobiles, is a major contributor to air pollution.

Transportation sources as a whole contribute over half of the emmissions every year in particular, carbon monoxide, hydrocarbons and nitrogen oxides. Air pollution from transportation would appear to be a major and costly concern for governmental agencies and private firms.

2. Noise

A problem that is similar to that of air pollution is noise. The effects of noise on health are both physiological and psychological, though primarily psychological. Psychologically, the affects are widespread:

- Noise can interfere with speech communication and the perception of other auditory signals.
- Noise can disturb sleep and relaxation.
- Noise can interfere with an individual's ability to perform complex tasks.
- Noise can be a source of annoyance, it can influence mood, and can otherwise detract from quality of life.

Physiologically, excessive noise is capable of producing hearing loss, although it is unlikely many have suffered from highway generated noise.

As of yet no one has been able to calculate the cost of noise in dollars, but it is generally agreed to be high. Highway noise affects property values, impairs health and lowers working conditions. There are strong indications that highway noise reduces property values when the property use is incompatible with the highway, as in the case of many residential areas.

The following figures indicate typical decibel (db) readings for common sounds.

| db | Source (source-observer distance = 100') |
|---|---|
| 150 | Jet Take Off (at close range) |
| 140 | Threshold of pain |
| 130 | Riveting Machine |
| 94 | Jackhammer |
| 86 | Sportscar, truck, shouted conversation |
| 85 | Vacuum Cleaner |
| 71 | Automobile |
| 50-60 | Normal Conversation |
| 50 | Quiet Street |
| 40 | Quiet Room |

The Department of Transportation/Federal Highway Administration (DOT/FHWD) has published noise standards for five land use categories as shown on Table ____.

Other federal agencies, such as the Department of Housing and Urban Development, have also adopted noise standards for activities falling under their jurisdiction.

TABLE

3. Visual Intrusion and Poor Appearance

One aspect of the impact of transportation on its environment is visual. Naturally, nothing creates more arguments than a discussion over what is "good looking" and what is not. It is important to try to design transportation facilities and systems that have a pleasing appearance both as they stand and in their environment.

The problem of visual intrusion can take many forms. There is the intrusion by a multitude of signs and signals - directional, one-way, no parking and so forth - that give that "scattered" look. Increases in the number of automobiles create intrusions by parked vehicles around and between buildings. Usually the only storage space available for the auto is in the already crowded confines of the city streets and open spaces.

4. Excessive Right-of-Way and Relocation Requirements

Transportation systems, especially highways, bring about problems associated with right-of-way and relocation requirements. These two problems arise because of the need for a very precious commodity land. Right-of-ways are required and acquisition is expensive, both in initial cost and in productive land taken from the tax base. Additionally, people are usually living on the desired land, and relocation can be a trying experience for both the displaces and those implementing the displacement.

It is difficult to use any land in the City of Flint urban area since someone is bound to be adversely affected either directly because he must move, or indirectly because a favorite social, recreational or commercial spot has been eliminated.

It is remarkable how much land area is occupied by transportation systems or facilities. In Flint, almost 25 per cent of the corporate area is consumed by streets, alleys or parking areas. Only the concentration of single-family residential uses exceeds this proportion.

5. Inappropriate or Undesirable Land Development

The potential access to land which transportation provides can also produce problems. It has been shown that an increase in land value, and hence development, go hand-in-hand with access. The enhanced development potential of more accessible areas can lead to certain inappropriate or undesirable land use. Growth regions have experienced this phenomenon, witness the commercial development taking place along Linden and Miller roads in the out-county areas near Genesee Valley Shopping Center.

The City of Flint has relatively little area for development left in the corporate limits. Further development here would largely be a result of transportation system improvements or modifications to existing systems. The threat of inappropriate or undesirable land development must still be contended with to minimize deletarious uses.

Unequal Impact Upon Certain Groups

Unfortunately, transportation systems do not affect evenly the whole urban area or urban population:

1. The non-user may be subject to the noise and air pollution caused by the automobile user.

2. The poor may get much worse transit service than the rich.

The list could be extended, but it is important that not all people stand to gain from new or improved transportation systems and this can create problems.

The poor, handicapped, the secondary worker, the elderly and the young are groups that too often are neglected in planning transportation systems. Typically, the poorer the person the more dependant he is on public transportation systems. United States Department of Commerce figures indicate that less than half of all families with incomes under $4,000, half of all black households, and half of all households with heads over 65 years own no automobiles. As more central business district jobs become white-collar, and unskilled and semiskilled jobs move to outlying areas, poor people are more disadvantaged than ever by mass transit systems that focus on central city areas and stop at the city limits.

Obviously any efforts towards betterment of transportation systems must attempt to identify special groups of interest and not treat the population of an area homogeneously.

Problems Affecting Transportation

Three major considerations influence and impact the transportation system explicitly: (1) increased population growth and dispersion, (2) increased automobile ownership, and (3) peakedness in the amount and timing of travel.

On a national scale population growth rate is decreasing. In Flint growth has been replaced by population decline. The loss of population in the city would seem to be a benefit to transportation systems, but the influence of out-county growth

and suburban orientation on city travel patterns tends to cancel out this advantage. As stated earlier, this suburban growth and dispersion places added impacts and constraints on the city's transportation system.

The increase in automobile ownership, a direct result of its popularity and utility, appears to be unhampered by recent energy problems. Of course, present trends are not expected to continue, but the number of vehicles will increase markedly, creating problems both for overtaxed roadway networks and parking areas.

While auto ownership has increased transit ridership has decreased markedly - an indication of increased consumer buying power and higher life-style. It appears that transit alternatives necessarily will have to be given increasing weight in developing suitable transportation systems.

The quantity and temporal-nature of vehicle usage have a direct effect on the transportation system. Vehicle miles of travel have increased faster than either the Gross National Product (GNP) or population. To make matters worse, allowances must be made for the significant hourly peaking in travel that takes place in the urbanized area. In Flint, the "rush-hours" (7-9:00 a.m. and 3-6:00 p.m.) account for almost 40 per cent of total traffic volumes during an average day. As a result, the city's roadways must provide for roughly three to four times as many trips as would occur otherwise. It has been the policy of Flint to design roads to accomodate these peak volumes at a level-of-service "C", which in itself is a compromise between "congestion" and "underutilization" of the street lanes. As has been shown, most of the city's major and minor arterials operate over the designed level of service on a 24-hour basis, not to mention peak hour.

Outside the Central Business District

Identifying transportation problems in areas outside the Central Business District is not as clear-cut as it is in the CBD. Varied land use considerations tend to mask the effect of the traffic problem. Impacts on residential neighborhoods or established uses complicate efficient and expedient solutions to seemingly pure transportation related problems. As an example, the proposed widening of Lapeer Road from Twelfth Street to Center Road appears at first to be a straightforward solution to a chronic congestion problem. In practice, the potential affects of noise and air pollution on the contiguous residential area may require a less severe, compromise solution. Situations such as this dictate a problem solving approach predicated on both traffic and land-use considerations.

The Department of Public Works, through its Traffic Engineering Division, has made great strides in the area of aggregating and isolating transportation problem areas in the city. The table in Appendix E, Priority Ranking Urban System Projects, indicates of needs throughout Flint. The 114 projects listed have been identified as having some combination of safety, capacity, physical condition, service, or demand deficiencies based on accident rates, roadway widths, and current and projected traffic volumes for the particular intersection or roadway segments indicated.

Unfortunately the analysis stops short in two critical respects, coordination and impact. Even a cursory glance at the list shows many diverse projects that appear as isolated projects. To date, no attempt has been made to co-ordinate these various projects or schedule their implementation. The unpredictability of funding sources dictates some form of capital improvements budgeting process to minimize "crises-oriented" decision-making and to smooth out annual fluctuations in the money available. The impact of the Hamilton Bridge or Fourth-Fifth couplet projects, as examples, will extend far beyond their respective project boundaries, requiring an integrated approach to the implementation of project improvements.

Routine street maintenance and sidewalk repair must also be co-ordinated to prevent having to tear-up newly laid pavement for subsequent street modifications.

Impacts on land use and neighborhood integrity have not been fully addressed in relation to the projects. Right-of-way costs indicated for the roadway or intersection represents only the actual acquisition and do not take into account the costs associated with the relocation of individuals or commercial enterprises. Often these costs are greater than the project improvement itself.

There is a definite need to take a closer look at the various positive or negative influences on neighborhoods caused by the planned transportation improvements. Substantial ground has been broken in this area for the Fourth-Fifth Avenue one-way pair study scheduled to begin in the spring of 1978. This study, conducted by an independent consulting firm, will attempt to assess the social, physical and economic impacts of various alternative relief solutions for the capacity and safety problems along Fifth Avenue. The methods and conclusions generated by this effort should serve as a model for future determining the affect of transportation improvement projects.

## Central Business District

The Central Business District (CBD) has experienced a great upheaval in the last two years. Various projects, such as the new downtown campus of the University of Michigan, Riverfront Beautification, Doyle Redevelopment and the construction of the northern portion of I-475, have all impacted the CBD and the transportation patterns and networks in it. The reconstruction and upgrading of two major river bridges at Saginaw and Harrison streets have forced motorists in the downtown area to seek alternate routes.

The completion of the UM-Flint Classroom-Office Building and subsequent work on the new Student Center forced the permanent closing of Kearsley Street from I-475 to Harrison, and Stevens Street from the Flint River to First Street. Both Kearsley and Stevens had functioned as minor arterials; Kearsley traversed the downtown area from Robert T. Longway near Mott Community College to Glenwood Avenue at Court Street, and Stevens connected the Municipal Center to both James Cole and East Boulevard Drive. Closing of segments of these two arterials seriously hampered the flow of traffic through the CBD. The loss of Stevens as a through street will be minimized when the I-475 service roads are completed in 1978. The loss of Kearsley will be harder to rectify as the street represented the only continuous westbound link across the CBD area. First Street in Kearsley's place has now been renovated to provide the west-bound pair with east-bound Second Street.

Closing these street segments vividly illustrates the traffic circulation constraints in the downtown. All the streets, with the exception of Saginaw Street, function as one-way pair systems, which from a safety and flow point of view offer obvious advantages over two-way systems. The development of large land bays for future projects is precluded by circulation needs for traffic on the one-way systems. The Central Business District is changing. Whether these changes will benefit the economic well-being of the area depends in large part on maintaining effective vehicular and mass transit access from all regions of the city and out-county.

The closing of the Saginaw Bridge structure in early 1977 had the most significant effect on circulation downtown. Over 25,000 vehicles per day were shunted to alternate routes, a situation that will continue well into 1978.

All these closures have created problems for motorists going to the CBD in terms of congestion and traffic circulation. As a result of the closing of the Saginaw Bridge, Harrison, Beach and Grand Traverse streets have been forced to bear the brunt of the recirculation movements in the area, because these streets are the only major north-south routes across the Flint River. Latest traffic counts, taken in May and June of 1977, indicate that Harrison Street is carrying volumes about 14,000 to 17,000 vehicles per day between Court Street and the river, well over capacity and almost double the volumes normally experienced.

Beach Street has also experienced increased traffic volumes, 4000 to 5000 additional trips passing over this stretch of roadway south of the river every day. Although no current data is available on the traffic volumes on Grand Traverse near downtown, the Traffic Engineering division of the city of Flint estimates an increase of about 10 per cent. Grand Traverse under normal conditions operates at service levels (both peak and 24-hour) over capacity, so additional volumes on the street only increases the congestion problem. The congestion seen on Harrison and Grand Traverse, and to a lesser extent on Beach Street is certainly only temporary. Completion of the Saginaw Bridge improvements will restore the diverted traffic back on to Saginaw Street.

Paradoxically, the situation now seen offers an interesting look at how future downtown developments could affect the CBD street networks. A proposed Center City Plaza on Saginaw Street between, Kearsley and Fourth Streets would replicate the situation now being experienced with the closing of the bridge over the Flint River. If the plaza were to completely close Saginaw to through traffic, then Harrison and Beach Street would again become major arterials leading into and through the CBD area. Consideration would have to be given to easing the flow of traffic along Harrison by providing connectors to Saginaw both north and south of the downtown, presumably at Fifth Street and somewhere near Second or Third Avenues. On-street parking would have to be removed from both sides to allow adequate lanes to handle traffic in a safe, expeditious manner. Likewise Beach Street, carrying traffic southbound, would need a connector to Saginaw at First or Second Avenue (north of the river) and a similar connector at the south end near Twelfth Street. All these connector proposals have been addressed at various times by Urban Renewal Plans, special studies, and urban systems analyses.

The congestion and flow problems could become more critical if projects such as the Riverfront Center Convention-Hotel Facility, State Office Building and Autoworld are built. These projects will add traffic to the system in and around the CBD. Estimates from studies by Traffic Planning Associates and Zuchelli and Hunter Associates predict there will be about 6000 additional trips per day made near the river.

The proposed State Office Building would provide 158 parking spaces for visitors plus 370 for employees. The turn-over period for the visitor spaces could be as short as one-half hour indicating a potential for high volume. The proposal site is just west of Harrison Street directly south of the river beautification project. Harrison and Saginaw streets are major access routes to the building.

The Autoworld project, tentatively selected for a site north of the Flint River between Grand Traverse and Lyon streets, could produce as many as 1600 auto trips per day during peak periods. Both Grand Traverse and Church Streets become prime paths for this traffic since projections

indicate more than 75 per cent of this movement will come from the south off I-69 and I-475. The Fifth Avenue-Longway corridor to the north, due to its ready access to I-475, would also be another major route to the Hall of Fame providing access for east-west movements.

Serious consideration should be given to reducing traffic on Grand Traverse street because of it's current congestion-capacity problems and potential effects of Autoworld. Right-of-way constraints and land use impacts mitigate against widening as a solution. A proposed one-way pair system with Church Street would give immediate relief and improve access but would require two connectors. One, located between Ninth and Twelfth Streets would divert northbound traffic on Grand Traverse to Church. The other, spanning the Flint River at Kearsley Street, would connect Church to Mason Street and provide one-way movement through the CBD north past Fifth Avenue. High capital costs and environmental impact problems would have to be solved but the one-way proposal offers certain traffic movement advantages.

The Riverfront Center Convention-Hotel facility located between Beach and Saginaw Streets south of the river will affect both Grand Traverse and Church Streets and probably Harrison. Conceptual schemes show various arrangements and numbers of rooms and parking spaces for the center. Although the design is not finished, ease of access is necessary. To function, the facility must have an adequate, high capacity roadway network.

The street system in the Central Business District is a closed, rigid system. The position and alignment of the roadways are set and no additional right-of-way is available to expand or modify individual routes. Land bays are small, which tend to discourage large developments. Closure of two major arterial routes, Kearsley and Steven Streets, points out the necessity of maintaining flow and access to the downtown, an area which should function as a local circulation system. In light of the development now taking place and potential for future growth the street system must be allowed to function to its fullest potential. This means whereever possible to reduce or eliminate on-street parking, provide for adequate mass transit access for those unwilling or unable to use autos, and investigate the potential of further paired systems. Future growth potential for the downtown will hinge on basic transportation issues.

Computer Modeling

The transportation modeling process is designed to answer four main questions:

1. How many trips?
2. Where to?
3. By which mode?
4. By what route?

To answer these questions, relationships between social, economic, and land use conditions, and trips are developed. These relationships are the model.

To answer question number one, Trip Generation Models are developed. Information obtained from the 1966 Origin and Destination Survey is used to build equations which determined the number of trips a household is likely to make for each trip purpose in the area. An example of a Trip Generation equation is Home Based Work Production = 22.48 + 1.71 (resident labor). This means that a house will make 1.71 (RFL) trips for work per day.

Because a trip has two ends, it is also necessary to model the attraction end of the trip. For example, Home Based Work Attraction = 61.14 + 1.43 (Total Employment). Thus, a large industrial area will attract 1.43 (TE) trips per day.

This brings us to the second question, "Where are the trips going?". We have generated trips at both the home and work end which now must be linked together. This is the function of the Trip Distribution Model. The model used in the study is the Gravity Model. It is based on Newton's theory of gravity and says that the relative attractiveness between any two activities (object) is inversely proportional to some function (square of the distance) of the physical separation between the objects. Time is used as distance in the distribution of the trips. The model builds a travel matrix which, based on the function of time-distance, connects the two ends of a trip. Therefore, the closer one activity is to another, and the larger the activities are, the more attractive they are to each other and the more likely they are to be linked as trips.

A different model is developed for each trip purpose that is identified. The work purpose is the most consistent, since the choice factor is less dominant. One must go to work, whereas a shopping trip is based on personal preferences and locational factors.

Having developed and distributed trips, it is important to determine by what mode these trips will travel (question 3). The Modal Split Model divides the trips generated and distributed by purpose, into cars, bus, train, etc. (these are the Modal components). These splits are based on relationships developed between the preference of a person to use different travel modes, and income, sex, age, service characteristics (e.g.; the difference in travel time of the same trip by car or bus) and location (does the person live in the CBD, City, suburbs, rural areas?).

The last question deals with route selection. This is the Traffic Assignment Process. It utilizes two major elements; 1) a simulated street and highway network of Genesee County, and 2) Moore's Algorithym to find the shortest path through a maze (all or nothing assignment).

The network is built based on the travel facilities of an area. Testing alternative facilities plans obviously necessitates changing the network. The basic network is a series of links (a link has an index at each end) which has the following data detailed:

1. Link Distance
2. Link Speed (calibrated posted speed)
3. Link Volume (Count)
4. Link Capacity
5. Link Direction (one or two way)
6. Link Travel Time
7. Link Functional Class
8. Link Jurisdiction

The assignment model (all or nothing) takes this data and the trip matrix developed in the trip distribution phase and allocates trips to these links. It literally starts with Zone 1 and builds a minimum path (by travel time) to all other zones. It then does the same thing for Zone 2 and so on. These loaded minimum paths are then overlayed by adding them together to get the travel volume on a particular link.

There are certain problems with this type of assignment process which is the most widely used. The most critical is that this model assumes complete knowledge on the part of the traveler - that a traveler will take the shortest route. This, as we know, is not always the case. Problems with congestion, equally quick routes, or any number of factors can intervene. Internal adjustments to the process partially compensate for these problems. While other, more humanistic approaches have been attempted, this is the most consistent and widely used approach.

This brief review of the transportation modeling process is designed to aquaint the reader with the system level planning tools used in this study. A more indepth discussion is available in the developmental report for the study through GMPC of MDSH&T.

## Current Plan Proposals

As of November 1978, the Traffic Engineering Division has recommended 114 street improvement projects. (See Appendix E). The projects, proposed for completion during a capital improvement plan to span about 12 years, are subject to approval by the Department of Public Works. DPW's decision on individual projects is based on a continuous review of factors including available funding, state requirements, land use projects, utility interface, citizen input and planning requirements.

# V. DOWNTOWN PARKING FACILITIES

## Introduction

We have become so accustomed to the convenience and freedom provided by the automobile that most people automatically use their car for any trip more than a few blocks. This universal attitude makes it necessary to provide for storage of autos at the destination. If suitable parking is not provided, routine trips to the area are unlikely.

Over the last two decades, suburban shopping centers have developed in part as a response to the demand for convenient parking. Flint's downtown has lost much of its retail business to six major shopping centers on the periphery of the city. Shoppers cite the more convenient parking and store hours at shopping centers as well as a broader range of goods for preferring them to downtown.

The downtown has evolved into a place for the weekday activites of government and financial institutions. While these functions attract people for employment or business two other roles are developing for the downtown. The first is educational because of the University of Michigan-Flint campus is downtown. The second is as a regional convention center as part of the Riverfront Center development.

These developing functions offer opportunities for revitalizing the downtown. An increase in employees, students and visitors will provide an increased market for restaurant, entertainment and specialty retail businesses.

Yet most of these people remain a "captive" population - coming to the central area because they have no option. Their needs will begin the revitalization process and provide a nucleus for diversification. Many more people in the metropolitan area must be motivated to come to the downtown. To attract these people will mean there will have to be adequate parking close to their destinations in safe, clean facilities.

## Current Conditions

Parking in downtown can be categorized into four types - private-paid, private-customer, bonded-city, and curb parking. Although the purpose of these types of parking is to provide storage for automobiles, they are competitive. Private-paid parking is usually operated as any other private business - for profit. It is also a means of holding land in anticipation of future development. Private-customer parking is usually provided a service to customers of an adjacent business. Bonded-city parking is either surface lots or structures built with guaranteed bonds sold to the public who expect to profit from their investment. Curb parking downtown is free or metered parking provided on a first-come, first-serve basis for short-term use.

There are about 5,400 parking spaces in downtown. Private-paid parking accounts for 2000 spaces, private-customer parking 900 spaces, bonded city parking 1790 spaces and curb parking about 700 spaces. Results of two surveys (1) (1974 and 1976) on parking demand show about a 91 per cent use of on-street parking, an 84 per cent use of private off-street parking, and a 63 per cent use of public off-street parking during the peak hours (12:30 to 2:30 p.m.). Peak-hour use of all facilities downtown is 78 per cent. This indicates that there is an adequate supply of parking for now. Map 6 shows an even distribution of this parking with radii for maximum walking distances (800 feet) overlapping the downtown.

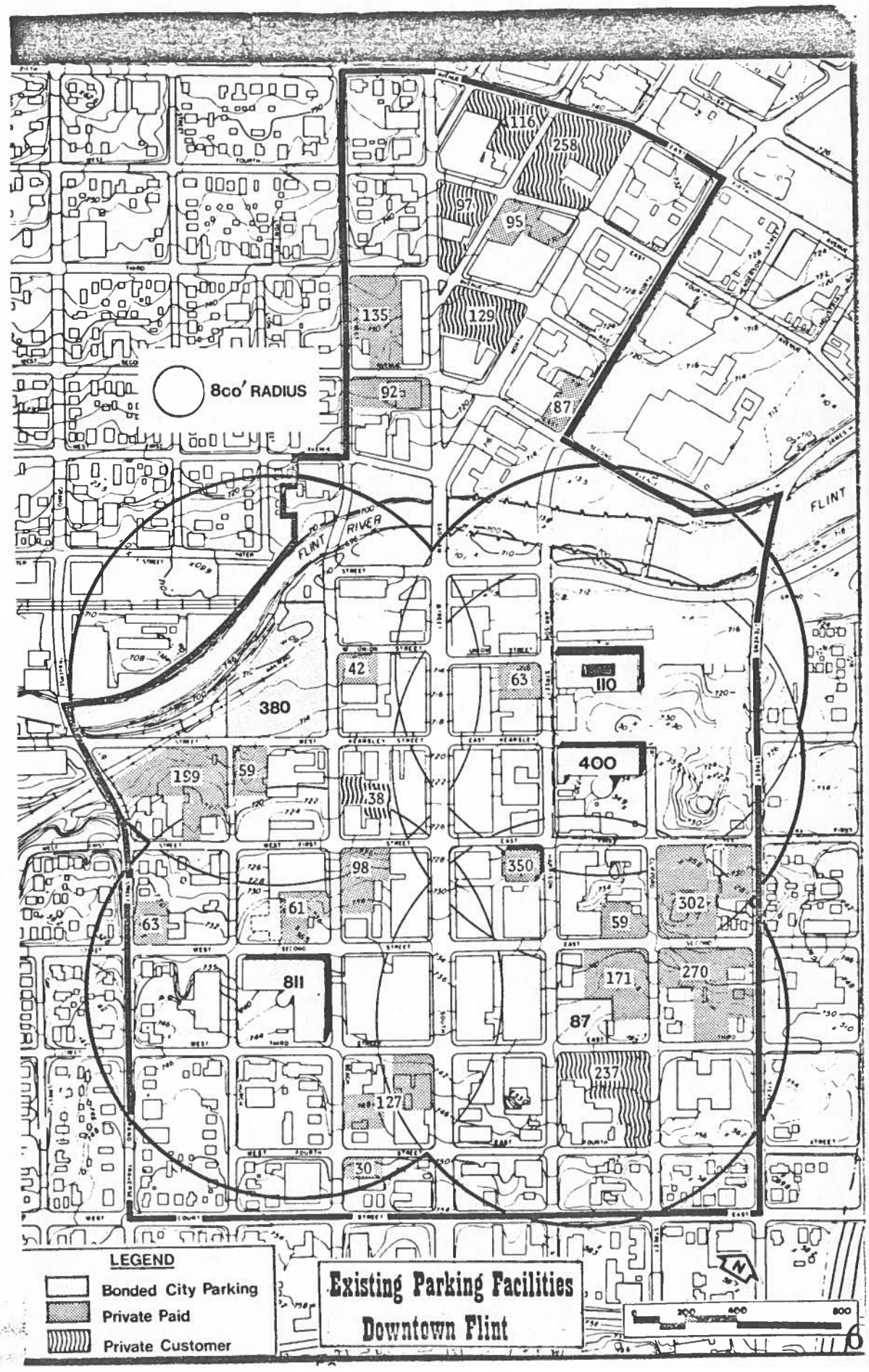
Analysis and Problem Identification

Although there is enough parking spaces now, future downtown development, traffic volumes, and governmental requirements will drastically alter the situation. The major developments, the University of Michigan-Riverfront Center and River Beautification will cause the vacation of streets used for curb parking, take about 900 off-street general use parking spaces and increased the traffic on remaining streets. These developments will also generate more traffic require some off-site parking. While most of the direct parking needs of the developments will be handled internally, surrounding areas will be pressured to accommodate overflow situations. If, as anticipated, these developments generate new businesses and more customers for existing business, more parking will be needed for the downtown.

Concurrently, state and federal transportation agencies are pressuring the city to eliminate curb parking on major streets downtown or face loss of funding for construction and maintenance on those streets. Compliance would eliminate about 225 curb spaces if parking is also removed from Saginaw Street. The criteria for parking on streets is listed in Appendix F.

The 5,400 spaces now in the downtown for the general public will be reduced by 24 per cent to 4200 spaces after new development and the elimination of curb parking. At a 78 per cent use now, this will mean saturation of downtown parking at peak hours with no allowances for convenient location, increased demand or new development. The Riverfront Center is projected to need 2,200 more spaces of which about 1,800 spaces would be on the site. The difference of 400 spaces required at peak hours will not be available off the site unless new parking is built.

Although accurate estimates of increased demand are elusive adequate parking is essential. If the downtown is to be revitalized, parking must be conveniently located and exceed peak-hour demand. Additional spaces for about 800 cars within 800 feet of the Riverfront Center are critical. Given a 95 per cent use of all parking, another 320 spaces should be built in the downtown area by 1990. Any further developments must provide all parking on the site, by shuttle from remote lots, or share parking only at non-peak hours.


800' RADIUS
FLINT RIVER
FLINT
116
258
97
95
135
129
92
87
42
63
110
380
400
199
59
38
98
350
61
63
59
302
811
171
270
87
237
127
30
LEGEND
Bonded City Parking
Private Paid
Private Customer
Existing Parking Facilities
Downtown Flint
N
200
400
800

The Pereira Report of 1973 designates four kinds of parking for the downtown.

1. Parking for shoppers requiring several well-distributed, medium-size sites (100-200 spaces), within 600 feet of major shopping destinations.

2. Large parking facilities (500 spaces or more) for employees strategically located in intercept positions along major approach routes to the central area. Walking distance of up to 800 feet to the ultimate destinations are acceptable. Some form of shuttle service is necessary for longer distances.

3. Small (less than 20 spaces), well-distributed, short-term (less than 30 minutes) parking facilities for people on short trips.

4. University parking to meet most of its needs on campus, or in near shared facilities, such as at the I.M.A.

These recommendations provide a general guide. The University will meet its needs on its site while parking for shoppers and employees is appropriately outlined. The location and size of these facilities will determine their effectiveness. Remote surface parking may be impractical since it would require a basic change in drivers' attitudes as well as an efficient shuttle system. Parking structures, although costly, may be more acceptable in terms of economical land-use and convenience. Dominating many of these recommendations will be the cost both to the developer and patron. The idea of any parking charge may discourage many shoppers unless that cost can be seen as acceptable due to the quality of the experience.

The revitalization of the downtown will depend on a parallel development of quality services and convenient access to those services.

(1) 1974 Traffic Engineering Survey, Department of Public Works and 1976 survey conducted by Traffic Planning Association, Inc., Atlanta, GA.

# VI. MASS TRANSPORTATION FACILITIES

## Introduction

Mass transportation is becoming an important consideration as vehicular congestion, environmental concerns and energy costs increase. The cost, both in dollars and quality of life paid for by unlimited use of the private automobile, will be difficult if not impossible for many to accept. Even now, some people are prevented from traveling freely because of the effort and cost. Income, safety, health, age and inconvenience all help to restrict essential travel. The "extras" such as entertainment and recreation are even more affected.

Although adequate mobility for society is not east to define, the concept of mobility is ingrained. Many transportation alternatives must be encouraged to promote this mobility on a local and regional scale. To be true alternatives a majority of people must view them as efficient and convenient. Mass transportation is one alternative.

## Current Conditions

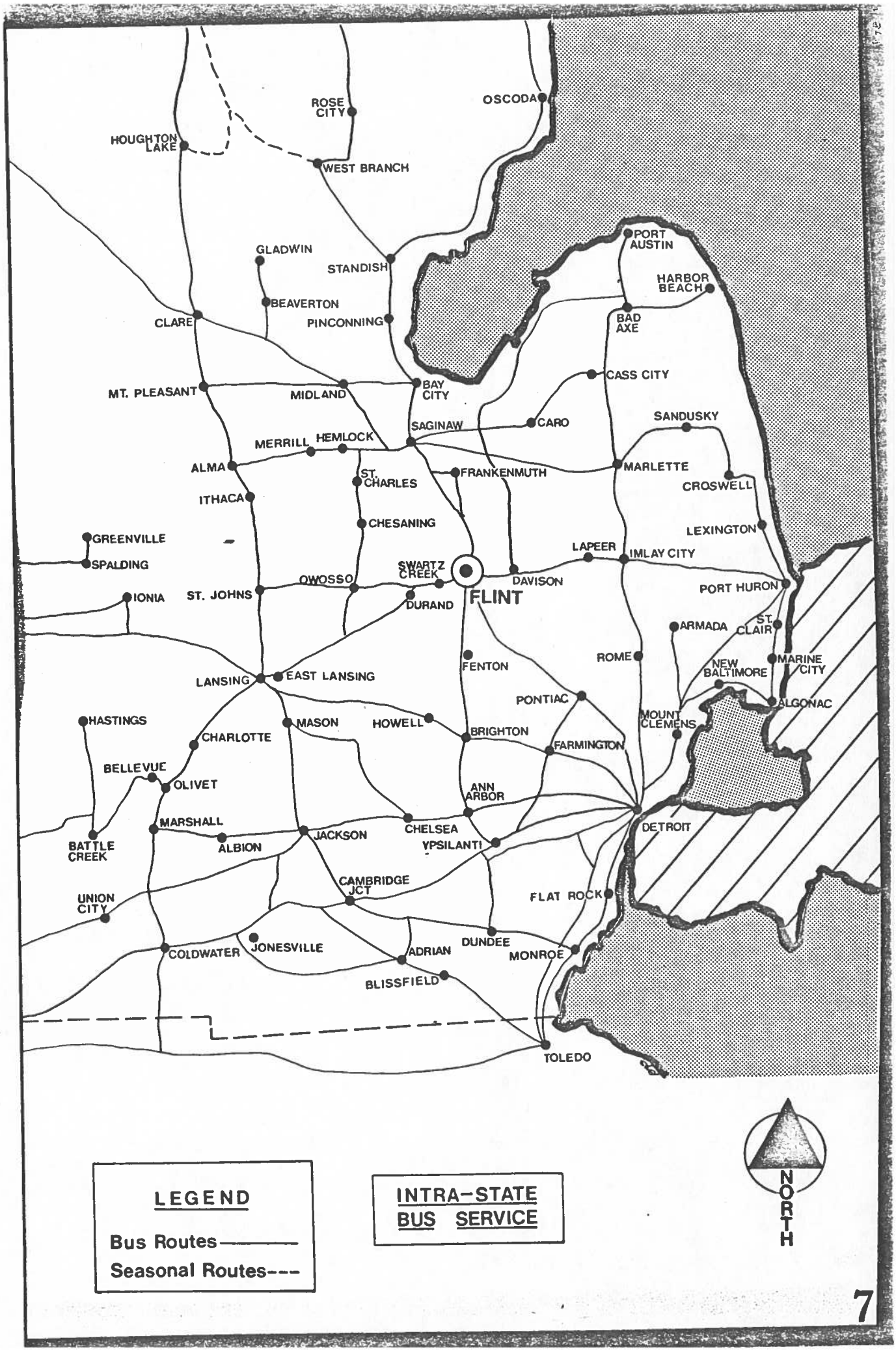
Flint is served by three inter-regional and one local bus system. The Greyhound Lines operates interstate and intrastate service. Indian Trails operates point-to-point express service between Chicago, Benton Harbor, South Bend, Kalamazoo, Battle Creek, Lansing, Owosso, Flint, Saginaw and Bay City, with secondary routes to Port Austin, Bad Axe, Imlay City and Detroit. The third, Valley Coach Lines, operates a Flushing to Port Huron route with service to intermediate points. These three systems use the Greyhound Bus Terminal in downtown Flint. Map 7 indicates the intrastate routes of these systems.

Flint and the greater metropolitan area is served locally by the Mass Transportation Authority (MTA), established in 1971 by the Flint City Council. This organization replaced the Flint Transportation Authority (FTA), which went out of business that year. From an initial 26, 45-passenger buses, the MTA fleet has expanded to 61 buses. These vehicles vary in size from 18-passenger minibuses to 66-passenger school buses.

The MTA has 12 routes in the Flint area. These routes (map 8) 86 miles one way, radiate from the downtown where all bus transfers occur. The MTA bases its route locations on the number of residents and major traffic generators within a quarter mile of a regular line-haul route.

"Within the City of Flint, about 80 per cent of the residents (154,650 people) live within a quarter mile of a regular line-haul route."

Regular service is provided six days a week on 30-minute headway except on the Fenton Road route, which operates on an hour headway. The service is provided Monday through Friday between 6:30 a.m. and 6:45 p.m. and Saturdays 8:30 a.m. to 6:45 p.m.




**LEGEND**

Bus Routes ———

Seasonal Routes---

**INTRA-STATE BUS SERVICE**

The MTA also provides three separate types of service to the College and Cultural area.

1. Service between the University of Michigan and downtown.

2. Service between the two University of Michigan campuses on 15 minute headways.

3. Service between the C.S. Mott Community College and the Career Development Learning Center.

The combined ridership of these three services exceeds 1,000 per day.

Ridership on the MTA has increased from 936,775 in 1972 to 3,319,442 in 1976, or a 169 per cent increase in four years of operation. While ridership on all routes has increased, vehicle miles have remained fairly constant, indicating more efficient use of the vehicles. The MTA has installed 60 bus shelters at high boarding points, elderly housing developments, hospitals and colleges. Bus stop signs giving bus arrival times are also planned, some of which have been installed.

Capital projects completed and planned included:

1. $2.5 million office and maintenance facility built at I-69/Dort Highway interchange to increase both operational and maintenance efficiency. The facility covers about six acres of the 17-acre site allowing for future expansion and a potential "transportation center" with rail and intercity bus terminals.

2. $3.0 million for 38 new 45-passenger air-conditioned coaches.

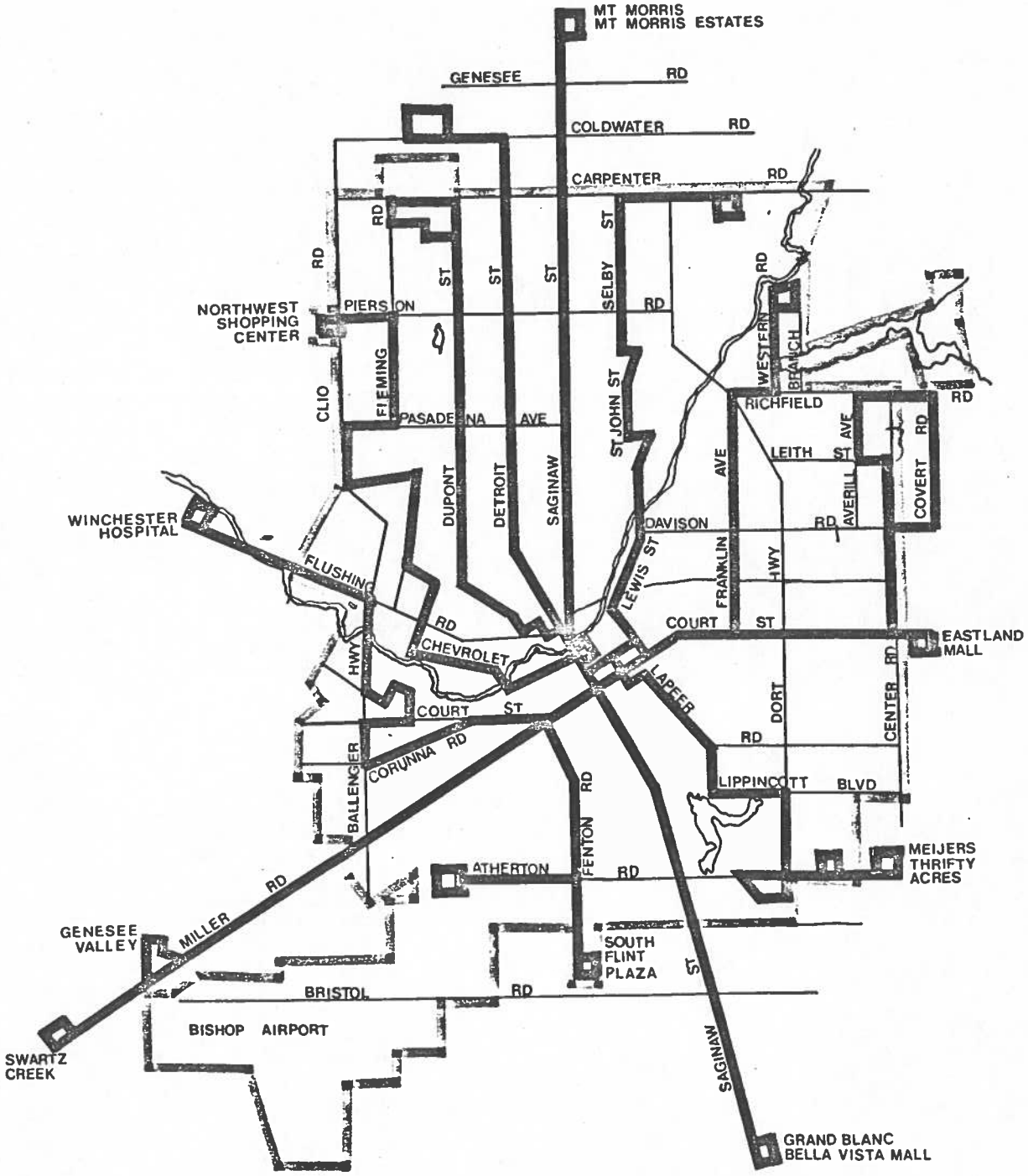
3. Two additional vehicles equipped with hydraulic lifts to serve to the elderly and handicapped. This will, allow the MTA to triple its existing service to these groups.

4. 35 additional passenger shelters (which brings the total number of MTA shelters to 95.

Analysis and Problem Identification

The MTA sees several short to medium-range problems with the increase in public use of their facilities. These problems, which are detailed in the S.S.M. Program Report listed, before, include capacity overloads at peak times, lack of factory service, insufficient number of passenger shelter areas and continued funding for two state demonstration projects which provide special service to the elderly, handicapped and college students.

Increased public transit patronage will be based on provisions for a continued upgrading of the system's headways, visibility, operating hours, efficiency, speed and comfort level. Mass transit must be able




**LEGEND**

Bus Routes

City Limits

**MTA BUS ROUTES**

NORTH

to compete with the automobile to draw riders. Less tangible factors such as safety, pollution or even cost will not, on a daily basis, induce people to drive less.

The MTA program concerns itself with a number of improvements to an ongoing system which should increase the efficiency, speed and comfort of the system. Money for the improvements is primarily from federal and state sources as governmental agencies shift emphasis from highway construction to all modes of transportation. This need for support should continue as multi-modal needs increase.

Additional attention should be placed on the visability of the transit routes. Unlike the streetcars of the past, no tracks act as continuous links to identify the system. Headways of 30 minutes and an hour may not be enough for areas of high use. Operating hours extending into the evening may be required to improve the system's convenience. Special systems other than buses may be appropriate for the downtown or inter-campus movement.

The long-range success of mass transit will be closely linked to its ability to exceed the private automobile in efficiency, convenience and comfort.

# VII. NON-MOTORIZED FACILITIES

## Bicycle Networks

Traditionally, bicycles have been regarded as recreational machines - primarily for children too young to drive motor vehicles. Now a sizable minority sees them in a far different light. A growing number of adults have found that bicycles are a financially viable alternative to the automobile for short-distance travel as well as a pleasant device for the promotion of personal health. In addition, many see bicycle riding as a personal contribution to the general welfare--helping to ease the "energy crisis", reducing air pollution, lowering the urban noise level, etc. In short, a great many people have concluded that riding bicycles is good for them and for their community and they have emphasized their conviction by investing money in these machines.

Yet the obvious benefits from an extensive use of bicycles (for riders and non-riders alike) will not be obtained until provisions are made to make riding safer and more convenient.

## Current Conditions

Local and national bicycle sales have increased substantially in the last decade. Sixteen million were sold in 1973 as opposed to 11.5 million automobiles. According to the Bicycle Institute, more than one person in three owns a bicycle and one-half of the population will own one by 1978. A high proportion of those sold are light-weight, precision models with variable-speed gear systems.

The bicycle route systems were designated by the Department of Parks and Recreation in cooperation with the Department of Public Works, Traffic Engineering Section and local bicycle clubs. The routes (Map 9) were selected to achieve three primary objectives.

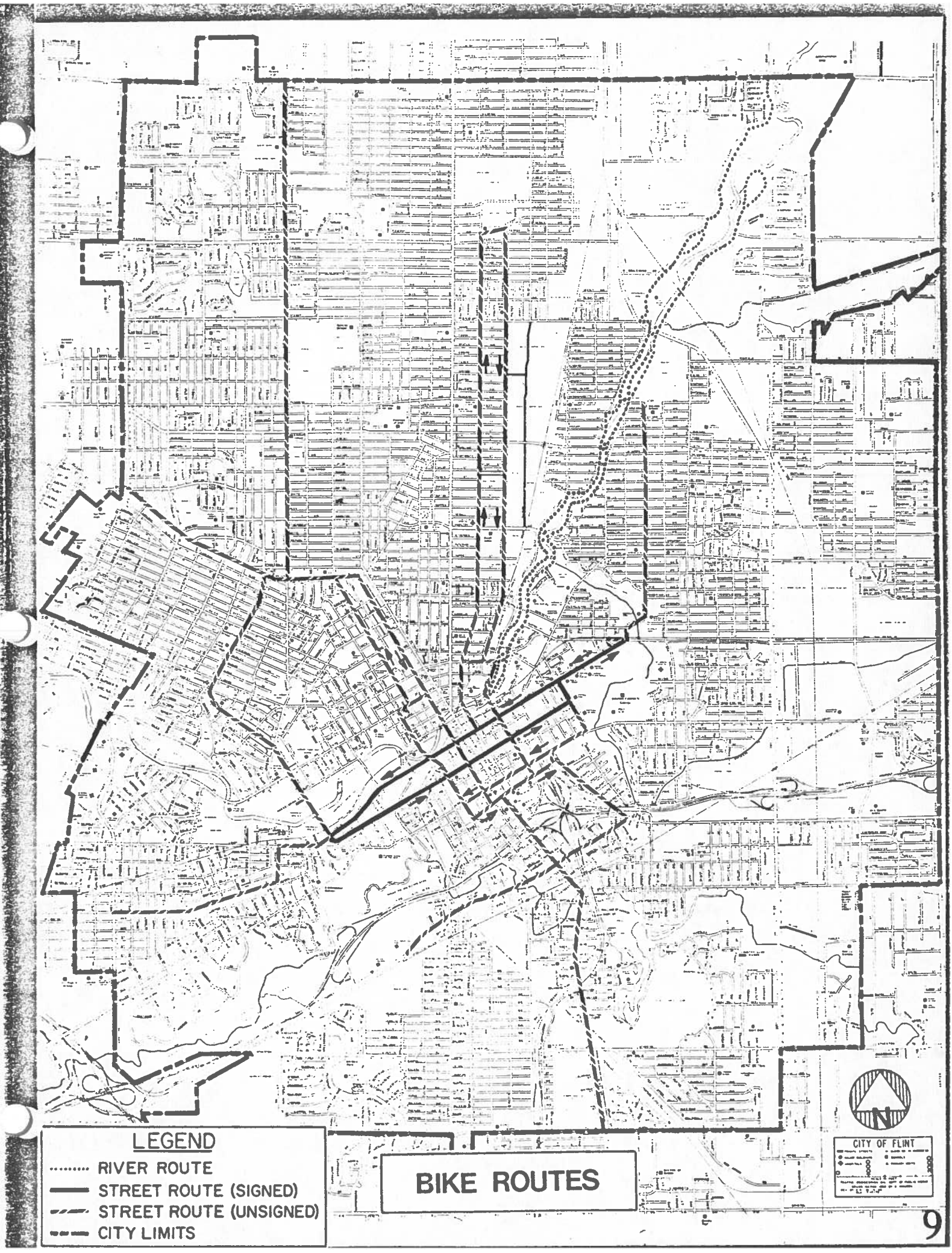
a. To connect residential neighborhoods to the Central Business District

b. To provide north-south and east-west routes across the city

c. To serve as collectors of bicycles from local streets.

These routes are on existing streets and will be identified with the international bicycle symbol and the words "Bike Route". Although signs have been purchased, they have been installed only on streets linking the College-Cultural Center to the central business district. The Department of Public Works is responsible for installing the signs.

The primary purpose of the signs is to make cycling safer by reminding motorists that cyclists have an equal right to use the streets. The signs also alerting the motorists to watch for a heavier concentration of bicyclists on the designated routes than on other streets.


LEGEND
RIVER ROUTE
STREET ROUTE (SIGNED)
STREET ROUTE (UNSIGNED)
CITY LIMITS
BIKE ROUTES
N
CITY OF FLINT

## Analysis and Problem Identification

About 20 of the 28 miles of the network fall on city-designated truck routes. Although these streets provide the shortest distances for bicyclists, they are also inherently less safe for cyclists than non-truck route streets.

The cyclist must compete for roadway with motor vehicles in all non-residential areas. City Ordinance, Section 11.118 (h) states:

> "...no person shall ride any bicycle upon any sidewalk in the City of Flint except on sidewalks in residential districts..."

While this does not pose any major problem for the experienced rider, it does for the inexperienced. Representatives from local bicycle clubs have told the Park and Recreation Board that experienced riders prefer to use main streets because they have signal-controlled intersections and they are usually the shortest route to the destination. In contrast, the inexperienced riders (both adults and children) would probably be safer riding on sidewalks and low-use streets.

Maintenance of the bicycle network is crucial. Variable-speed gear bicycles (those most likely to be ridden on the network) have precision mechanisms and thin tires, easily damaged by uneven or littered surfaces. This will make frequent cleaning of the routes necessary. On the positive side, bicycles themselves put less stress on the surface.

Thus while it is necessary to keep the bike route in better condition, bikes will cause less damage than automobiles to surfaces from which motor vehicles are excluded.

Additional problems should be investigated in a coordinated study prepared by the Department of Parks and Recreation, the Department of Community Development; and the Department of Public Works. The study should include the following problem-areas:

a. Safety

   (1) Conflicts between automobiles, bicycles and pedestrians.

   (2) The location of bike paths, lanes, and routes

   (3) Bicycle route signs

   (4) Maintenance of bike routes

   (5) Condition of bike route surfaces

   (6) Curb ramps

b. Security for parked bikes at destinations along routes

c. Enforcement of bicycle ordinances

(1) Licensing

(2) Proper use

Plan Proposals

The Recreation and Park Department has designed a Flint River Bikeway route from the downtown north to Carpenter Road. Construction was begun in 1976 on this federally funded project and was completed in 1977.

Breakdown of Flint River Bikeway

| Total Length | East Side | West Side |
|---|---|---|
| 4-foot bike paths | 4.07 miles | 4.46 miles |
| 8-foot bike paths | 13,000 linear feet | 8,600 linear feet |
| street bikeway/other | 6,000 linear feet | 8,600 linear feet |
| | 8,700 linear feet | 6,750 linear feet |

The university impact study by Pereira proposed that the part of Kearsley Street through the University of Michigan Campus (Harrison Street to the I-475 Expressway) be used exclusively by bicycles and pedestrians. Motorized traffic on this street segment ended in 1976.

Pedestrian Networks

The most basic and oldest mode of transportation is walking. Because walking has no age limits and it requires only minimum physical abilities, it can be the most efficient, healthy and enjoyable form of movement. Although the needs of pedestrians are few, these needs have generally been treated as add-on items in the transportation network. But in the urban areas we can no longer afford to treat this mode of transportation so casually.

Density of land development, particularly in the downtown, will impose limits on vehicular use of streets and parking. Rising energy costs and environmental concerns dictate a search for alternatives to unlimited use of the automobile.

While increased pedestrian movement offers an alternative, greater use of this mode cannot depend on external economic forces. The impetus must come from a reduction in conflicts with vehicles, elimination of physical barriers and sufficient amenities to create an enjoyable walking experience.

Current Conditions

The terrain of Flint is flat to gently rolling, allowing long, comfortable walking distances. A 10-minute walking distance is about

2,200 feet (.4 of a mile). This distance makes the downtown internally accessible and also places adjacent residential areas within walking distance.

Outside the downtown, little data is available about pedestrian circulation needs. Accumulation of city-wide information depends on development of physically defining limits of pedestrian movement. These limits include distance, seasonal constraints and natural and man-made boundaries.

Analysis and Problem Identification

Although there are no comprehensive studies of pedestrian movement on a citywide basis, planning for the development of downtown has produced some analyses. Studies have been directed primarily at the movement of pedestrians from parking areas to the downtown. Walking radii of five and 10-minute distances are drawn around the development areas to point out adequacies and deficiencies of automobile storage.

In the university site, an exclusive pedestrian-bicycle system will be maintained. This will eliminate internal conflicts with automobiles and promote free movement for pedestrians. Other developments such as Riverfront Center and River Beautification will also promote pedestrian movement with overhead walkways and by closing streets. Yet since these plans are essentially internal they do not deal with the needs of pedestrians citywide.

Outside the downtown area, the 10-minute walking distance can be used as a guide to determine neighborhood units and local services for those areas. Natural and man-made barriers form boundaries for these potential neighborhoods and can be used as a starting point. The 12 areas of the city designated as planning districts can be subdivided using the 10-minute walking criteria modified by the natural and man-made boundaries.

Availability of small retail functions, parks and schools could then be evaluated on a pedestrian scale. Those areas lacking such services would be pinpointed for more investigation. A local system of pedestrian routes to these facilities could be planned or improved. Priorities for limited funds could be set based on this barrier-free pedestrian network, much the way street improvements are allocated now.

In a simplified example, major and local sidewalks could be designated to avoid conflicts with major streets. Priorities for tree planting could be scheduled along these pedestrian routes and rest areas provided for longer routes connecting neighborhoods. Basic to the system would be the defined area comfortable for walking. The networks would promote pedestrian movement, set priorities for public works projects, and define neighborhood needs.

# VIII. RAILROAD FACILITIES

## Introduction

Railroads are an essential part of Flint's transportation system because of their vital role in moving freight for the automobile industry. The three major facilities of Buick, Chevrolet, and A.C. Spark Plug depend on railroads to bring in raw materials and parts and carry out finished products.

Railroads are also important to other parts of Flint's economy since they carry in or out much of the lumber, scrap, paper and other goods used or made here. AMTRAK has offered passenger service to metropolitan areas east and west of Flint since 1975. Although new, this form of mass transit provides a pleasant, safe and inexpensive alternative to automobile travel for intercity travel in a time of rising energy costs, traffic fatalities, highway congestion, and destination parking or storage problems.

## Current Conditions

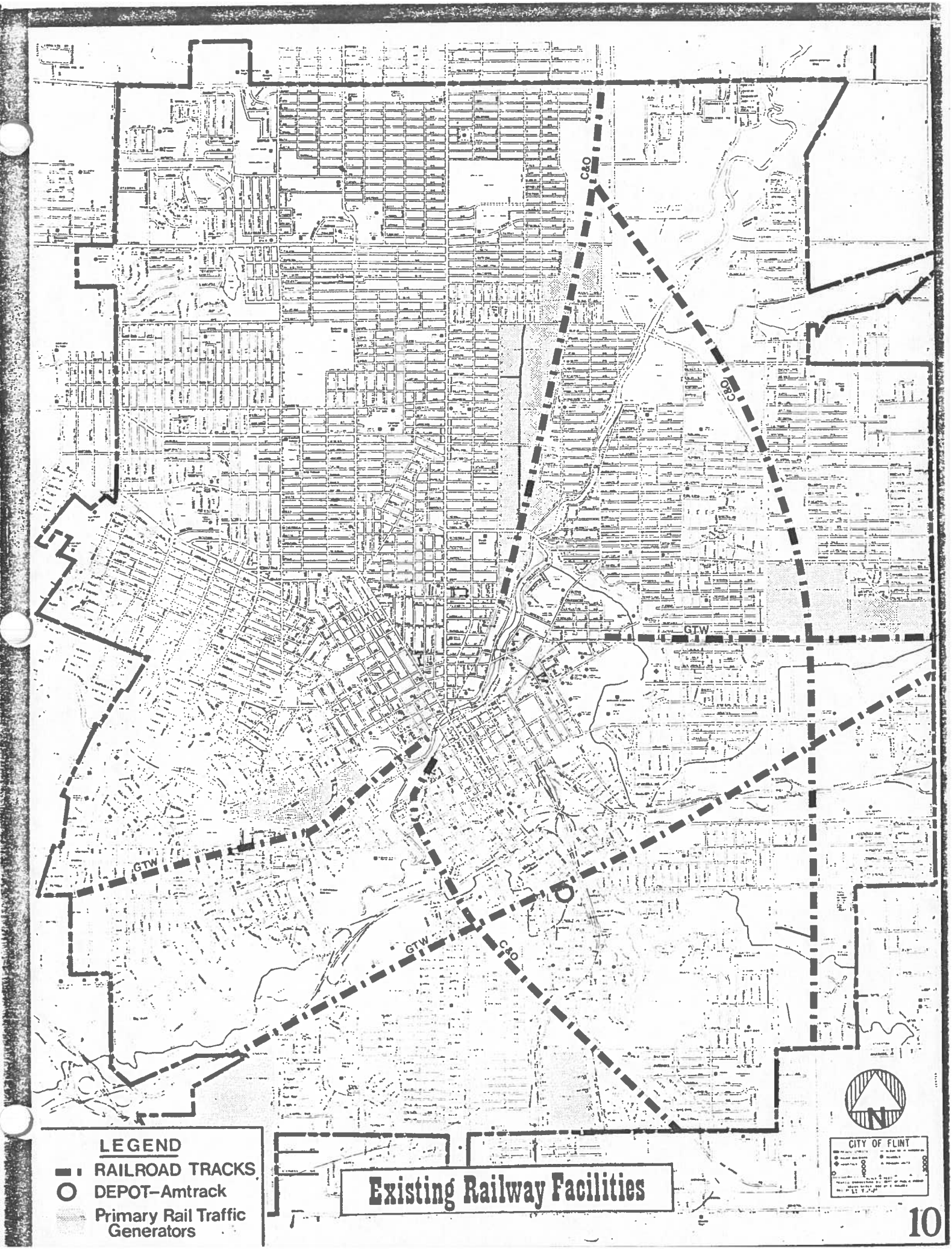
The Grand Trunk Western Railroad (GTW) and the Chesapeake and Ohio Railroad (C & O).operate in Flint. Their main lines cross the city in an east-west (GTW) and north-south (C & O) directions. Facilities, including railroad tracks and primary rail traffic users, are shown on Map 10.

Originally, both railroads ran all trains through the central business district (CBD). Now, however, those tracks serve local customers on the right-of-way while the main lines circumvent the CBD.

The C & O is on the main line connecting Saginaw, Toledo, Chicago, Detroit and Port Huron. The railroad provides freight service to about 150 customers in Flint. Buick and A. C. Spark Plug are the largest users while the lumber, scrap and liquor industries are heavy users on a lesser scale. In 1975 eight to 10 trains a day, hauling 31.4 million cars for the year, passed through Flint.

The Grand Trunk Western Railroad is on the main rail line between Chicago and Port Huron. It serves 24 communities in Michigan. The railroad provides freight service to Chevrolet and A. C. Spark Plug as well as local lumber, glass, paper and general warehousing customers. Each day about 200 loaded cars arrive in Flint and 250 loaded cars leave. This is about 3.33 million tons annually. About 24 trains passed through Flint a day in 1975. Although the G.T.W. does not provide passenger service, AMTRAK uses its main line.

The federally supported AMTRAK system provides daily passenger service from Chicago to Port Huron and back with eight stops in Michigan. Connections are also available from Port Huron to Toronto Canada.




# Existing Railway Facilities

The schedule is listed below.

AMTRACK SCHEDULE
(as of May 1977)

| Depart | | Arrive |
|---|---|---|
| 3:25 p.m. | Chicago, Ill. (CST) (Union Station) | 12:00 Noon |
| 6:10 p.m. | Niles, Mich. (EST) | 11:00 a.m. |
| 7:05 p.m. | Kalamazoo | 10:05 a.m. |
| 7:40 p.m. | Battle Creek | 9:35 a.m. |
| 8:55 p.m. | East Lansing | 8:20 a.m. |
| 9:30 p.m. | Durant | 7:42 a.m. |
| 10:10 p.m. | FLINT | 7:07 a.m. |
| 10:34 p.m. | Lapeer | 6:35 a.m. |
| 11:30 p.m. | Port Huron | 5:45 a.m. |
| 5:40 a.m. | Sarnia, Ont. (EST) | 12:15 p.m. |
| 8:55 a.m. | Toronto, Ont. (EST) | 8:15 p.m. |

Analysis and Problems

The strong demand for freight service by the automotive industry should continue in the future. Bulk freight needs for lumber and other wholesale customers in the greater metropolitan area should continue but may vary in location due to normal business activities. The revival of federally supported passenger service must compete with the automobile, the bus and air services to draw travelers. To succeed railroads must provide efficient, quality movement which requires massive upgrading of tracks, road beds, cars and terminals and more frequent runs.

Locally, the city's major problems are land- use conflicts with the railroads. One conflict is where railroad grades intersect the street system. A second is the environmental impact of trains on adjacent land uses, especially on residential areas.

Railroad grade crossings cause problems for automobiles - especially traffic delay, accidents, and rough street surfaces. The best solution is to separate the grades allowing the railroad line to pass under or over the street. Due to the high cost of building grade separations, all arterial street crossings need to be reviewed and priorities established.

According to C & O and GTW railroads there are grade crossings conflicts at Carpenter Road, Pierson Road, Grand Traverse Street and Bristol Road. Conflicts with adjacent land are a second problem area. Most industrial and commercial land uses are appropriate along main rail lines. Their operations often are linked closely to direct rail access. In contrast, rail lines create serious problems for nearby residential areas. One major concern of those living nearby is the danger to curious children and pets. Another is the danger of derailments or accidents which cause the release of toxic chemicals.

A third class of problems are vibrations, noise and air pollution. Appropriate zoning could prevent some of these problems and buffering neighborhoods would alleviate some of the impact.

# IX. AIR SERVICE AND AIRPORT FACILITIES

## Introduction

Nationally, the expansion of airports has confronted communities with the problem of balancing a growing need for air service and the protection of the environment. Flint is no exception to this trend. Future transportation will create a need for more flights, larger airplanes and expanded facilities at Bishop Airport. The orderly development of Bishop Airport will be closely linked to adjacent land development. Although most land adjacent to the airport is not in the city limits, portions of Flint are near the airplane approach and take-off patterns. Orderly airport growth depends on compatible land uses in these impact areas.

## Current Conditions

Flint is served by Bishop Airport, a facility which accomodates the commercial flights of United and North Central airlines. They provide an average of 22 direct flights per day from Flint to Detroit, Cleveland, Chicago, Lansing, Alpena and Saginaw with connections to other cities in and out of the state (see Map 11). The number of passengers using these airlines has increased from about 23,000 in 1962 to over 107,000 in 1974. During this period, cargo including mail, has fluctuated from 480 tons in 1962 to a high of 1455 tons in 1969. It was about 860 tons in 1973.

A daily commuter service, Comutaire, Inc., provides six round-trip flights to Detroit Metropolitan Airport. Each flight can carry 19 passengers. The service is projected to carry one to two per cent of the passengers at the airport.

Bishop Airport also provides facilities for general aviation aircraft (non-commercial) with about 200 based there now. The combined operations of general and commercial aviation results in about 150,000 runway operations per year.

## Analysis and Problem Identification

The recently adopted airport master plan (1) forecasts that by 1980, present hangers will be inadequate to house the increase in general aviation aircraft. Secondly, by 1985, the present terminal building, parking, and runways will be inadequate to handle a continued 7.4 per cent annual growth rate in number of passengers and a continued 15 percent annual increase in cargo. The increased demand for future service will generate needs for additional land and new facilities at the airport.

Although continued advancement in aircraft technology should produce quieter aircraft with less exhaust emmissions, the advancement historically has been offset by the increase in size and number of aircraft. Additionally, the trend is to a change in land uses around the airport from agriculture to less compatible uses such as residential.

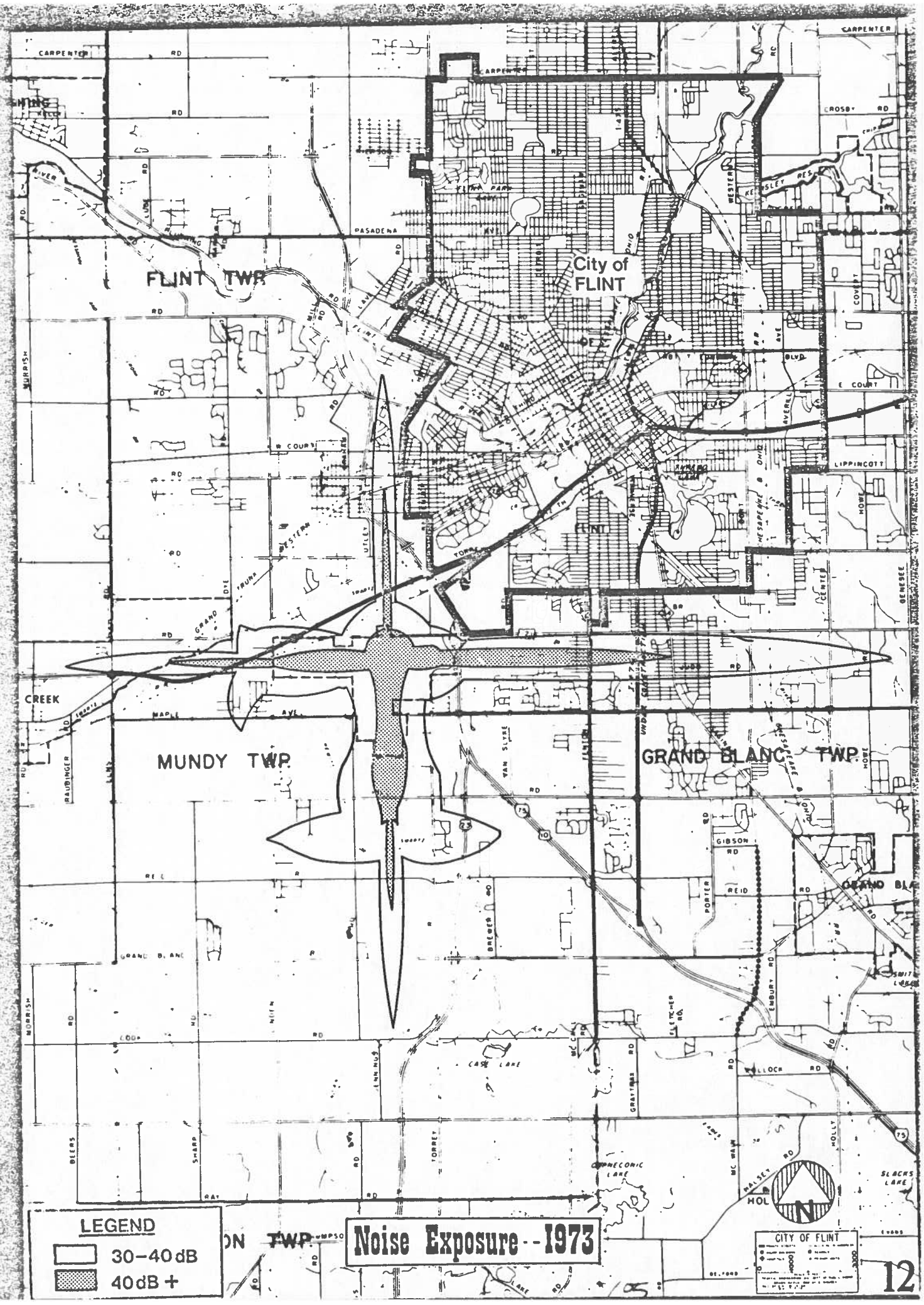
Land adjacent to the airport is outside the city's jurisdiction but portions of Flint lie near existing and future noise exposure areas. These areas are shown on Map 12 for 1973 and Map 13 which shows projected growth for the year 2000 (1) Federal guidelines have established noise exposure levels for differing land uses listed in Appendix H. Although 30 NEFs (noise exposure forecast) generally falls outside the south and west limits of the city, prevailing southwesterly winds bring noise and emissions into the city.

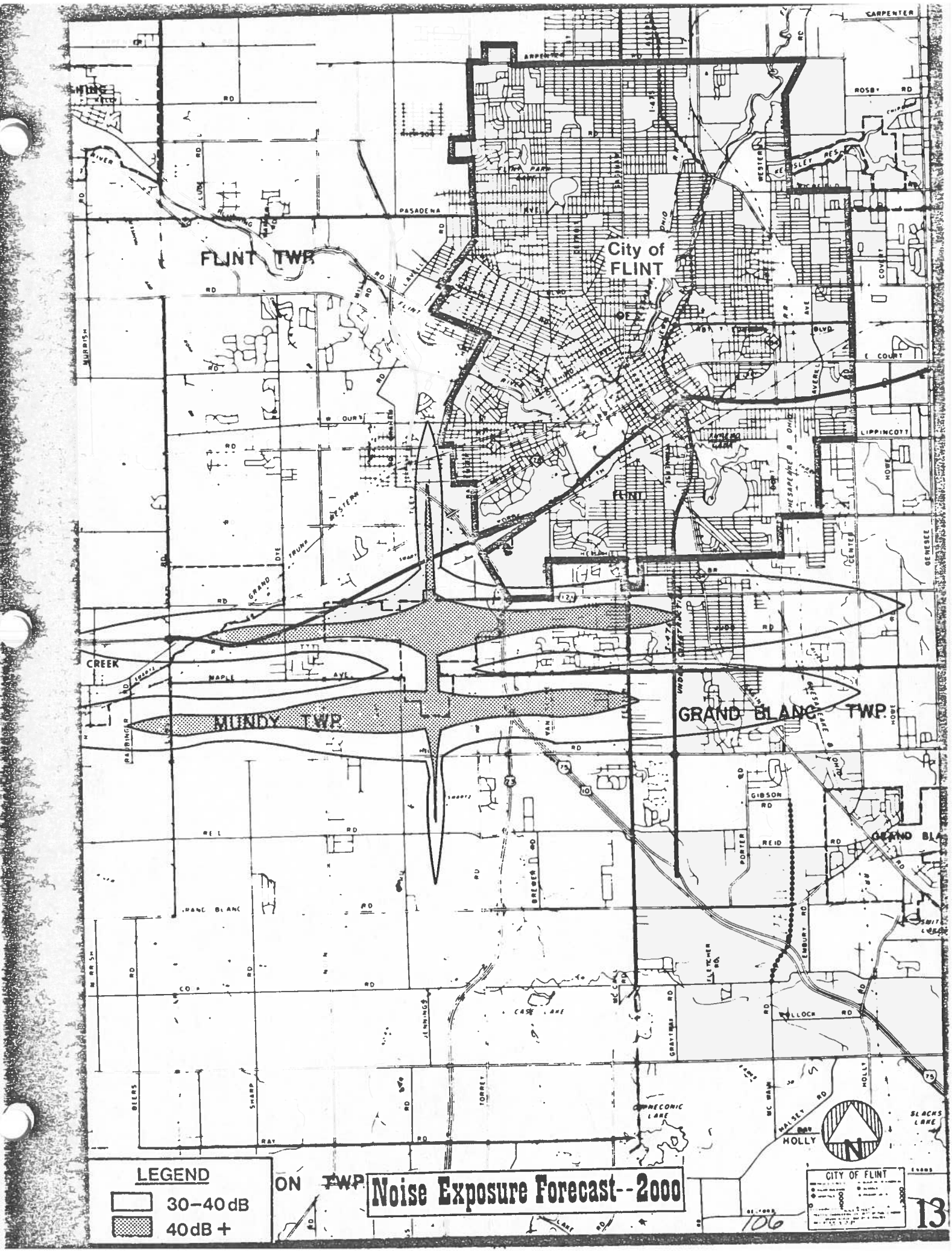
An orderly development of the airport will be closely linked to compatible land development and the environmental impact of flight activity.




# Direct Air Service

Non-Stop Routes between Michigan cities,
and service to Chicago and Cleveland 'hub' terminals.


FLINT TWP
City of FLINT
MUNDY TWP
GRAND BLANC TWP
CREEK
LEGEND
30–40 dB
40 dB +
Noise Exposure--1973
CITY OF FLINT
N


FLINT TWR
City of FLINT
MUNDY TWP.
GRAND BLANC TWP.
CREEK
LEGEND
30–40 dB
40 dB +
ON TWP
Noise Exposure Forecast--2000
CITY OF FLINT
106
13

-APPENDIX A-

FUNCTIONAL STREET SYSTEM

| System Classification | Primary Service Function | Access Control | V.M.T. (Vehicle miles of travel per total system) | Federally proposed Miles In City By % | Miles Of Flint Streets | Miles Of Flint Streets By % |
|---|---|---|---|---|---|---|
| Principle Arterials | -Through traffic<br>-Intercity bus routes<br>-Intercept rural arterials<br>-Inter area (Ex. CBD to residential)<br>-Little or no access to adjoining land<br>-Highest mobility | Fully Controlled & Partially Controlled | 40-65% | 5-10% | 40 | 7.9% |
| Minor Arterial Streets | -Interconnect principle arterials<br>-Routes for local buses<br>-Does not penetrate neighborhoods | Partially Controlled | 60-80% | 15-25% | 61 | 11.9% |
| Collector Streets | -Circulation within residential<br>-Neighborhood, commercial, and industrial areas<br>-Provides access to adjoining land | None | 5-10% | 5-10% | 48 | 9.3% |
| Local Streets | -Direct access to adjoining land<br>-Low mobility<br>-No through movement<br>-No bus routes | None | 10-30% | 65-80% | 364 | 70.9% |

## APPENDIX B

### MAJOR STREETS PRIORITY EVALUATION CRITERIA

| RATING | Surface Deterioration Factor |
|---|---|
| 0-50 | None or very little deterioration |
| 51-100 | Some initial deterioration, but not yet requiring maintenance |
| 101-225 | Occasional deterioration requiring occasional maintenance |
| 226-350 | Frequent deterioration requiring frequent maintenance |
| 351-500 | Intolerable deterioration requiring continuous maintenance |

Added to above:

| RATING | Traffic Count Increment (Daily) |
|---|---|
| 0-56 | 0-900 |
| 57-110 | 901-2400 |
| 111-166 | 2401-4500 |
| 167-224 | 4501-6500 |
| 225-282 | 6501-8600 |
| 283-340 | 8601-9700 |
| 341-400 | over 9700 |

Added lastly:

| RATING | Years of Deficiency on List |
|---|---|
| 25 | one year |
| 50 | two years |
| 75 | three years |
| 100 | four years |

### LOCAL STREETS PRIORITY EVALUATION CRITERIA

| RATING | Surface Deterioration Factor |
|---|---|
| 0-60 | No or very little deterioration |
| 61-120 | Some initial deterioration, but not yet requiring maintenance |
| 121-270 | Occasional deterioration requiring occasional maintenance |
| 271-420 | Frequent deterioration requiring frequent maintenance |
| 421-600 | Intolerable deterioration requiring continuous maintenance. |

Added to above:

| RATING | Land Use Factor |
|---|---|
| 0-100 | Pure residential |
| 101-230 | Residential-school arterial |
| 231-300 | Residential--semi-commercial |

Added lastly:

| RATING | Years Deficiency on List |
|---|---|
| 25 | one year |
| 50 | two years |
| 75 | three years |
| 100 | four years |

NOTE: The above rating factors will result in a street prioritized list with a point spread of 0-1000 for each major or local street.

## APPENDIX C

## PRIORITIZED RESURFACING LIST FOR FY 77/78 AND OTHER INFORMATION

### RESURFACING COMPLETED IN 1977 PRIOR TO JULY 1

| STREET | LIMITS | AREA S.Y. |
|---|---|---|
| ATHERTON TERRACE | 3300-3200 blocks | 1500 |
| COMSTOCK | PASADENA*SONNY | 2041 |
| DAYTON PLACE | DELMAR*FOREST HILL | 361 |
| LAPEER | HOWARD*DORT | 9500 |
| RUSSELL | SAGINAW*INDUSTRIAL | 4692 |
| TORREY ROAD | BRISTOL*S. CITY LIMITS | 11450 |
| TWELFTH STREET | E. OF BEACH | 63 |
| WHITE | 600 Block | 50 |

### MAJOR ST. RESURFACING COMPLETED IN 1977 FROM 7-1-77 TO DATE

| | | |
|---|---|---|
| LEITH | NORTH*INDUSTRIAL | 3161 |
| ATHERTON | DORT*SAGINAW | 34269 |
| LEITH | BRIDGE*FRANKLIN | 11246 |

### LOCAL ST. RESURFACING COMPLETED IN 1977 FROM 7-1-77 TO DATE

| | | |
|---|---|---|
| CAMDEN | BLOOR*PADDINGTON | 2060 |
| SEVENTH ST. | GRAND TRAVERSE*ANN ARBOR | 2742 |
| HUGHES | CORUNNA*HERRICK | 4261 |
| CADILLAC | #423*BLUFF | 1568 |
| PHILADELPHIA | HORTON*INDUSTRIAL | 3621 |
| NEUBERT | FENTON*GRAND TRAVERSE | 7557 |
| DARLING | CORUNNA*REYNOLDS | 664 |
| LEXINGTON | FENTON*E. DEAD END | 3966 |
| TACKEN | CORUNNA*REYNOLDS | 679 |
| PETTIBONE | TUXEDO*FENTON | 2273 |
| KNAPP | FIELDING*CORUNNA | 1277 |
| DURAND | MILLER*RAMSEY | 1677 |
| HUGHES | FIELDING*CORUNNA | 1600 |
| FOREST HILL | PASADENA*MCCLELLAN | 2415 |
| CHIPPEWA | WOOD*FIFTH | 6397 |
| RAY ST. | STEVENSON*RAY CT. | 904 |
| RAY CT. | ALL | 462 |

### MAJOR ST. RESURFACING TO BE COMPLETED BEFORE 7-1-78

| | | |
|---|---|---|
| WELCH | FOREST HILL*CHEVROLET | 6843 |
| BROADWAY | LEWIS*RIVER | 8666 |

LOCAL ST. RESURFACING TO BE DONE BEFORE 7-1-78

| STREET | LIMITS | AREA S.Y. |
|---|---|---|
| FOURTH AVE. | BIECK*FROST | 968 |
| IOWA | IOWA*MONTANA INTERSECTION | 312 |
| BEGOLE | BALLENGER*W. DEAD END | 6665 |
| BARTH | BALLENGER*W. DEAD END | 6665 |
| IOWA | IOWA*ARIZONA INTERSECTION | 312 |
| IOWA | IOWA*COLORADO INTERSECTION | 312 |

MAJOR ST. G. & WT. RESURFACING FY 77/78

| | | |
|---|---|---|
| WARD #1 | | |
| FLEMING RD. | HOME*CARPENTER | 7800 |
| WARD #2 | | |
| FLEMING RD. | PIERSON RD.*HOME | 7800 |
| WARD #3 | | |
| LEITH ST. | ST. JOHN*BRIDGE | 3258 |
| WARD #4 | | |
| BENNETT | DORT*FRANKLIN | 7800 |
| WARD #6 | | |
| CALDWELL | WOLCOTT*MACKIN | 1500 |
| MARQUETTE | PUDUCAH*CHEVROLET | 1662 |
| DETROIT | SAGINAW*THIRD AVE. | 3733 |
| WARD #7 | | |
| FOX | GLENWOOD*COURT | 2100 |
| NEBRASKA | KEARSLEY PK. BLVD.*VERNON | 7200 |
| WARD #8 | | |
| BRADLEY | CRESTWOOD*SUNSET | 6361 |
| WARD #9 | | |
| GRAND TRAVERSE | HEMPHILL*LELAND | 6769 |

LOCAL ST. G. & WT. RESURFACING FY 77/78

| | | |
|---|---|---|
| WARD #1 | | |
| WOODBINE | WESTMORELAND*PIERSON | 2400 |
| BISHOP | 100' E. & W. OF AUBREY | 746 |
| CHATEAU | OXLEY*KAREN | 533 |
| PULASKI | SAGINAW*DETROIT | 4650 |
| WARD #2 | | |
| SENECA | 100' S. OF COPEMAN*BEGOLE | 1892 |
| GENESEE | DUPONT*# 1601 | 5250 |

| | | |
|---|---|---|
| WARD #3 | | |
| LOMITA | SAGINAW*NORTH | 5250 |
| ESTHER | PASADENA*EDMUND | 4200 |
| WARD #4 | | |
| WHITTIER | BRANCH*CURRY | 1744 |
| UTAH | FRANKLIN*MINNESOTA | 2559 |
| MARYLAND | IOWA*FRANKLIN | 4244 |
| WARD #5 | | |
| PAGE | SAGINAW*INDUSTRIAL | 1144 |
| WARD #6 | | |
| RASKOB | FORREST HILL*MILBOURNE | 2166 |
| FIRST AVE. | GARLAND*SAGINAW | 1056 |
| FROST | FLUSHING*FIFTH AVE. | 2900 |
| HUBBARD | COURT*VAN BUREN | 2250 |
| WARD #7 | | |
| KEARSLEY PK. | OHIO*INDIANA | 4957 |
| UNION | GARLAND*SAGINAW | 2339 |
| WARD #8 | | |
| OSSINGTON | CAMDEN*FENTON | 3753 |
| ARLENE | BALLENGER*NEDRA | 3600 |
| CLANCY | CORUNNA*BROWN | 1609 |
| AUGUSTA | BALLENGER*NEDRA | 3600 |
| WARD #9 | | |
| COLERIDGE | MILTON*SAGINAW | 722 |
| TOBIAS | SAGINAW*X-WAY | 924 |
| LAKEVIEW | SAGINAW*COLLINGWOOD | 3139 |
| McKINLEY | SHAWNEE*OGEMA | 2700 |
| KENT | BARKS*McPHAIL | 2679 |

HUD LOCAL ST. RESURFACING FOR 1978 CONSTRUCTION SEASON

| | | |
|---|---|---|
| BELLEVIEW | CARPENTER*ALMA | 3450 |
| LORADO | SAGINAW*STAFFORD | 900 |
| MARY | ROOT*SAGINAW | 1800 |
| BONBRIGHT | OREN*WITHERBEE | 900 |
| ROOT | PAGE*MARY | 900 |
| MARY | DETROIT*ROOT | 5400 |
| ADAMS | OREN*PATTERSON | 1500 |
| ALBERT | MARY*WITHERBEE | 900 |

HUD MAJOR ST. RESURFACING FOR 1978 CONSTRUCTION SEASON

| | | |
|---|---|---|
| HAMILTON | DUPONT*MASON | 4200 |
| DAYTON | DETROIT*MASON | 2550 |
| DAYTON | DUPONT*MASON | 4200 |
| AVENUE A | MARY*PAGE | 600 |

## APPENDIX D

### 1976 - 77 - 78 - HIGH ACCIDENT LOCATIONS
### TRAFFIC ENGINEERING DIVISION
### CITY OF FLINT

| 1976 RANK | INTERSECTION LOCATION | NO. OF ACCIDENTS |
|---|---|---|
| 1. | 12TH ST. & VAN SLYKE | 32 |
| 2. | FIFTH AVE. & GD. TRAVERSE | 30 |
| 3. | DORT HWY. & LAPEER RD. | 28 |
| 4. | COURT ST. & DORT HWY. | 23 |
| 5. | DETROIT ST. & PASADENA AVE. | 22 |
| 6. | DORT HWY. & R.T. LONGWAY | 21 |
| 7. | DETROIT ST. & STEWART AVE. | 20 |
| 8. | BEACH ST. & FIFTH ST. | 19 |
| | RICHFIELD RD. & WESTERN RD. | 19 |
| 10. | CENTER RD. & DAVISON RD. | 18 |
| | DORT HWY. & RICHFIELD RD. | 18 |
| 12. | COURT ST. & SAGINAW ST. | 17 |
| | DORT HWY. & LEITH ST. | 17 |
| | FENTON & HEMPHILL RD. | 17 |
| 15. | DAVISON RD. & DORT HWY. | 16 |
| | DETROIT ST. & FIFTH AVE. | 16 |
| 17. | ATHERTON RD. & VAN SLYKE | 15 |
| | DUPONT ST. & PASADENA AVE. | 15 |
| | DUPONT ST. & WELCH BLVD. | 15 |
| | PIERSON RD. & SAGINAW ST. | 15 |
| | SAGINAW ST. & WOOD ST. | 15 |
| | I-475 & FIFTH AVE. | 15 |

| 1977 RANK | INTERSECTION LOCATION | NO. OF ACCIDENTS |
|---|---|---|
| 1. | PIERSON RD. & SAGINAW ST. | 51 |
| 2. | COURT ST. & GD. TRAVERSE | 47 |
| 3. | BEACH ST. & FIFTH ST. | 43 |
| 4. | COURT ST. & DORT HWY. | 42 |
| 5. | DORT HWY. & LAPEER RD. | 41 |
| 6. | DAVISON RD. & DORT HWY. | 38 |
| 7. | FIFTH AVE. & GD. TRAVERSE | 37 |
| 8. | CLIO RD. & PASADENA AVE. | 36 |
| 9. | DORT HWY. & R.T. LONGWAY | 35 |
| 10. | GD. TRAVERSE & THIRD AVE. | 28 |
| | 12TH ST. & VAN SLYKE | 28 |
| 12. | CENTER RD. & DAVISON RD. | 27 |
| | DORT HWY. & RICHFIELD RD. | 27 |
| | DUPONT ST. & PASADENA AVE. | 27 |
| 15. | DORT HWY. & STEWART AVE. | 26 |
| 16. | DORT HWY. & LIPPINCOTT | 25 |
| 17. | DETROIT ST. & PASADENA AVE. | 24 |
| 18. | BEACH ST. & NINTH ST. | 23 |
| | COURT ST. & SANINAW ST. | 23 |
| 20. | BALLENGER HWY. & BEECHER RD. | 22 |
| | ATHERTON RD. & DORT HWY. | 21 |

| 1978 RANK | INTERSECTION LOCATION | NO. OF ACCIDENTS |
|---|---|---|
| 1. | PIERSON RD. & SAGINAW ST. | 48 |
| 2. | I-475 & FIFTH ST. | 47 |
| 3. | FIFTH AVE. & GD. TRAVERSE | 43 |
| 4. | DORT HWY. & LAPEER RD. | 39 |
| | 12TH ST. & VAN SLYKE | 39 |
| 6. | DETROIT ST. & PASADENA | 33 |
| | DORT HWY. & LIPPINCOTT | 33 |
| 8. | DORT HWY. & R.T. LONGWAY | 31 |
| 9. | DUPONT ST. & WELCH BLVD. | 28 |
| 10. | COURT ST. & GD. TRAVERSE | 26 |
| | DAVISON RD. & DORT HWY. | 26 |
| | DUPONT ST. & PASADENA AVE. | 26 |
| | I-475 & COURT ST. | 26 |
| 14. | BALLENGER HWY. & CORUNNA | 25 |
| | BEACH ST. & FIFTH ST. | 25 |
| | CLIO RD. & PASADENA AVE. | 25 |
| 17. | COURT ST. & DORT HWY. | 24 |
| 18. | BALLENGER HWY. & BEECHER | 22 |
| | GD. TRAVERSE & THIRD AVE. | 22 |
| | RICHFIELD RD. & WESTERN | 22 |

(COMPILED: MARCH 1977 & JANUARY 1978 & JANUARY 1979 BY: M.R. NOVARA AND P.A. MANNING)

APPENDIX F

## UNIFORM CRITERIA FOR MAJOR STREETS

### Category 1 - Existing Major Streets

The existing Major Street System throughout the state, in some instances, is not functioning as intended due to excessive on-street parking and sub-standard widths. Such deficiencies materially decrease capacity, impede traffic flow and increase the accident potential to both the traveling public and pedestrians.

It is essential that an existing Major Street facilitate at least two 10-foot lanes, unencumbered by parked vehicles. A minimum pavement width is 20 feet.

The following minimum criteria will apply, in order to maintain an effective and safe existing major street network.

| Curbed Streets | Face to Face of Curb |
|---|---|
| Parallel parking-one side | 28'* |
| Parallel parking-both sides | 36'* |
| Diagonal and perpendicular parking | Not Permitted** |

*Add at least one foot to these widths for average daily traffic volumes in excess of 5,000, or peak-hour two-way traffic volumes in excess of 600.

**Upon approval by the Michigan Department of State Highways and Transportation, existing diagonal or perpendicular parking may be allowed to continue in extenuating local circumstances where traffic conditions and accident experience justify such continuance.

### Category 2-Reclassification of an existing Local Street to a Major Street

For the acceptance of Local Streets which meet the other requirements into the Major Street System, the following minimum width requirements must be met:

| Curbed Streets | Face to Face Width |
|---|---|
| No parking | 24' |
| Parallel parking-one side | 29' |
| Parallel parking-both sides | 38' |
| Diagonal parking | Not Permitted |

Category 3-Construction of new Major Streets and the reconstruction of existing Major Streets.

| Curbed Streets | Face to Face Width | |
|---|---|---|
| | Minimum | Desirable |
| No parking | 26' | 30' |
| Parallel parking-one side | 32' | 36' |
| Parallel parking-both sides | 40'* | 48' |
| Diagonal parking | Not permitted | |

*In the event the 20-year traffic projections indicate the need for a four-lane facility, a minimum width of 46 feet is necessary.

(1) Uniform Criteria For Major Streets, Michigan Department of State Highways & Transportation, 1974.

## APPENDIX G

| Land Use Type | Noise Exposure Forecast | Noise Impact |
|---|---|---|
| Residential & | Less than 30 NEF | Little or no noise impact. Areas can be developed with no special noise insulation requirements. |
| | Between 30 to 35 NEF | New construction recommended only after detailed noise evaluation. New buildings should be noise insulated. |
| | Greater than 35 NEF | No construction advised. |
| Commercial | Less than 35 NEF | Little or no noise impact. |
| | Between 35 to 45 NEF | New construction recommended only after detailed noise evaluation. New buildings should be noise insulated. |
| | Greater than 45 NEF | No new buildings except those directly related to the airport. Provision of adequate noise insulation. |
| Industrial | Less than 40 NEF | Little or no noise impact. |
| | Between 40 to 50 NEF | New construction recommended only after detailed noise evaluation. New buildings should be noise insulated. |
| | Greater than 50 NEF | No new buildings except those directly related to the airport. New buildings should be noise insulated. |
| Open Space | Less than 40 NEF | Little or no noise impact. |
| | Greater than 40 NEF | Land uses that could involve concentrations of people such as in spectator sports should be avoided. |

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JR:gwa:S/5

APPENDIX E
CITY OF FLINT MICHIGAN
PROPOSED URBAN SYSTEM IMPROVEMENTS
AS OF MARCH 1978

Compiled By:

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| Priority Number | Rating % | Road & Location | Urban (1) System No. | Participating Agency (FAUS-Federal Aid) | Existing Condition ADT(2)-ROW(3) | Deficiencies LS(4)-AR(5) | Planned Improvements 1990 ADT(6) | Estimated Cost | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 83 | R. T. Longway Blvd. (Cole Blvd. to Avon Street) | 23 | FAUS 1976 | ADT-10,000 one-way | Existing Longway L.S.-E A.R.-5.1 | East Bound roadway of one-way pair with R.T. Longway Blvd. Westbound. New bridge over Flint River and approaches ADT-18,000 (one-way) | | Cross-town one-way Need ROW from post office |
| 2 | 76 | Fourth Ave. (Garland St. to Cole Blvd. -- one-way pair with 5th Ave.) | 9 | FAUS Submit 1976-77 | ADT-10,000 One-way ROW-60' | L.S.-E A.R.-5.1 Surface & width on existing 5th Ave. | Widen 4th Ave. 48' + curb & gutter to serve as one-way Eastbound. ADT-16,000 (one-way) | | Cross-town one-way pair ROW needed |
| 3 | 76 | Fourth Ave. Ext. to 5th Ave. (Prospect St. to Stone St.) | 36 | FAUS 1976-77 | ADT-eastbound 5th Ave. is 8,000 ROW-60' | Existing 5th Ave. L.S.-D A.R.-5.7 | One-way pair with 5th Ave west end connector. Construct to 36' + curb and gutter accomodating one-way east bound traffic. 5th Ave. will become one-way west bound. ADT-east bound 5th Ave. 15,000 | | Most ROW has been purchased Cross-town one-way pair |

CITY OF FLINT MICHIGAN
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| Priority Number | Rating % | Road & Location | Urban System No. | Participating Agency (FAUS-Federal Aid) | Existing Condition ADT-ROW | Deficiencies | Planned Improvements 1990 ADT | Estimated Cost | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 4 | 72 | Fourth Ave. (Stone St. to Garland St.) | 39 | FAUS submit 1977 | ADT eastbound 8,000 | Existing 5th Ave. L.S.-D A.R.-3.7 | One-way pair with 5th Ave. Widen 4th Ave. from 26' to 36' + curb & gutter Stone to Grand Traverse, 48' from Grand Traverse to Garland | | Cross-town one-way pair ROW needed. |
| 5 | | | | | | | | | |
| 6 | 72 | Broadway Blvd. (Stever St. extension @ west end to Hamilton and east end to Davison Rd.) | 44 | Submit 1976 | ADT-6500 Average on Broadway Row 100' ADT-12,000 on Davison Rd. ROW-66' | Existing Broadway L.S.-D A.R. 3.6 | One-way east bound connector to Davison Rd. Widen west end to 33' + curb and gutter; east end taper from 36' to 40' + curb and gutter. ADT-21,000 (one-way) ROW 60' | | Completes Broadway-Stever interchange |
| 7 | 78 | Church St. ext. (Kearsley to Water at Mason) | 6 | Public Works 1977-78 | ADT 12,000 N. bound on Grand Traverse | L.S.-F AR 8.8 on Grand Traverse | One-way N.B. connects over Flint River from Church to Mason, includes new bridge | | ROW needed |

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| Priority Number | Rating % | Road & Location | Urban System No. | Participating Agency (FAUS-Federal Aid) | Existing Condition ADT-ROW | Deficiencies | Planned Improvements 1990 ADT | Estimated Cost | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 8 | | Hamilton Bridge-Broadway (C&O) R.R. to Lewis St.) | 44A | | | | | | Inadequate 4 lanes. |
| 9 | 78 | Atherton Rd. (Fenton Rd. to 200' east of C&O R.R.) | 5 | FAUS 1976 70/30 | ADT-15,882 ROW-66' | L.S.-E A.R.-4.9 width-curbs surfaces | Widen from 36' to 44' ADT-26,000 ROW-widen C & O R.R. crossing @ Fisher Body | $250,000 | Links with I-475 Service Rd. @ Grand Traverse |
| 10 | 67 | Church St. Ext. to Grand Traverse (12th St. @ Grand Traverse to Church & 9th St.) | 45 | 1976-77 Bond | ADT-G.T. North bound 12,000 ADT-Church St. north bound 2,300 | L.S.-# A.R.-1.04 | Build connector for one-way north bound 33' to 44' + curb & gutter ADT-Church N.B. 19,000 ROW-80' | $225,000-Road | Freeway Related |
| 11 | 80 | Hamilton Ave. (C&O RR to 500' West of Saginaw) | 3 | FAUS 70/30 1978 | ADT-19,938 ROW-100' | L.S.-F A.R.-4.0 Surface | Widen roadway from 44' to five lanes | | Bisects Buick Complex and serves St. John Industrial Park |
| 12 | 77 | Lapeer Rd. (12th St. to 300' east of Center Rd.) | 8 | FAUS 70/30 Submit 1977-78 | ADT-9,000 ROW-66" | L.S.-E A.R.-5.6 Width, Drainage & Surface | Widen from 20' to 44'+ curb & gutter. Add turn lanes @ Dort Hwy, Center Rd. and Averill & widen south leg of Averill at Lapeer Rd. for turn lane. ADT-15,000 | | Tree Removal |

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|---|---|---|---|---|---|---|---|---|---|
| 13 | 76 | Dupont Street (Pasadena Ave. to Pulaski St.) | 11 | FAUS Submit 1977-78 | ADT-12,607 ROW-80' | L.S.-E A.R.-5.1 width drainage | Widen existing bottle-neck from 26' to 44' + curb & gutter. Add continuous turn lane from Moore to Bishop. ADT-19,000 | | Turn lane for commercial district traffic |
| 14 | 74 | North Street extension to Saginaw St. (2nd Ave. @ North St. to 4th Ave. @ Saginaw St. | 32 | FAUS 1977-78 | ADT north-bound 6,500 | Without connection a capacity & safety problem would develop at 5th Ave. | One-way north bound connector to Saginaw St. serve the downtown one-way pair of Harrison & Beach Sts. Proposed 36 ft. with curb & gutter. ADT-15,000 | | Project Under Review |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | 74 | Cedar Street (Fenton Rd. @ Cedar St. to Second St. @ Chase St.) | 56 | Bond proposal 1978 | Fenton Rd. ADT-12,367 | Alignment | Relocation of Fenton Rd. to provide more direct connection with Court St. & Second St. ADT-19,000 ROW-80' | | New Rdwy. CBD bypass ROW needed |

CITY OF FLINT MICHIGAN
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|---|---|---|---|---|---|---|---|---|---|
| 19 | 76 | Beach Street connection to Saginaw Street (12th St. to 9th) | 18 | Bonds 1980 | ADT Beach - 4,000 Saginaw-10,300 | On Saginaw St L.S.-F A.R.-5.3 | New one-way south bound connector to Saginaw St. 36' + curb & gutter. ADT-Southbound ROW-21,000 | | ROW needed. |
| 20 | 74 | Saginaw St. Ext. to Harrison St. (6th St. to Court St.) | 19 | Bonds 1980 | ADT-2 way on Saginaw 27,499 | L.S.-F A.R.-8.97 | Connector to Harrison oneway Northbound 44' + curb & gutter. ADT-one way Saginaw 16,300 ROW-70' | | ROW needed. Impacts on City Hall frontage |
| 21 | 74 | Fenton Road (Markham St. to Alvord Street) | 20 | FAUS 1978 | ADT-19,178 ROW-80' | Width L.S.-E A.R.-9.94 | Widen existing 36' to 44' + curb & gutter. ADT-24,000 | | Inadequate four lanes |
| 22 | 74 | Ballenger Hwy (Flint River to Miller Rd.) | 21 | FAUS 1977 | ADT (inbound) 28,474 ROW-Ballenger 100', Court St. - 80' ft. | Width L.S.-D A.R.-1.35 | Widen Ballenger Hwy. from 44' + curb & gutter. to five lanes ADT-38,000 | | Continuous left turn lanes on Ballenger |
| 23 | 73 | R.T. Longway Blvd. (Commerce St. to Center Rd., except Longway-Averill intersection-safety project.) | 22 | FAUS 1979 | ADT-12,485 ROW-66' | Width L.S.-F A.R.-2.41 drainage open ditches dirt shoulders | Widen to 44' + curb & gutter entire length to match safety project. ADT-16,000 | | |

CITY OF FLINT MICHIGAN
PROPOSED URBAN SYSTEM IMPROVEMENTS
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| Priority Number | Rating % | Road & Location | Urban System No. | Participating Agency (FAUS-Federal Aid) | Existing Condition ADT-ROW | Deficiencies | Planned Improvements 1990 ADT | Estimated Cost | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 24 | | | | | | | | | |
| 26 | 72 | Flushing Rd. (Stevenson St. to Ballenger Hwy.) | 26 | 1978 | ROW-60'-70' & 80' ADT-18,270 | Width L.S.-E A.R.-3.47 | Widen to five lanes ADT-14,000 (1980) | | Residential area. Limited ROW. EIS may be required. |
| 27 | 71 | Beach Street connection to Saginaw St. @ First Ave. | 28 | 1980 Bond Propoasl | ROW- ADT-15,000 one-way | L.S.-E A.R.-.258 Saginaw St. Data | 48' + curb & gutter ADT-25,000 one-way ROW-80' | Realign Beach St. Bridge | ROW needed North side of River |
| 28 | 71 | Stewart Ave. (Horton Ave. to Saginaw St. M-54 BR.) | 29 | FAUS 1977 | ADT-12,000 ROW-60' | Width | Widen to 48' + curb & gutter entire length. Must accommodate inter-change with I-475 ADT-26,000 | | Inadequate four lanes |
| 30 | 70 | Court Street (west city limits to Grand Trunk R/R) | 34 | 1979 FAUS | ADT-12,200 ROW-66' | Open ditches dirt shoulders L.S.-D A.R.-5.63 | Widen existing 20' pavement to 44' + curb and gutter ADT-16,000 | $1,173,000 | |
| 32 | 69 | Fleming Rd. (Pasadena Ave. to Pierson Rd.) | 37 | 1979 FAUS | ADT-7,300 ROW-80' | Open ditches dirt shoulders L.S.-D A.R.-5.63 | Widen from existing 20' to 44' + curb & gutter ADT-20,000 | | |
| 33 | | | | | | | | | |

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| Priority Number | Rating % | Road & Location | Urban System No. | Participating Agency (FAUS-Federal Aid) | Existing Condition ADT-ROW | Deficiencies | Planned Improvements 1990 ADT | Estimated Cost | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 34 | 68 | Grand Traverse St. (6th Ave. to 8th Ave.) | 40 | 1976-77 FAUS | ADT-13,900 ROW-60' | 8th St. is major St. at ADT of 6,600 with 87% turning movement @ Grand Traverse. There's an extreme vertical climb at N.B. Grand Traverse. L.S.-E A.R. -4.93 | Widen from 26' to 44' + curb & gutter ADT-28,000 | | Expansion of Hurley Medical Center warrants this widening. Stevenson Elem. to be closed |
| 35 | 68 | Twelfth St. (1200' east of Hammerburg Rd. to I-475 overpass) | 41 | 1978 | ADT-9,000 ROW-60' | Width, open ditches & dirt shoulders L.S.-D A.R.-3.26 | Widen from existing 24' to 44' + curb & gutter and add turn lanes @ Saginaw and Grand Traverse. | | |
| 36 | 68 | Davison Rd. (Vernon to Dort Hwy.) | 42 | 1978 | ADT-14,000 ROW-66' | Width L.S.-D A.R.-6.65 | Widen to 55' Vernon to Dort ADT one-way-17,000 | | ROW needed at intersection |
| 37 | 68 | Broadway Blvd. Ext. (Broadway Ext. from Broadway-Franklin intersection to Vernon Ave.-Davison Rd. intersection.) | 43 | Submit in 1977 | ADT-14,000 | L.S.-D A.R.-4.9 | Connector to complete oneway pair with Davison Rd. 36' + curb & gutter ADT-17,000 oneway | | ROW needed |

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|---|---|---|---|---|---|---|---|---|---|
| 38 | 67 | Welch Blvd. (Forest Hill Ave. to 250' East of Ballenger Hwy.) | 45A | FAUS 70/30 1977 | ADT-12,000 ROW-100' | Broken curbs & surface | Widen from Ext. 36' to 44' + curb & gutter ADT-16,000 | | Tree removal needed. Inadequate four lanes |
| 39 | 67 | Detroit St. (Stockdale St. to Pasadena) | 46 | 1980 | ADT-12,926 ROW-80' bottleneck | Hazardous traffic ADT-16,000 L.S.-D A.R.-8.58 | Widen from 42' and 52' to 55' + curb & gutter | | Remove on-street parking |
| 41 | 67 | Saginaw St. (Peer St. to 15th St.) | 48 | 1981 | ADT-22,000 ROW-99' | Only existing 44' section on entire length of Saginaw St. through city. L.S.-E A.R.-4.11 | Widen existing 44' to 57' to provide left turn lane. | | |
| 42 | 66 | Detroit St. (Pasadena Ave. to Philadelphia) | 49 | 1980 | ADT-17,185 ROW-60' & 80' | Hazardous bottleneck L.S.-D A.R.-6.28 | Widen from 40' and 44' to 55' + curb & gutter ADT-21,000 | | ROW needed for side-walk |
| 43 | 66 | Detroit St. (Stockdale to Welch @ Garland) | 49A | 1980 | ADT on existing 13,000 | Hazardous AR 6.2 | 26 ft. wide connector to Garland St. SB. 8,000 one-way pair with Garland. | | ROW needed |

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|---|---|---|---|---|---|---|---|---|---|
| 44 | 66 | Oren Ave. (Hamilton to Welch Blvd. | 3A | FAUS 1979 | ADT-5,000 ROW 60' | Curb Surface width | Widen from 26' to 44' + C & G | | Urban Renewal area- Oak Park. Related to Hamilton. |
| 46 | 69.5 | Beecher Road (Edgemont to Court St.) | 51 | 1979 | ADT-8,600 ROW-80' | Dirt shoulders Open drainage ADT-13,000 | Widen from existing 20' to 44' + curb & gutter | $427,000 (1978) | |
| 47 | 65 | R.T. Longway Blvd. (Dort Hwy. to Rachel St.) | 52 | 1978 | ADT-18,000 ROW-100' | L.S.-D A.R.-2.0 | Widen from 22' X 22' to 33' X 33' + curb & gutter. Construct median between Rachel and Franklin. Turn lane @ all intersections ADT-32,000 | | Limited access roadway |
| 48 | 65 | Franklin Ave. (Illinois to Broadway) | 53 | 1978 | ADT-10,342 ROW-60' | Alignment L.S.-E A.R.-4.99 Drainage | Widen from 36' and 40' to 44 + curb & gutter.4 lanes. Realign job @ Davison Road. | | Inadequate 4 lanes |
| 49 | 65 | Western Road (Leith St. to Carr St.) | 54 | 1977 | ADT-9,723 ROW-60' | L.S.-E A.R.-2.74 Drainage width | Widen from 20' to 44' + curb & gutter. ADT-15,000 | | Reevaluate priority ranking |

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| Priority Number | Rating % | Road & Location | Urban System No. | Participating Agency (FAUS-Federal Aid) | Existing Condition ADT-ROW | Deficiencies | Planned Improvements 1990 ADT | Estimated Cost | Comments |
|---|---|---|---|---|---|---|---|---|---|
| 50 | 64 | Second Street Ext. to Court St. (Chevrolet Ave. @ Second St. to Court St.) | 55 | 1980 | ADT-for Glenwood 7,405 westbound ADT for 2nd St. 7,808 eastbound ADT for Chevrolet Ave. 10,000 | L.S.-E A.R.-86 | Connector to complete one-way pair with Glenwood. ROW-70' ADT Glenwood WB-10,000 ADT 2nd St. EB-10,000 ADT Chevrolet Ave-14,000 | | ROW needed Reevaluate priority ranking |
| 52 | 68-1972 62-1976 | Kearsley Street (I-475 to Crapo St. connect campuses) | 42A | 75 Bond Issue | ADT-4,000 ROW-60' | Deteriorated curb & surface | Widen existing 26' to 44' + curb & gutter (2 X 4' bike paths included) Proposed bridge over (I-475 will have 50' road width. ADT-7,000 | $250,000 | Widening cannot be justified at this time. Except for 36 ft. road & bike ways |
| 53 | | | | | | | | | |
| 54 | 61 | Hemphill Road (Van Slyke Rd. to Tuxedo Ave. plat line) | 62 | City/County 1977-78 | ADT-7,000 ROW-80' | L.S.-C A.R.-3.82 Drainage width | Widen from 24' to 44' + curb & gutter ADT-12,000 | $247,209 | |

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|---|---|---|---|---|---|---|---|---|---|
| 55 | 61 | Court Street (Grand Trunk R/R to Corunna Rd.) | 63 | Proposed Bonds 1978 | ADT-12,182 ROW-60' | L.S.-D A.R.-2.49 width curb surface | Widen existing 38' to 44' + curb & gutter ADT-18,000 | $215,500 | Inadequate four lanes and remove parking Reevaluate in respect to W. Court widening |
| 57 | 60 | Averill Ave. (Davison Rd. to Longway Blvd.) | 65 | 1978 | ADT-14,549 ROW-80' | L.S.-C A.R.-10.76 | Widen from 44' to 55' + curb & gutter. Center lane will serve as continous turn lane for A.C. Spark Plug Plant ADT-20,000 | $200,000 | Reevaluate priority ranking |
| 58 | 60 | Dupont Street (Flushing Rd to Stockdale) | 66 | 1978 | ADT-11,000 ROW-80' | L.S.-D A.R.-2.05 Width alignment | Widen from 36' to 44' + curb & gutter. Realign curve @ Ballenger Park. ROW from Park needed. | | Inadequate four lanes ROW needed |
| 59 | 60 | Dupont Street (Chevrolet to Flushing Rd.) | 67 | 1984 | ADT-7,000 ROW-60' & 80' | L.S.-C A.R.-6.2 width | Widen 2 x 18' to 2 x 22' (cut from median strip) ADT-16,000 | | Part of future Dupont ext. |

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|---|---|---|---|---|---|---|---|---|---|
| 62 | 60 | Hammerburg Rd. Extension (Hemphill Rd. to 12th St. @ Hammerburg Rd.) | 69 | 1980 | ADT Does not exist. | L.S.-D A.R.-4.18 Van Slyke data. | New extension passing under G.T.R.R. Direct link with I-69 interchange and Dupont St. extension all the way north to city limits. ADT-29,000 ROW-100' & 80' | | Part of Dupont St. Extension ROW needed. Van Slyke relief. |
| 63 | 59 | Pasadena Ave. (Saginaw St. to Wisner St.) | 71 | 1982 | ADT-8,500 ROW-80' | L.S.-C A.R.-4.29 | Widen from 38' and 40' to 44' + curb & gutter. ADT-15,000 | | Inadequate four lanes |
| 64 | | | | | | | | | |
| 65 | 57 | Stevenson St. (Flushing Rd. to Kearsley St.) | 73 | 1980 | ADT-4,557 ROW-60' | L.S.-B A.R.-3.87 width | Widen existing 26' roadway to 44' + curb & gutter. Existing bridge over Flint River has 40' roadway. Roadway bisects Chevy Manufacturing Plant. ADT-13,000 | | ROW needed Part of Cedar St. extension |
| 66 | 56 | Pierson Rd @ Saginaw St. (Saginaw St. to 400' East of Saginaw St.) | 74 | Capital Improvement 1976-77 | ADT-17,000 ROW-100' W. Leg 66' E. Leg | L.S.-D A.R.-1.21 alignment | Widen Pierson Rd. to 55' @ intersection. ROW triangle 13' X 200' needed in North/East quadrant. ADT-20,500 | | Reevaluate priority ranking |

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|---|---|---|---|---|---|---|---|---|---|
| 67 | | | | | | | | | |
| 68 | | | | | | | | | |
| 69 | 55 | Leith St. (Lewis St. to Franklin Ave.) | 77 | 1980 | ADT-10,745 ROW-60' | L.S.-C A.R.-4.98 | Widen existing from 36' to 44' + curb & gutter ADT-21,000 | | Reevaluate for St. John Industrial Park influence. Inadequate four lanes remove on-street parking |
| 70 | | | | | | | | | |
| 71 | | | | | | | | | |
| 72 | | | | | | | | | |
| 73 | | | | | | | | | |
| 74 | 51 | Ann Arbor St. (Court to 2nd Street) | 85 | 1979 | ADT-6,500 ROW-60' | Alignment L.S.-C A.R.-4.5 | Realign sharp curve @ Third St. Need additional ROW. Widen road from 26' to 44' + curb & gutter. ADT-9,000 | | ROW needed. Reevaluate priority ranking |

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|---|---|---|---|---|---|---|---|---|---|
| 75 | 50 | Crapo St. (2nd St. to N. bound I-475 service road.) | 86 | Bonded 1975-1976 Urban Renewal Grant | ADT-6,000 ROW-60' | L.S.-B A.R.-5.48 width | Widen from 38' to 41' + curb & gutter. ADT-10,000 | | Serves college & cultural center and F.B.E. |
| | | Ballenger Hwy. (Mackin Rd. to Sloan St.) | 90 | | | | Widen from 40' to 44' + curb and gutter | | Inadequate 4 lanes. |
| | | Bradley Avenue (Mansfield Ave. to GTW RR) | 91 | | | | Widen from 26' to 36' + curb and gutter for left turn lane. | | Increase capacity |
| | | Hamilton Avenue (Dupont St. to Forest Hill Ave.) | 92 | | | | Narrow median to widen 2x18' pavement to 2x24' pavement. | | Increase capacity. |
| | | Leith Street (Saginaw St. to Industrial Avenue) | 93 | | | | Widen 36' & 40' to 44' + curb and gutter. | | Inadequate 4 lanes. |
| | | Lewis Street (Kearsley Pk. Blvd. to Hamilton Ave.) | 94 | | | | Widen 38' to 44' + curb and gutter. | | Inadequate 4 lanes. |
| | | Clifford Street at Lippincott Blvd. | 95 | | | | Re-align curve. | | ROW Needed. |

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|---|---|---|---|---|---|---|---|---|---|
| | | Mason Street (Water Street to Fifth Avenue) | 96 | | | | Widen 26' to 33' and 44' + curb and gutter | | Part of Church, Mason & Grand Traverse one-way pair. |
| | | Torrey Road (Bristol Road to City limits) | 97 | | | | Widen 24' asphalt pavement to 48' + curb and gutter. | | Bishop Airpark |
| | | Wood Street (Saginaw St. to C&O RR) | 98 | | | | Widen 24' to 44' + curb & gutter. | | Doyle Urban Renewal Area |
| | | Broadway (Lewis Street to Franklin) | 99 | | | | Adjust geometrics for one-way W.B. traffic. | | Part of Broadway Davison One-way pair. |
| | | Chevrolet Avenue (Dupont St. to Third Avenue) | 100 | | | | Widen 36' to 44' + curb and gutter. Widen to 55' north of Third for left turn lane. | | Inadequate 4 lanes. |

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|---|---|---|---|---|---|---|---|---|---|
| | | Chevrolet Ave. (Welch Blvd. to Rankin St.) | 101 | | | | Narrow median to widen 2x18' pavement to 2x24' pavement. | | Increase capacity. |
| | | Detroit St. (Pierson Rd. to Pulaski Street.) | 102 | | | | Narrow median to provide N.B. left turn lane. | | Increase capacity. |
| | | Franklin Avenue (Utah Ave. to Oklahoma Ave.) | 103 | | | | Widen 36' to 44' + curb and gutter. | | Inadequate 4 lanes. |
| | | Franklin Avenue (Missouri Ave. to Kansas Avenue) | 104 | | | | Widen 20' concrete slab to 26' + curb and gutter. | | |
| 76 | | | | | | | | | |
| 77 | | | | | | | | | |

NOTES:

(1) Urban System number is a reference number for location of project on map.
(2) ADT (Average Daily Traffic) count
(3) ROW (Street Right-of-Way) usually one foot outside of sidewalk from the center of street.
(4) L.S. (Level of service) is a qualitative measure of the effect of speed, travel time, traffic interruptions, maneuverability, safety, comfort and convenience.
(5) A.R. (Accident rate per million vehicle miles) = $\frac{\text{No. of accidents (1,000,000 miles)}}{\text{Length of street segment in miles (ADT X 365)}}$
(6) 1990 ADT's are normally taken from I-475 Freeway Engineering Report # 1658 unless otherwise noted.

CITY OF FLINT MICHIGAN
PROPOSED HIGH HAZARD SAFETY IMPROVEMENTS
AS OF MARCH 1978

| Priority Number | Rating % | Road & Location | Urban (1) System No. | Participating Agency (FAUS-Federal Aid) | Existing Condition ADT(2)-ROW(3) | Deficiencies LS(4)-AR(5) | Planned Improvements 1990 ADT(6) | Estimated Cost | Comments |
|---|---|---|---|---|---|---|---|---|---|
| | 75 | Averill Ave. @ Longway Blvd. + RR crossing | 57 | Section 209 90/10 (submitted 2/11/76) | ADT inbound - 23,533 ROW 100' | Surface, width, & RR protection A.R.-1.77 L.S.-E/C | Widen N. leg to 58' + curb and gutter. Widen E. and W. legs to 55' + curb and gutter. Rebuild RR crossing and gates. | | |
| | 66 | Oakley @ Saginaw St. (400' N. of Oakley to 400' S. and 250' W.) | 50 | Section 209 1979 | ADT-inbound 26,208 ROW-60' on Oakley ROW-100' on Saginaw. | L.S.-EB-C/D WB-D/E NB-E | Widen Saginaw St. from 44' to 57' + curb and gutter. Widen Oakley from 26' to 36' + curb and gutter. | | |
| | | Richfield @ Western Rd. (400' in all directions) | 114 | | | | Widen all four legs to 5 lanes. | | High accident location |
| | 61 | Stewart Ave. @ Saginaw St. (500' W. of Saginaw to to 500' E.) | 64 | Section 209 1979 | ADT invound-41,692 ROW-60' | Alignment LS-WB-E AR 1.12 | New alignment to connect jog from E. to W. Widen both legs to 55' + curb and gutter to provide turn lane. | | ROW needed Simplify signal arrangement |
| | | Miller Road (Court St. to Boston Ave.) | | | | | Add turn lanes. | | Part of Chevrolet Avenue Extension |
| | | Ballenger Hwy. @ Mackin Road (500' in all four directions) | | Section 209 | | | Widen Ballenger to 60' + curb and gutter for left turn lane, widen Mackin to 48' plus curb and gutter for 4 lanes. | | High accident location. Remove trees. |

CITY OF FLINT MICHIGAN
PROPOSED HIGH HAZARD SAFETY IMPROVEMENTS
AS OF MARCH 1978

| Priority Number | Rating % | Road & Location | Urban (1) System No. | Participating Agency (FAUS-Federal Aid) | Existing Condition ADT(2)-ROW(3) | Deficiencies LS(4)-AR(5) | Planned Improvements 1990 ADT(6) | Estimated Cost | Comments |
|---|---|---|---|---|---|---|---|---|---|
| | | Pasadena @ Detroit | 109 | Section 209 | | | Add left-turn lanes @ all four legs. | | ROW needed. High accident location. |
| | | Pasadena @ Dupont | 110 | Section 209 | | | Add left-turn lanes @ all four legs. | | ROW needed. High accident location. |
| | 53 | Fenton Rd. @ 12th St. (400' in all directions) | 79 | Section 209 | ADT-25,000 ROW 66' | A.R.-0.77 | Widen all legs to 55' to accommodate left turn lanes. | | ROW needed |
| | | Fenton Rd. @ GTW RR viaduct | 111 | Section 209 | | | Replace structure and eliminate center pier | | Structure is deteriorating and center pier is safety hazard. |
| | 53 | Welch Blvd. @ Dupont St. (500' on N., S., W. and Euclid Ave. to E.) | 80 | Section 209 1979 | ADT-12,000 ROW-80' | L.S.-C A.R.-1.96 | Add left turn lanes @ all four legs. | | High accident location. Inadequate four lanes. |
| | | Court St. @ Center Road (500' E. & W.) | 112 | Section 209 Cities of Flint and Burton | | | Widen Court St. to 55' + curb and gutter for left turn lane. | | High accident location. Eastland Mall. |

CITY OF FLINT MICHIGAN
PROPOSED HIGH HAZARD SAFETY IMPROVEMENTS
AS OF MARCH 1978

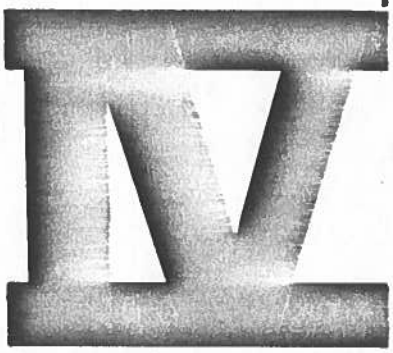
| Priority Number | Rating % | Road & Location | Urban (1) System No. | Participating Agency (FAUS-Federal Aid) | Existing Condition ADT(2)-ROW(3) | Deficiencies LS(4)-AR(5) | Planned Improvements 1990 ADT(6) | Estimated Cost | Comments |
|---|---|---|---|---|---|---|---|---|---|
| | | Atherton Road @ Fenton Road | 113 | Section 209 | | | Widen all four legs to 5 lanes. Realign reverse curve. | | High accident location. ROW needed. |
| | | Fenton Road @ Hemphill Road (500' in all directions) | 15 | Section 209 Cities of Flint, Burton, and GCRC | | | Widen S. leg to 60' + curb and gutter. Widen other three legs to 55' + curb and gutter. | | |

CITY OF FLINT MICHIGAN
PROPOSED PROJECTS FOR FUTURE EVALUATION
AS OF MARCH 1978

| Priority Number | Rating % | Road & Location | Urban (1) System No. | Participating Agency (FAUS-Federal Aid) | Existing Condition ADT(2)-ROW(3) | Deficiencies LS(4)-AR(5) | Planned Improvements 1990 ADT(6) | Estimated Cost | Comments |
|---|---|---|---|---|---|---|---|---|---|
| | 70 | Lapeer Rd. @ C&O RR (500' W. to 500' E. of C&O RR) | 35 | | ADT-8,000 ROW-60' | LS-D AR-3.4 | Grade separation to 44' | | ROW needed |
| | 62 | Atherton Rd. @ Van Slyke Rd. (500' E. to Van Slyke Rd.) | 59 | | ADT-inbound-27,624 ROW-80' | LS- AR-1.28 | Build exclusive rt. turn lane for west-bound Atherton Rd. | | |
| | 60 | Russell St. (Saginaw St. to Selby St.) | 67A | 1979 | ADT-2,400 ROW-50' Residential | LS-D AR-5.81 | Widen existing 26' to 44' + curb and gutter. | | I-475 related. ROW needed. |
| | 60 | Dupont St. extension (Court St. to 3rd Ave.) | 68 | 1985 | ADT-does not exist | LS-C AR-3.7 | New connector from Dupont St. @ 3rd Ave. to Court St. @ Pershing St. New bridge over Flint River required. | | ROW needed. |
| | 56 | Atherton Rd. @ Fisher Body RR siding (500' E. and W. of tracks) | 75 | Public Works or Section 209 | ADT-15,882 ROW-80' | LS-E AR-0.86 width | Build grade separation | | |

CITY OF FLINT MICHIGAN
PROPOSED PROJECTS FOR FUTURE EVALUATION
AS OF MARCH 1978

| Priority Number | Rating % | Road & Location | Urban (1) System No. | Participating Agency (FAUS-Federal Aid) | Existing Condition ADT(2)-ROW(3) | Deficiencies LS(4)-AR(5) | Planned Improvements 1990 ADT(6) | Estimated Cost | Comments |
|---|---|---|---|---|---|---|---|---|---|
| | 55 | Dupont St. (Ridgeway Ave. to Bundy Ave.) | 76 | 1978 | ADT-8,000 ROW-80' | LS-C AR-11.11 | Widen from existing 26' to 44' + curb and gutter. | | Residential |
| | 53 | Davison Rd. @ C&O RR (500' E. and W. of tracks) | 82 | Public Works 1977 or Section 209 | ADT-20,724 ROW-80' | LS-C AR-2.63 | Build grade separation | | |
| | 52 | Chevrolet Ave. extension (Chev. Ave. bridge to Miller and Hammerberg) | 83 | 1981 | ADT-10,239 | LS-C AR-5.52 | Build two-way connector 44' + curb and gutter. | | ROW needed. Reevaluate various alignments. |
| | 50 | Pierson Rd. extension (Dort Hwy. to E. Blvd. drive) | 87 | Bonds 1982 | Does not exist | LS-E AR-5.26 | Build 24' connector + curb and gutter. Require new bridge over Flint River. Build grade separation @ C&O RR. | | ROW needed |
| | 50 | Atherton Rd. @ C&O RR (500' E. and W. of tracks) | 88 | County Public Works 1977 | ADT-16,189 ROW-80 | 28 trains per day, avg. delay of 1.75 minutes. | Build grade separation | | |
| | | Pershing St. (Miller Road to Court Street) | 25 | | | | Widen from 26' to 44' + curb and gutter. Improve horizontal and vertical alignment. | | |
| | | Dupont Street (3rd Ave. to Chevrolet Ave.) | 106 | | | | Widen from 26' to 44' + curb and gutter. | | Part of Dupont St. extension. |



# ASSESSMENTS

PREPARED BY THE DEPARTMENT OF COMMUNITY DEVELOPMENT, CITY OF FLINT, MICHIGAN

THE PREPARATION OF THIS REPORT WAS FINANCED IN PART THROUGH A COMPREHENSIVE PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT; CPA-MI-05-28-0386.

# ABSTRACT

TITLE: ENVIRONMENTAL ASSESSMENT

PREPARED BY: CITY OF FLINT, DEPARTMENT OF COMMUNITY DEVELOPMENT, DIVISION OF PLANNING AND PROGRAM DEVELOPMENT

SUBJECT: ENVIRONMENTAL ASSESSMENT OF COMPREHENSIVE MASTER PLAN

DATE: NOVEMBER, 1977

NUMBER OF PAGES: 47

ABSTRACT: FEDERAL GUIDELINES REQUIRE THAT ANY PROPOSED PLAN OR POLICY BE ASSESSED AS TO ITS EVNIRONMENTAL IMPLICATIONS, AND ARE EXPLICIT AS TO REQUIRING FOCUS ONTO TWO BROAD AREAS: HISTORICAL PRESERVATION; AND ACTIONS RELATING TO LAND USE, MAJOR COMMUNITY FACILITIES, MAJOR UTILITIES, MAJOR TRANSPORTATION SYSTEMS OR THE PROTECTION OF NATURAL AREAS, IF ANY. APPLICABLE FEDERAL, STATE AND LOCAL ENVIRONMENTAL CONTROLS MUST BE IDENTIFIED INCLUDING ANY DEVIATIONS FROM THESE.

SINCE THE MASTER PLAN INCLUDES PLANS AND POLICIES THAT WILL IMPACT NATIONAL REGISTER PROPERTY AN ASSESSMENT WAS PREPARED DETAILING ENVIRONMENTAL IMPACTS OF THE HISTORICAL PRESERVATION ELEMENT. BECAUSE NO MAJOR ACTIONS, OR PROJECTS, ARE PROPOSED IN OTHER AREAS OF THE MASTER PLAN, IT MIGHT BE SUFFICIENT TO STATE THAT THE PLAN WILL HAVE NO SIGNIFICANT EFFECT. HOWEVER, BECAUSE OF THE LOCAL IMPORTANCE OF LAND USE AND RESIDENTIAL (OR HOUSING) PLANS AND POLICIES PROPOSED, ASSESSMENTS WERE PREPARED COVERING THESE TWO PLAN ELEMENTS. NO SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACTS ARE PROJECTED.

THE PREPARATION OF THIS REPORT
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FROM THE
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# I. ENVIRONMENTAL ASSESSMENT OVERVIEW

In general, no major actions are proposed by the City of Flint Master Plan. Those major projects described are either ongoing activities, which have been previously assessed, or are projected and will require preparation of an environmental assessment once funding has been authorized. For the latter, the assessment will be prepared concurrently with development of the Community Development Block Grant Application. For the former, ongoing major projects are described in the documents contained in the Environmental Review Record (ERR), which compendium is available for public inspection in the Division of Planning and Programming (planning office) of the City of Flint Department of Community Development.

Since no major actions are proposed, relative to the five categories listed below (and possibly the sixth), it might be adequate to state that there is no significant effect. (For the sixth category, historical preservation, the action proposed is not major but does affect a property on the National Register, and therefore requires assessment.) However, because of the importance of the Land Use and Housing elements, an environmental assessment was prepared. The plans and policies here will not have a significant adverse affect on the environment. However, they will affect the human or social sphere, which it is hoped, will be significantly improved. The central thrust of proposed actions is to improve the human community, or residential neighborhoods.

1. Land Use -- The Land Use element in the City Master Plan essentially summarizes and recapitulates recommendations given in other Plan elements that affect land use. No major actions are proposed. The plans and policies cited in the Land Use element largely refine, clarify, reiterate or extend upon prior plans and policies; with only limited shifting of emphasis. There is emphasis on the needs for conservative rezoning and variances, closer interaction between land use and transportation planning, land use coordination between major institutional users, the master plan and renewal plans, plus the need to strengthen, update and correct zoning deficiencies. The element also proposes small studies to examine the negative effects of rezoning and variances, how incompatible land uses may be mitigated, whether nonresidential growth needs further controls, and optimal land use controls including the zoning for transportation corridors.

   "Mini-master plans" were formulated during the comprehensive planning process, for the 12 planning districts comprising the City. These are essentially descriptive and do not propose any major actions. The mini-plans provided the basis for analysis yielding land use goals covering residential, commercial, industrial, institutional, and recreational-open space uses.

   The Master Plan's Housing element provides a substantial discussion of residential considerations -- existing conditions and those

necessary in the future to meet local housing needs. Policy is given to guide the achievement of goals necessary to meet needs. This is fully assessed, separately from the assessment covering land use. The Land Use and Housing elements were developed concurrently so that both are consistent with each other and function in a complementary way.

2. Major Community Facilities -- No major public facilities are proposed by the City Master Plan. Substantial redevelopment in and about the central business district is taking place, but it is not the result of Master Plan plans or policy. The only major proposed activities not under construction are Riverfront Center and Center City Plaza. An environmental assessment was prepared in 1976 for Riverfront Center and the project is currently being restudied and revised. Center City Plaza is a nine-acre project adjacent to the Center, in the Central Business District, physically related to river bank park and other development including the University's downtown campus. The plaza project is based on development of an enclosed shoppers' concourse that is expected to enhance CBD attractiveness year around and revitalize the area. Design work is continuing along with more specific cost estimation, both necessary before any assessment can be made.

   The Public Facilities element does not propose any major facilities, rather, re-use of existing structures to the greatest extent possible. Along with this, the element emphasizes stabilization, preservation and recentralization of facilities within the City.

3. Major Utilities -- No major utilities are proposed. In general, the City Master Plan ignores any detailed discussion of utilities other than noting current capital improvement projects, mainly sewer construction now in progress.

4. Major Transportation Systems -- No major transportation systems are proposed. First year 701 activities were devoted to data gathering which resulted in a July, 1976, publication, Transportation Report. This report was essentially descriptive and a statement of existing conditions in the City and region. No recommendations, policy or plans were given beyond listing street construction priority rankings of proposed Urban Systems projects. Concurrently, citizens participation meetings suggested some minor deficiencies which are cataloged and also given by planning districts in Mini-Plans for the City's planning districts.

   Second year funding via 701 was not available, and subsequent activities were funded by CDBG and Section 112 of the Federal Highway Act of 1962 via the 3C Process. Transportation system project or activity proposals now being formulated will be environmentally assessed by consultants separately. The Department of Community Development has limited responsibility in the area of transportation, plans being formulated by the City's Department of Public Works-Traffic Engineering Section and by the independent authority, the Flint Mass Transit Authority (MTA). Efforts to coordinate these activities are continuing.

The final Transportation element is intended to be a process model to provide systematic analysis of needs, rather than a product oriented analysis that will propose specific projects.

5. Protection of Natural Areas -- No plans or policies are proposed for the protection of natural areas such as estuaries since such areas are not known to exist within the City of Flint. The Master Plan's Environment element proposes that "critical zones or areas" be defined relative to implementing a development review process, and that such critical zones include flood plains; also, that water courses be controlled as "sensitive areas" primarily to regulate development and prevent excessive soil erosion. The thrust of such regulation, however, is to protect the City's environment as a whole rather than natural areas or zones per se, the latter's improvement being incidental.

6. Historic Preservation -- The City Master Plan includes an element devoted to historic preservation and enhancement in the comprehensive planning process. Since the physical focus of current activities is a property listed in the National Register, an environmental assessment has been prepared which details the City's current program.

## II. ENVIRONMENTAL ASSESSMENT-LAND USE

Summary or abstract of the proposed plan or policy.

1. Land use plans, zoning map and ordinances, should be revised to be consistent with the Master City Plan, both City-wide and for renewal project areas.

2. Cluster development patterns for commercial uses should be promoted while linear or strip commercial should be controlled to provide buffering, parking, landscaping and signage. Re-use of vacant structures should be promoted.

3. Development of industry within industrial parks that facilitate control of traffic, noise and other impacts while featuring incentives and amenities, should be promoted.

4. Land use planning including zoning and transportation planning should be integrated, with special attention devoted to development controls for lands at freeway access points and service drives.

5. Watercourses should be regulated by ordinance that controls development within flood plains.

6. Comprehensive development review should be initiated to regulate new construction in critical areas and generally assess the impacts of development.*

7. Zoning should be formulated that establishes "sun rights" or protected access to solar energy.*

The environmental impact (beneficial as well as adverse) of the proposed plan or policy if carried out.

1. Revision of other land use plans to reflect the new City Master Plan is beneficial. This assumption is the basis of 701 comprehensive planning process, and its continuation by Congress. In Flint's case, the benefit is more than inter-plan consistency, although inconsistency is an increasing deficiency because the existing Master City Plan was adopted in 1960 and most urban renewal plans roughly ten years later. Existing land use regulation is generally very dated, with relatively little change having taken place in the recent decade. It is acknowledged that zoning is in need of revision for a variety of reasons, quite apart from the obsolescence created by Master Plan proposals. Some industrial zones are

* Development review and solar zoning are recommendations in the Environment element. All other policy here paraphrases recommendations from the Land Use element. The land use recommendations from the Housing element are assessed separately.

incorrectly zoned and are actually light commercial. There may be excessive zoning of residential areas, since Flint is heavily single-family home-oriented, which is a disincentive to developing the multi-unit structures that have become important in recent years. The Plan also proposes a different approach to commercial land use, which if fully implemented would completely restructure commercial zones.

Revision of renewal plans for eight NDP renewal areas is vital to relate changes in federal, and local policy and priorities (which are largely brought together within the Master City Plan and are primarily expressed by the Housing element). This mainly speaks to the shift in emphasis from the traditional approach of relocation and clearance, to rehabilitation and preservation. Incorporation of this contemporary reality is seen to be beneficial to all plans, and the community and its residents. Like the City-wide situation, there is also justification to revise renewal plans even without the impact of the Master Plan.

Some existing ordinances are also intrinsically defective in detail, suggestive of a need to amend them in wording, which gives an opportunity to incorporate improvements. A history of requests for variances (which is proposed to be studied) is often indicative of a defective ordinance. The City Zoning Map also must be changed concurrently. Beyond spatial zoning changes, regulation of yard size, parking and signage, plus site plan review, requires improvement if only to provide for changing transportation patterns and needs. These changes will have some effect on details of life style and economic costs, but precise impacts would be difficult to assess since public hearings dealing with such regulation identify a variety of viewpoints as to probable impacts.

Adverse impacts, if any, are not apparent. Change is in itself, troublesome and a human burden as well as an economic cost. Extensive plans changes are costly and time-consuming. However, the citizens participation that formal change causes is seen as beneficial to the public. Some changes will cause negative impacts but these can only be assessed on an individual case basis.

2. Promoting cluster development and controlling linear commercial districts is seen to be beneficial. Cluster development assumes that commercial uses are concentrated in essentially one group on a shared site such as a shopping mall. This improves economic feasibility to businessmen, and may have a productive synergistic effect because of several firms being located in one place. Parking can be shared, along with utilities and other necessary services. Business clusters may also be safer since traffic movements are concentrated rather than random and sporadic as with linear or strip commercial

development. Planning is enhanced via use of single large land mass and conflicts with residential land uses are reduced, if only because less area is exposed as a residential-commercial interface. Buffering and screening becomes more feasible, as does landscaping. There is less pressure for extensive signage which is a major negative factor in strip commercial development.

Promoting the re-use of vacant non-residential structures is essentially a response to vacant stores or other commercial uses, since industrial uses are generally fairly stable over time. Re-use is highly desirable, since vacant commercial structures are a major eyesore to the neighborhood and residents, they are a major loss of tax income and jobs, and generally become a blighting influence very quickly. Without intervention, vacant commercial structures deteriorate and become hazards, and eventually must be cleared at high costs and often at public expense. Commercial space also is necessary to have a viable residential community and one of the first signs of decline is a loss of retail services.

Promotion of cluster commercial has few if any intrinsic adverse effects, but the approach is really too new to allow full assessment. There are some deficiencies, mainly based on the feasibility of making any substantial change within a reasonable period of time. Given the age and highly developed nature of Flint, most development now takes place outside the City and mainly redevelopment occurs inside. The latter is very expensive, compared to simple development of vacant land, time-consuming and generally difficult. The major disadvantage to clustering is that the concept comes too late in the history of the City and may have but slight betterment opportunities. Apparently, most new clusters would have to involve relatively commercial development since open land parcels of any size would be scarce. Rezoning to convert existing strip commercial to cluster development also has the complex problem of what to do with existing commercially-zoned land strips (do they become residential?) and how to reimburse owners who are deprived of business use.

Promoting the re-use of vacant structures of any kind is desirable and useful and has many benefits to the community and the City. However, the City's involvement forces government to intrude into the private sector with existing market mechanisms, a role that officials are uncomfortable in and often poor at. Short of providing subsidies or assistance, what the City can do that the private sector cannot, is uncertain.

3. Promoting the development of industry within special-purpose parks is similar to the concept of setting aside commerce in clusters such as shopping malls, and represents the best contemporary planning practice. Its desirability, while established elsewhere, is unknown in Flint since the industrial

park in modern form does not exist here. Two industrial parks are currently under development and well short of full occupancy. It is assumed that industrial parks are the best solution for heavy uses, for a variety of reasons. Separation is the key. Manufacturing and other process functions can be isolated and negative environmental effects be buffered, screened or otherwise separated from residential areas. Landscaping can be planned to serve in multiple roles of screening, beautification and buffering.

Separating industry also facilitates the creation of industrial development districts which can be locally relieved of some portion of the normal tax burden under Michigan State law. Such tax abatement and other economic incentives are more readily provided to separated industry. There are other amenities (streets, roads, parkways, parks and other capital improvements) that local government can also provide that are more appropriate to the industrial park than simply land zoned for industry. Finally, since there being more land zoned industrial than the market has been able to absorb (in Flint and elsewhere), a competitive condition exists which requires localities to provide exceptional incentives if the vital function of economic development is to be fulfilled. Industrial parks best serve this function since they are most attractive on the land market. This is closely related to the local assumption that "Class A" amenities, based on state specifications, are necessary to market such industrial lands.

Since Flint's experience with juxtaposed industry is now manifested in seriously deteriorated neighborhoods of marginal residential utility, the need for separation and treatment of industrial land is obvious. St. John, on one side of Flint's largest industrial facility, became so hopelessly deteriorated that it had to be totally cleared of housing. Oak Park, on the other side of that facility, is on the threshold of a major decision as to its fate. Whether buffering and other extensive treatment of this residential-industrial face will work is now being studied. However, had that industrial facility been developed originally as a park its residential impacts might have been much less adverse.

The negative impacts of promoting industrial parks are largely limited to the feasibility of such development, almost totally an economic problem. Industrial land is generally the most expensive to develop, which is related to its market value. Local resources are strained to provide adequate funding. In Flint's case, federal and state assistance was involved, primarily via Economic Development (EDA) grants. Had there not been a high redevelopment cost, St. John residents could have been relocated much more quickly. Such a drain has also handicapped other local projects. Even given a large investment, the marketability of industrial land, whether or not

in a park (and not all consumers necessarily want this, since there is some cost attached) is uncertain. Since there is more industrial land available than the market can absorb, some must remain unsold and some of this may be highly priced park land.

Parks have limited isolation and buffering value, and even screening has its limits. This is clearly apparent in considering air quality since pollution quickly spreads over a large area, affecting many persons. The large steam generator at the Buick facility had a very adverse effect on air quality in much of the City until the plant was improved. No amount of isolation and other treatment could have improved this deficiency. This is somewhat less true for noise pollution. Another point that has become critical, transportation (typically, employee cars and vendor trucks plus those of the industrial facility) creates its own air and noise pollution, and affects the surrounding area that is much larger than the facility generating this traffic. Therefore, siting industry onto park-like campuses may make it more attractive and less obnoxious, but the industrial park is not a cure-all and a park will not eliminate undesirable impacts. Improved land such as industrial parks, has been overproduced because of the economic desires of both private owners and local government, which is a waste of resources. Dependence on incentives that are available (such as tax abatement) will not guarantee the marketability of industrial land; at best, this can only be one of a variety of incentives and amenities that the developer can offer.

The impacts of industrial parks onto people, directly, is largely unknown. There is a variety of inferential evidence that suggests that a park-like setting for workers is better for their well-being, but this is uncertain. This is likewise an uncertainty that would apply to industrial neighbors. In spite of many legal suits, some seeking redress for impaired health, there is still no proof that industry, whether or not in a park, has a direct adverse effect on human health. However, the perception on the part of residents living near industrial facilities tends to be to the contrary and suggests that more separation and buffering is called for.

4. The integration or closer coordination of transportation and land use planning seeks to accomplish at least two objectives, both of which are beneficial: technical product or the plan will be better (a better design which is more useful, possibly at less cost or more quickly), and its immediate externalities (direct impacts which may be negative) may be reduced. The planning agencies for other units of government are often less sensitive to land uses than the City, in part because they have less control, as via zoning. Operating staffs or those responsible for public works, may be the least

sensitive, since they are wholly oriented to engineering and construction. Inter-agency coordination can be improved if City Planning (within the Department of Community Development) continues regular contact with Traffic Engineering (within the Department of Public Works), the County and Regional Planning functions, plus the Michigan State Department of State Highways and Transportation.

The Master City Plan's transportation element has not been completed since the loss of 701 funds temporarily handicapped plan development in this area. The Master Plan should be revised to accommodate this element when it is completed. The element being developed will be a process model that enables and facilitates the formulation of a product rather than producing, formulating or proposing a transportation product. The element's development in itself requires extensive inter-agency cooperation embracing all levels.

One of the most serious deficiencies in land use planning involves the negative impacting of uses contiguous to major transportation. Proposed control of development around freeway access points and along service drives by use of zoning, site plan review and environmental regulation is therefore seen to be beneficial. This is similarly true for proposed freeway corridor studies aimed at determining appropriate land use and zoning for these areas. The adverse effects on unregulated development adjacent to freeways and other high traffic density corridors has been demonstrated locally and is documented (notably in the I-475 City freeway Environmental Impact Statement which details this deficiency). In the case of the City interstate, the intrusion of this highway has created numerous impacts which include predictions of several adverse effects at interchange areas presently zoned for and containing both residential and commercial uses. A large residential land bay is also impacted by the highway and is assumed to be unsuitable for continued occupancy once the highway is opened. The prior (1960) City Master Plan anticipated this problem and proposed that the area be rezoned as industrial, which was done but with no further action on the part of the City. The City recently requested $7.2 million to acquire and clear the residential area impacted by the highway before its 1980 opening. The concurrent problem of dealing with interchanges and service drives remains to be resolved, along with certain other adverse highway impacts.

The negative impacts of dealing with proposed policy regarding the mitigation of adverse highway impacts fall into two areas: First, the added time and expense of integrated and comprehensive planning for such mitigation of impacts; second, the added time and expense of the implementation of mitigation measures. For the instance given above, had such planning been provided in early highway design steps the time and cost

factors may have been slight. Actually, other negative impacts intervened during the environmental impact analysis phase, and the start of the highway was actually delayed by several years. Unfortunately, this delay did not involve all negative impacts predicted, but primarily related to a proposed realignment, at the beginning, and finally hinged around the 4 (f) statement and controversial park lands. Planning and re-planning costs and delays remain the smallest part of project expense, with implementation costs representing a major part.

The social or human impacts of land use planning remain difficult to assess. A variety of basic assumptions are typically assigned. For example, given the case of I-475, planning reviewers generally assumed that residential land uses at interchanges would be severely undermined simply because of projected high traffic volumes. This probably involved a collateral projection of noise, air pollution and possibly reduced safety. Any commercial uses in such areas would introduce another factor, disruption of traffic patterns by turning movements in and out of businesses, which involved a further set of largely negative impacts. It has been suggested that the I-475 Environmental Impact Statement is deficient in its assessment in several areas: It cites certain critical uses to be noise sensitive (such as churches) as particular sites, but largely ignores large residential land bays facing the highway even though they would be subjected to the same noise and air pollution. Further, the EIS proposes continuing consideration of noise attenuation devices such as buffers or barriers but fails to detail the extent and nature of these construction features. Since the State of Michigan totally controls construction within its right-of-way, the City is left to deal with mitigating measures and any consequent need to change land uses. This deficiency actually is not one of authority and jurisdiction, so much as one of economic capability, since buffering could be accomplished outside of state-owned land by City acquisition of properties facing the highway. State officials generally argue that whatever mitigating measures are appropriate, construction budgets have previously been set and are in fact continuously eroded by inflation, and therefore nothing remains to fund additional highway-related work. This effectively forced the City to act alone to reduce adverse impacts of the highway. The only low-cost option locally available is to rezone contiguous land such as that at interchanges or facing service drives, as an attempt to reduce impacts.

5. Watercourse regulation is deemed to be both beneficial and necessary, for a variety of reasons. Since the City of Flint has known flood hazard, extensive flood control features have been developed and are now largely complete. The flood control project will be complete by 1980 although some tributaries

and the City periphery will still be subject to flooding. For this reason, the City has obtained interim or "emergency" status under the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973. Any resident may now purchase federally-subsidized flood insurance at low cost. In order to take advantage of the federal program, the City must commit itself to a local program of flood plain management that conforms to federal regulations (24 CFR Part 1910). The City has taken all necessary steps thus far, to assure continuing protection. While the real hazard of flood is probably small, the economic loss connected with any such event can be high, which is why flood control measures and management (including protecting access to federal insurance) deserves high priority. This, and other aspects of flood plain regulation are detailed in the City Plan's Environment element.

Flood plain management is required to define "sensitive areas or zones" as given in the Environmental Review and Assessment System (ERAS) also proposed in the Environmental element. The recommendation calls for formulation of an ordinance regulating flood plains and watercourses, with emphasis on their suitability for further development. This is somewhat related to the flood plain management required under federal insurance programs. Sensitive wetlands require identification under the proposed ERAS developer review process, along with other environmentally sensitive areas or zones. It is also proposed that biological study would be useful to help regulate such areas. The impacts of such management remain uncertain, but tentative are assumed to be beneficial. The ecological implications are broad. It is further assumed that watercourse regulation is connected to implementation of the Clean Air Act as amended and Section 208 waste management now being planned by the Regional Planning and Development Commission. While there has been no local study of this question, it is assumed that since suspended solids in surface waters are high and since suspended particulates in Flint air are also high (above standards in some parts of the City), tighter regulation of air quality will improve water quality. The high runoff figures assigned to the City further suggest that buffering and other treatment to stream banks is necessary to limit the continuing loss of topsoil. This deserves further study. .

The social or human impacts of watercourse regulation are difficult to assign, but citizens groups have assigned high priority to the development of the Flint riverfront as a downtown City park and also other recreational land uses. The Riverfront Park was cited as the City's Bicentennial Project, and is now under construction.

The negative implications of watercourse regulation basically involve implementation problems. Although a surprising amount

of City contained waterfront is completely ignored by residents, except for dumping and other infill, some has been developed. It may be necessary to reimburse fronting property owners for the economic loss of property rights under proposed legislative controls. For example, a small lake within the City is presently zoned to provide for business use (although it is now vacant land, no longer improved); it has been proposed that the City acquire this land and possibly develop it for passive recreation. In this way a negative prospect (economic cost of land acquisition) could become a public benefit.

Finally, watercourse regulation may have an incidental benefit that is not too apparent; attention will be focused on City waterways and flood plains, thus requiring residents to think about future land uses involving such lands. Up until now such attention has been inadequate. The Environment element has proposed that City soils be studied in detail to provide data for local decision-making. In prior years studies of our physical environment were only undertaken as part of construction phases, a procedure that has proved to be unwise, especially when marginal soils were involved.

6. Comprehensive development review may be the ultimate objective of local regulation, but only now has it been proposed. The Environment element only specifies new residential construction above the single-family (and duplex) level but also points out that there is no reason why such a process should not be applied to residential rehabilitation, commercial and industrial development as well. The Master Plan proposal also requires local development review in certain cases; as where "critical zones or areas" (given above, largely as flood plains) are involved, or where other environmentally-sensitive decisions must be made. This is designed to protect our natural and man-made resources from further encroachment and avoid the undermining of critical or nonrenewable resources. Citizens have repeatedly cited the ugliness and insensitivity of our existing built-up environment, although this deficiency has not been carried forward toward resolution. The Environmental Review and Assessment System (ERAS) is a first step to provide comprehensive review of developer proposals. This is intended to (1) provide a process affording a rational relationship of development to the carrying capacity of an environment, seen in several dimensions; (2) provide a means of sensitizing both developers and officials to existing and projected environments; and (3) provide a process that remains consistent with government environmental regulation so that the assessment is compatible with federal controls.

   Given a history of largely uncontrolled development in the City, ERAS affords an opportunity to improve the quality of our built environment, and thus is envisioned as a beneficial

mechanism. Although the process is initially conceived to be focused on the physical environment, social impacts are also to be considered. The ERAS process seeks to quantify as much as possible impacts, so reduce arbitrary human involvement and improve the objective evaluation of developer proposals. The Master Plan proposal suggests that environmental conditions be defined to enable use of a matrix analysis. In this way, for example, development that affects a critical zone or area (such as a flood plain) would be immediately identified, as would siting that falls within an environmentally sensitive area measured by other criteria (such as marginal air quality). By use of this technique, proposals quickly become sorted out when affecting critical conditions. The ultimate objective of this system is to identify both beneficial and adverse impacts quickly, so that mitigating measures can be applied (and lacking this, alternatives including "no project" can be formulated and proposed).

It is assumed that the ERAS process is generally beneficial in impacts. Cost and staffing impacts are envisioned to be minor, since the system only requires the refinement of a data base and staff that largely exists. One speculative objection is that ERAS may act to reduce the development of the City because it may require more on the part of the developer or limit his options such as buildable sites. This is difficult to respond to, without experience with the system in operation. The proposal points out that the operative system should facilitate review as much as possible, reducing bureaucratic difficulties. The Land Use element recommends that such administrative procedures (building permits, site plan review and other steps) be reviewed for improvement, and that a development manual be published to regularize administrative steps.

It might also be speculated that the ERAS process would have no significant beneficial (or indeed, any) effect, since residential scope is specified, and very little new residential construction has taken place within the City. A corollary of this, is that, to have a substantial effect on improving the City environment, the ERAS process would have to be applied to all construction, including residential rehabilitation, commercial and industrial projects. This may be true, if we assume that residential construction starts remain at a low level, but a recent trend suggests some improvement. As to expansion of the process, ERAS is proposed to give local officials and developers some preliminary exposure to and experience with a comprehensive planning review process. If this is successful, it would probably be expanded in future years.

7. The adoption of solar energy or "sun rights" regulation is deemed to be beneficial. But many trade-offs are involved that make this a mixed issue and one having some negative

aspects. National policy has assigned high priority to dealing with the energy crisis. The energy equation has two sides: supply and conservation. Use of solar energy directly enhances supply but indirectly assists conservation. As the Master Plan's Environment element points out both aspects must be addressed. Also, alternatives to existing supply (fossil fuels provided by a local public utility) scarcely exist, nor have no immediate prospect of large scale use with the possible exception of solar supplements. Only solar energy has immediate availability to residential consumers, at reasonable cost. For this reason, access to sunshine or "sun rights" must be assured to the greatest possible extent.

Because of its newness and very limited application nationwide, the impacts of solar rights regulation is largely unknown. Some speculation, mixed with very limited experience, is possible however. Shading from trees could adversely affect nearby solar collectors, which in turn has implications relative to the natural environment and man's landscaping. But shading created by large structures will be critical and controversial, especially where it would predictably impinge on existing or future collectors. This may be most critical where the bulk and height of structures is significant, as in the center City, especially when zoning brings together high and low structures. All this requires study.

Negative implications are difficult to assess, especially as to long-term consequences. While the use of solar energy appears to be an almost uniform blessing to man, some problems (such as the solar rights and shading issue cited above) are inevitable. Because of the height and bulk of downtown buildings, solar utilization there may be limited; conversely, low-rise extension of residences far beyond present development may be encouraged. Because of the present cost of solar heating systems, the urban poor may be further handicapped, being unable to add "free" solar heating while suffering increasingly from ever higher conventional energy bills. But regulation of sun rights would at least provide for access, a necessary first step in making solar energy available. It will be useful to think of solar regulation as an extension of existing zoning, a dimension that is not now considered. This may have some effect on property titles as for air rights provisions.

Any adverse environmental effects which cannot be avoided should the proposed plan or policy be implemented.

1. Revision and updating of land use plans to make consistent all local plans including those for renewal areas, has no predictable adverse impacts upon the physical environment. However, some residents, especially living within or affected by renewal areas, may find objection to specific proposals that tend to modify prior renewal plans for NDP areas. This objection is already known in the case of NDP areas originally planned for extensive clearance which is necessarily predicated on property acquisition and tenant relocation, and where property owners claim default on the part of the City in not acquiring their properties. This is related to a decline in property quality and value within such areas which is claimed to be the result of the City's inaction and also alleged refusal to issue owners building permits to allow property improvements.

   There may be possible adverse effects due to rezoning and other land use controls, but this is uncertain and would require assessment on an individual case basis. Since rezoning, like renewal plan changes, requires public hearings, any adverse effects perceived by residents and owners of property affected would be identified incidental to such hearings. It is the intent of such changes, especially zoning, to reduce adverse effects.

2. The promotion of cluster development, with appropriate controls, in contrast to allowing largely uncontrolled linear or strip commercial development to continue, is intended to reduce adverse effects. The City's limited experience in this is inadequate to predict impacts completely. Some comments to earlier proposals seeking to limit commercial access have been adverse; customers may feel handicapped as to drive-in access and parking, while owners may feel their business potential is reduced. This tends to ignore possible benefits to the community as a whole. It is assumed that cluster development will have both social and environmental benefits. The principal deficiency relates to the continuing existence of commercial strip development; there is no mechanism provided to eliminate such development and redirect it into clusters. Any City or private programs designed to do this would be very expensive and hard to justify because they represent assistance to the private sector.

   Promoting the re-use of vacant structures is beneficial, but has the disadvantage of being difficult and expensive to accomplish because re-use involves a substantial economic development activity. Given the large number of vacant structures within the center City, it is also improbable that all can be reused even if assistance were available. This is largely based on the depopulation of the center of Flint, especially within renewal areas, which has removed the economic base for commercial viability.

3. Promoting the location of industry within industrial parks having substantial amenities has basically two adverse effects to the City: Development costs of such parks is large and represents a substantial diversion of local and other government resources, and the sale or leasing of such land is an uncertain prospect and one that adds significantly to an already major time factor. There is also, as previously noted, no real improvement in the physical environment in terms of air, water and noise pollution. Some degree of environmental degradation must be accepted as the price of economic development and industry. The location of industrial parks within the City (one of the two now under construction is relatively centralized) may also serve to further impact lower-income minorities where they now live, although this is uncertain. Whether City industrial parks will have an adverse effect on the human environment remains uncertain, although such parks are now carefully designed to reduce the known adverse effects such as visual blighting, noise and traffic.

4. Integrating land use and transportation planning is predicated on the assumption that adverse environmental effects will be reduced. Earlier environmental analysis incidental to transportation planning has been shown to be imperfect, and to have ignored important impacts. It is now assumed that further refinement of the planning process can largely reduce adverse impacts, which is a critical aspect of the Master Plan's proposal. Two areas of predictable deficiencies remain: It is probably impossible fo the City to correct all adverse effects of prior planning and construction; also, some degree of environmental degradation will inevitably remain. The first deficiency is based on the lack of local funding to take comprehensive corrective measures, while the second reflects the reality that transportation (autos, trucks and rail traffic) always causes some degree of environmental pollution along with other adverse effects. Only the elimination of traffic can result in a complete elimination of such adverse impacts.

5. The regulation of watercourses including flood plains is expected to be a major benefit to the community. Its negative aspects relate to implementation, including any costs of reimbursing property owners for any loss of development rights and also any administrative, planning or construction costs necessary.

6. Comprehensive development review of proposed construction in critical and other areas is assumed to be beneficial. Its negative implications are largely speculative. One claim that local review is a disincentive to developers, is unsupported because little development has been proposed within the City. A related claim, that bureaucratic processing is a handicap, is also poorly supported; the Master Plan also proposes that administrative procedures be reviewed to facilitate developer processing.

7. The establishment of solar regulation or "sun rights" is assumed to be beneficial but no local experience exists to support this. Since some constraints to development appear to be necessary if sun rights are to be protected, there may be some adverse effects on adjacent properties. This could result in less intense development, and there could be a long-term effect on development patterns within the metropolitan area (to reduce height and bulk, also site coverage, and to extend outward urban development). Beyond the need to formulate an appropriate zoning ordinance, there would be greater complexity and difficulty in applying such controls by the City. While most of the difficulty relates to man's built environment, solar shading would have some impacts on his natural surroundings including landscaping by large trees. The sale or leasing of air transfer rights may also become a problem as via the character of title to real property.

Alternatives to the proposed plan or policy and an analysis.

1. The revision of land use plans to be consistent with the Master Plan for the City has only one alternative: continuation of the existing condition. This is unacceptable since a variety of special plans, such as those for eight renewal areas, would be perpetuated; further complications and conflicts would be introduced with the new Master Plan.

2. The primary alternative to encouraging cluster development of commercial, is to continue allowing development patterns as they are. Existing linear or strip commercial development is assumed to be undesirable for a variety of reasons given, and requires correction. Some variations of the basic cluster concept may be possible, but all have the same disadvantage of requiring a major change in existing patterns of development.

3. Development of industry within industrial parks has essentially two alternatives: continuing the juxtaposition of industry and other land uses more or less as they exist, or no new industry to be allowed within the City. The latter is unacceptable locally because of a shortage of jobs and continuing high employment rates, also the need to obtain tax incomes for local government. Unregulated industry closely mixed with housing and business has been demonstrated to be undesirable, as has been detailed. Planned industrial parks offer the best compromise.

4. Integrated planning that embraces land use and transportation is seen to be necessary if for no other reason than the need to improve planning including zoning. Attention to freeway conflicts represents a special aspect of integrated planning necessary to reduce adverse impacts in small land areas typically ignored by planners. The alternative is to allow existing and unsatisfactory conditions to continue.

5. Watercourse regulation by ordinance is required, as is formulation of a local flood plain management program, in order to qualify for federal flood insurance. There are, however, other alternatives to the general direction proposed beyond meeting flood insurance and flood plain management requirements. These collateral proposals, in the Environment element, suggest that further study is needed before more extensive water course regulation is established. The proposed soil map is one such study, aimed at providing data to assist in decision-making by local planners.

6. There is leeway at two levels of the proposed comprehensive developer review process, the Environmental Review and Assessment System (ERAS): Whether the City is to review developer proposals beyond simple licensing of construction; and whether comprehensive review is to take place. Site plan review is already required by ordinance for all residential construction over three units, plus commercial and industrial plans. ERAS simply expands the process so that all environmental factors are considered. The Environment element proposes that the exact scope of comprehensive review be tested, so a wide range of alternative review formats is available. The recommendation simply limits these to a process that is consistent with federal environmental guidelines.

7. Since solar rights are not now regulated, the basic alternative is no action. The Master Plan proposal is not specific as to the nature and scope of an ordinance but recommends that the City formulate appropriate regulations.

The relationship, under the proposed plan or policy, between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity.

1. Revising and updating land use plans, particularly zoning, for consistency with the Master Plan, will enhance both short-term use and long-term productivity of man's environment. This is necessary because the inconsistencies between the various plans, especially those for renewal areas, will grow with the adoption of the new Master Plan.

2. Promoting clustering of commercial uses will have a short-term benefit, but will have greatest impact for long-term productivity because it will reduce conflicts between other land uses. The greatest reduction of conflicts will take place when extensive buffering and other controls are applied to cluster development. Promoting the re-use of vacant structures is designed to eliminate blighting influences that are immediate and short-term but multiplier effects will have long-term benefits, particularly if local business would otherwise disappear or be displaced out of the City. The costs are not only those to the property owner but to the whole community.

3. Development of industry with industrial parks will improve both short-term use and long-term productivity, but the latter may have the greater importance. This is because the costs of juxtaposing industry with residential neighborhoods has been shown to be high, both to residents and the whole community. While the effects to industry is minor, industrial facilities have a severe negative impact on residential areas both in the short- and long-term.

4. Integrating land use planning with transportation planning will improve both short-term use and long-term productivity for whole systems as well as for special highway-impacted areas such as interchanges and service drives. Highway and other transportation impacts could easily be ignored for short-term uses but at a detriment to long-term productivity.

5. Development within flood plains and other watercourse zones must be regulated to meet federal and other environmental requirements, especially those necessary for the City to qualify for federal flood insurance. In this, there may be some impairment of short-term use because of restrictions on development in flood plains, but this is expected to improve long-term productivity. Other, collateral proposals are oriented to long-term improvements.

6. Comprehensive development review (ERAS) will have some direct, immediate benefit to short-term uses since it seeks to assist in bringing about better quality development. Enhanced long-term productivity is the major objective.

7. Regulating solar rights may have some adverse effects on short-term uses, if development should ever be handicapped. It is designed to have a sustained benefit in future years when solar energy utilization becomes extensive. The relationship cannot be assessed until an ordinance is formulated and its effects can be predicted.

Any irreversible and irretrievable commitments of resources which would be involved if the proposed plan or policy should be implemented.

1. Integrating all land use plans has, in itself, no significant effect. Such action brings together proposed commitments of resources. Such assembly facilitates and encourages resource review.

2. Clustering commercial development would have no adverse effect since it seeks to focus normal growth into coherent areas or sites rather than allowing it to sprawl out along streets. The re-use of vacant structures seeks to preserve resources already committed.

3. Promoting industrial parks seeks to focus development into special areas with added amenities, which will conserve resources. Making available such land is a commitment of both land and economic resources, but this is not necessarily irreversible and irretriev-

able. St. John Industrial Park is a re-use of blighted residential land, beneficial since the City needs jobs and income and does not and does not need space for housing. Bishop Industrial Airpark develops vacant land with poor prospects otherwise.

4. Integrating land use and transportation planning seeks to avoid wasted or lost resources, especially poor land uses at highway interchagnes and service drives. The latter uses were essentially unplanned or inadvertent commitments which integrated planning might mitigate or avoid by better land use controls.

5. Regulating development within flood plains is required under federal law to qualify the City for flood insurance. Little if any land would be lost or wasted since watercourses are now almost totally undeveloped except for that riverfront that also includes flood control features. The small amount of flood plain remaining and developed is marginal and would not stand development even without restraining ordinances. No resources, therefore, are committed.

6. No substantial commitment of resources is needed for comprehensive development review. The process (ERAS) itself seeks to economize resources.

7. The regulation of solar rights is designed to minimize the commitment of resources in such a way as would prejudice or reduce access to the sun and the utilization of solar energy. In addition to assuring optimal solar access, such regulation would attempt to balance resource development in future years.

Statement setting forth applicable Federal, State and Local environmental controls, including flood plain management and noise abatement and control.

The following authority and related guidelines are applicable:

National Environmental Policy Act of 1969 (PL 91-190)
Housing and Community Development Act of 1974 (PL 93-383)
Sec. 701, Housing and Community Development Act of 1954, as amended
National Flood Insurance Act of 1968, as amended
Flood Disaster Protection Act of 1973, as amended (PL 93-234)
Policies and Standards for Flood Plain Management (24 CFR Part 1910)
Noise Abatement and Control (HUD Circular 1390.2, 1971)
Federal Water Pollution Control Act Amendments of 1972 (PL 92-500)
Federal Safe Drinking Water Act of 1974 (PL 93-523)
Act 245, Michigan Public Acts of 1929, as amended
Federal Clean Air Act Amendments of 1970
Implementation Plan of the State of Michigan (1972)
Soil Erosion and Sedimentation Control Act of 1972 (Michigan PA 347)
Soil Erosion and Sedimentation Control Ordinance 2481 of 1975 (Flint)

## III. ENVIRONMENTAL ASSESSMENT - RESIDENTIAL

Summary or abstract of the proposed plan or policy.

1. Preserve and enhance the stock of decent, safe, structurally sound housing within the City of Flint.

   A. Establish a housing data base so that housing-related policy and program decisions can be based on the most complete and recent factual information available.

   B. Continue and expand support of housing rehabilitation programs as a primary means of fulfilling the requirements of the federally-mandated Housing Assistance Plan and enhancing the City's existing housing assets.

   C. Establish and fund a City-wide residential code enforcement schedule in which each dwelling unit is inspected for code violations at least once every five to seven years.

   D. Curtail block-scale demolitions, but use limited, expeditious spot demolitions to complement neighborhood housing rehabilitation programs.

   E. Encourage private group and individual efforts in the field of housing maintenance through educational efforts and the matching or private with public dollars.

2. Preserve the integrity and enhance the livability of residential neighborhoods within the City of Flint.

   A. Promote the formation of block clubs and citizen action groups in order to increase individual involvement and especially homeowner involvement, in neighborhood problem resolution and constructive neighborhood-oriented activity.

   B. Protect residential neighborhoods from non-residential encroachment and/or conversion to more intensive uses through strict interpretation and enforcement of zoning and other City codes, and through making neighborhood preservation a high priority in traffic planning and capital investment programming.

3. Provide adequate City services to all residential neighborhoods and dwelling units.

   A. Adopt the Responsive Municipal Services Program which measures present City service levels by neighborhood or planning district.

B. Improve the City's capital budgeting and programming procedures to incorporate City-wide community development as well as expenditure measures, and input from individual citizens and neighborhood groups.

4. Alleviate racial/low income impaction and promote economic diversity in housing.

A. Encourage formulation and adoption of a regional "fair share" housing plan through cooperation with other units of government in Genesee, Lapeer and Shiawassee Counties.

B. Encourage new construction within the City which will be attractive to those in the middle- and upper- income housing market.

C. Continue to participate in present and future housing programs which provide subsidies, outright grants or other forms of assistance to low and very low income households.

D. New construction of subsidized units for smaller families, the elderly and handicapped should be expedited. Public housing needs for larger families should be met by acquiring larger-size existing units rather than new construction.

The environmental impact (beneficial as well as adverse) of the proposed plan or policy if carried out.

1-A. Establishing a housing data base will have several beneficial effects: Data will become available to guide formulation, development and implementation of HAP and other housing plans, programs and policies, both for the City of Flint and other local units and agencies. This is also expected to have transfer utility for other aspects of community development, plus local public information and education efforts. Such data will form the basis for decision-making and action-oriented planning.

Since costs have not been precisely determined, economic impact is uncertain, possibly significant but not major. No adverse effects are apparent.

1-B. Continuing and expanding support for housing rehabilitation will have a variety of beneficial effects, as local experience has demonstrated.

(1) Rehabilitation of housing is necessary in order to meet the Housing Assistance Plan (HAP) and related housing need programs,

(2) Rehabilitation has an immediate and utilitarian impact on the local housing inventory, since it simultaneously meets deficiencies in existing inventory while providing standard housing, and also provides the basis of meeting future needs (which otherwise would require new construction);

(3) Rehabilitated housing meets local needs based on actual market demand, because of its immediate availability, low cost, and standard condition;

(4) Rehabilitation is highly beneficial to the local economy. In the short-term it provides construction and related jobs, materials sales and a variety of other local investments. In the long-term, higher property taxes result (subject to a short-term loss due to tax abatement);

(5) Rehabilitation is virtually the only housing activity taking place within the City, as new construction is virtually non-existant. Based on recent experience, any new units would be built outside the City;

(6) Rehabilitation, especially in connection with other programs such as PROP or urban homesteading, is the only feasible option for low- to moderate-income families, since new residential construction now averages over $40,000 per unit.

The adverse effects of rehabilitation are somewhat speculative. It may be argued that all housing production is locally unjustified because recent statistics indicate a high vacancy rate; this is hard to prove and may have changed with vacancies dropping. One criticism is that rehabilitation is only a short-term solution for older structures; this may be true but there is too little experience to be sure. Recent Flint data suggests the homes rebuilt under the original Section 312 authorization (ca 1969-70) remain generally in good condition. It must be acknowledged that rehabilitated homes have a predictable life expectancy that is less, perhaps one-half that of new construction. Another objection is that many families will not accept an older home even if restored to standard condition; for these only new construction is adequate. Also, that older homes are generally in neighborhoods that are unacceptable to upper-income families; again, the private sector will build to meet the popular demand. Finally, it could be argued that rehabilitation simply perpetuates the ghetto but without "slum" housing; this is conjectural but requires consideration of the high correlation between minority concentration and older housing (which is also

less costly). Importantly, rehabilitation requires that housing be restored to local code standard, which does much to eliminate possible negative impacts to tenants. From the City's point of view, a major deficiency remains, the erratic and very limited federal funding of Section 312 rehabilitation loans, also the lack of Section 115 grants to low-income homeowners; this need sparked the creation of the City's own rehabilitation program.

1-C. Establishing and funding a City-wide residential code enforcement schedule would have beneficial effects, except from the perspective of some vested interests. Flint's housing inventory is progressively declining in quality, as the Residential element points out, and the present inspection program is inadequate to meet the need. Given the demand for industrial, commercial and multi-unit housing and safety inspections, the City cannot possibly cover anything approaching 100% inspection City-wide. This deficiency requires that Inspection only addresses high-priority inspections, leaving much of the City without regular attention.

Regularly scheduled City-wide inspections would serve to: (1) restore housing to safe, standard condition, necessary for safety, (2) facilitate housing programs including relocation, (3) reduce blighting influences and their adverse multiplier effects, (4) improve the attractiveness of neighborhoods and so stabilize population and enhance rental and resale economics, and (5) improve City tax incomes.

The only adverse impact, beyond funding the costs of additional inspection staff, is that of possible hardship on lower-income homeowners. This has been cited as a principal handicap to expanding City inspections. Property owners have also pointed out that being forced into making costly improvements that will also possibly raise their taxes, without any guarantee that such investments will be recovered via rentals or sale, are a disincentive that forces them to oppose inspections. Tax abatement only partially counters this resistance. Finally, any code enforcement schedule is necessarily somewhat discriminatory since only a fraction of housing units can be inspected at any one time. It is also possible that an inspection cycle specifying a five- to seven-year cycle would actually require a very large additional staff, one having unacceptably high personnel costs.

1-D. Reduction of large-scale demolition is generally seen to be beneficial today since prior experience has demonstrated that redevelopment is typically slow and un-

certain while maintenance of vacant land is a continuing expense to owners. Extensive demolition has only been common in the poorest areas of the City which are also those that are least attractive to redevelopment. All redevelopment is very costly and slow even given maximum support, and projections suggest that federal and state assistance will be declining rather than increasing. Local government has demonstrated reluctance to support demolition funding, largely because it is a cost that is difficult to recover.

No negative effects are given, except that some areas of the City, those where extensive demolition was promised to meet earlier renewal plans, have become deteriorated on the expectation that housing was to be cleared. Owners further have demanded acquisition claimed due them.

1-E. Encouraging private maintenance is clearly beneficial, with some limits and reservations. Those areas in most need of maintenance and repair (via rehabilitation) typically have residents and owners least qualified for, or interested in, such preservative activities. In many areas home ownership is at a very low level, and non-resident owners are typically the least interested in, or capable of, effective maintenance of housing. Several programs now exist to provide help and information, generally at low cost, but these have proven to be difficult to utilize for a variety of reasons. Some City areas have a preponderance of elderly residents who are marginally able to participate in maintenance programs themselves, which means that a much more costly assistance program is required for their homes.

Related to the above, the feasibility of maintenance education is limited, and in many areas a much stronger program is required to bring housing to standard levels, which forces a major involvement on the part of the City. In some cases, such maintenance will never reasonably bring a home to compliance with Code, a severe handicap to public programs which must require standard housing. Educational efforts can only succeed if a lack of knowledge is the only deficiency that a homeowner has. Therefore, the principal negative impact is that educational efforts will not meet the total need.

The matching of public with private dollars is seen as beneficial, recognizing that neither can do the job alone, and that such a policy is presently most attractive to private foundations and governments alike.

2-A. Promoting the formation of block clubs and other citizen action groups would have a beneficial effect for various reasons. From the City's point of view, such local groups focus interest and action and make it convenient to deal with neighborhood residents via their appointed representatives.

Such promotion is never adverse, even when a few residents abuse their positions for reasons of personal gain. However, there remains the question of what can be done when such promotion does not result in the coalescing of local residents into a group; how the City is to deal with unorganized and scattered residents?

2-B. Protecting residential neighborhoods from non-residential encroachment and/or conversion to more intensive uses, through strict application of Codes and other controls; and making neighborhood preservation a high priority in traffic planning and capital investment programming -- this would appear to be completely beneficial.

It must be assumed that the amount of commercially-zoned land is adequate, that it is accessible, and reasonably priced. The pressure to rezone is always economic. However, the procedure of rezoning is more complex; it reflects contemporary conditions and largely ignores future impacts which are typically detriments to residential areas. Rezoning part of a street may have beneficial effects such as providing additional retail services; but the traffic generated during business hours may be a negative. A more clearly negative impact is rezoning to provide industrial land adjacent to residential. Assigning high priorities via traffic and capital planning also seems attractive and beneficial. However, as with zoning, it must be realized that competitive economic processes are involved. The City administrators may prefer to assign a higher priority to economic activities that are immediately rewarding; zoning that will result in higher tax revenues, new jobs, and other income.

Negative impacts -- residential neighborhood protection and preservation may not have as attractive a cost-benefit ratio as City investment in other land uses. Rezoning is the least costly investment that the City can make toward improving income, while major capital projects are often no more expensive when servicing commercial or industrial lands as opposed to residential.

The Residential and Land Use elements have recommended that the City's rezoning history be studied specifically to determine negative impacts caused by variances, rezoning,

and a lack or related controls such as performance standards (e.g., noise level limits), buffering and other site plan amenities.

3-A. Adoption of the Responsive Municipal Services Program that measures City service levels by neighborhood or planning district would have a beneficial effect the residential areas and their their residents. RMSP would quantify and indicate public services by local areas, facilitating further analysis and prioritization. Comparison by district would be simplified.

The only negative effect might be some difficulty in gaining acceptance and use of a new approach to planning City services.

3-B. Improvement of the City's capital budget process, to add inputs from local groups and areas, would be beneficial. This is one of the major complaints from residents, that services are provided or withheld without advice of the taxpayers that support costs.

Negative impacts are speculative, aside from probable resistance in the several City administrative offices responsible for capital budgeting. Without some controls, areas of greatest need and/or persuasion could gain disproportionately at the expense of other areas. Similarly, commercial and industrial interests may require more representation to avoid imbalance.

4-A. Clearly beneficial, a GLS Region consortium and housing plan would be a major step in scattering minority location. No plan limited to the City alone could be completely effective; at best, this could only redistribute minorities within the City boundaries. The most acute difference in distribution is that between the City and the out-county, the latter having much higher income and far fewer minorities.

The principal negative implication is the probable difficulty of implementing such a housing plan in the several units of government. Minority neighbors and the poor are sensitive subjects to many persons, and their acceptability to higher income homeowners is questionable. Although a tri-county agency exists it has no authority to formulate, adopt and enforce a regional housing plan.

4-B. Encouraging new construction within the City for upper income residents is clearly beneficial, and has been cited as a desirable policy locally for some years. This runs contrary to actual trends however, as most upper

income families have elected to live outside of the City where virtually all new construction has taken place. While there is no disagreement as to the desirability of attracting new construction for housing upper income families, there has been developed no plan or approach to implement this policy.

While the policy is beneficial, the most workable way to implement such construction within the City -- direct assistance -- runs contrary to private practices and public policy, including that promoted by HUD (which requires that preference be given to minorities and lower income groups). Although there appears to be a surplus of housing in the area today (as indicated by vacancy rates), any plan to promote upper income housing might also have the effect of reducing opportunities to lower income groups, if only by reducing the vacancy rate and therefore local need.

4-C. Continued participation in subsidized housing and other assistance to lower income groups is probably desirable and certainly will be continued. Some federal programs have a bad image because of a small number of highly publicized abuses, while public housing will probably always have some degree of stigma attached to it and its participants. However, housing assistance is necessary if lower income persons and families are to enjoy standard housing. The complexity of various programs and difficulties of meeting all applicable guidelines will continue to handicap housing assistance. The City of Flint also has not been successful in obtaining Urban Homesteading programs (as opposed to PROP) to date, for uncertain reasons. Technical and administrative difficulties and the need to invest local resources, may be the essential negative implications of this policy. The fact that responsibility for assisted housing does not rest with the City and is effectively divided between several local agencies, may be a major handicap. While the Flint Housing Commission has prime responsibility, both City and County are required to play some role in such housing production.

4-D. The primary benefit of expediting construction of new units for smaller families, the elderly and handicapped, is that the availability of more units will meet the pressing need identified in the Housing Assistance Plan (HAP). Because of fundamental demographic changes the average family size has fallen to about three, with the typical family now ranging from two to four persons. In this, Flint is only slightly above the national average.

The relatively rising numbers of elderly are typically one- or two-person households. Greater priority is now being assigned to meeting the special housing needs of the handicapped. HAP indicates that meeting the housing needs of lower-income smaller families is easily Flint's greatest problem, one not being fully addressed by the market. Meeting this need will represent a major benefit to the community. Some collateral benefits also may be realized, as where development can be planned to take place within planned unit developments (PUD) or other carefully structured aggregations. In such situations, environmental pollution is often reduced. Coherent developments also enhance the feasibility of adding solar energy utilization (as is being done in Flint's Doyle project). Providing a variety of amenities that will be shared is also more feasible when a single intensively planned site is developed. Adding smaller housing units has immediate utility for meeting market needs (given the large local deficiency). Given a projected continuing decline in average family size, marketing feasibility is expected to increase over time, which further improves prospects for new construction.

Meeting public housing needs for larger families by acquiring larger-size existing units has several advantages and is expected to be beneficial to the community as a whole. The primary advantage is that this policy deals with several problems in a mutually complementary way, quickly and with least cost. Speed is an important factor, since government programs typically involve long periods of time compared to private conventional housing production. Utilizing the existing market inventory is fastest of all. If direct assistance is available, housing may be leased and need not even be acquired, which would reduce time to an absolute minimum. Making available units for large families has always been difficult to do, partly because local housing authorities find it difficult to justify. Costs of large (multi-bedroom) units are very high, and new construction requires a disproportionately high initial cost. Its feasibility may be handicapped by uncertain long-term prospects (assuming that the size of public housing families also continues to drop over time). Using existing housing units also will serve to reduce the high local vacancy rate (estimated to be over 8% in 1976) which is based on a large number of empty homes. Many of these homes were vacated via mortgage defaults during the recessionary and energy crisis-impacted 1974-76 period, and many multi-bedroom residences remain on the market today.

Meeting the large-family housing need with existing residential units is also consistent with the local market, since Flint is heavily oriented to single-family detached housing. Public housing reflects this local preference and for some years the Flint Housing Commission has pursued a policy of providing scattered-site residences located throughout the City. Private sector brokers appear to support, and have proposed City use of larger existing homes for public housing.

The adverse impacts of expediting construction for smaller families are essentially no different than those for any new construction; there are adverse short-term effects. The exception (noted above) would be carefully planned single-site development which should minimize adverse environmental effects. The principal negative implication may be that assigning priority to new construction for assisted housing diverts some economic resources from government. Such housing might be made available by the private sector. The actual prospect of this taking place is uncertain but is assumed to be poor unless developer subsidies are made available and promoted actively. Finally, the Housing Assistance Plan (HAP) indicates a sufficiently large demand for smaller assisted units that cannot be met quickly, so that some deficiency will continue for an uncertain period of time. This will encourage overcrowding, substandard housing and other adverse community effects.

There are no adverse environmental impacts to utilizing existing homes for public housing since the structures exist and nothing new is being introduced to the environment. There may however be claimed some adverse socio-economic impacts, aside from private sector beneficiaries such as real estate brokers. This would largely depend on where public housing is located. Other adverse impacts are problematic. There may also be negative reactions voiced by builders who would prefer to construct new housing. Whether scattered site or broadly dispersed public housing is beneficial per se, is uncertain. Since vacant homes are fairly well distributed throughout the City, implementation of scattered site public housing is simple.

Any adverse environmental effects which cannot be avoided should the proposed plan or policy be implemented.

1-A. The only adverse effect of data-gathering is an unavoidable cost.

1-B. Expanding rehabilitation would be very costly and would sharply cut into the City's HUD entitlement. Given the continous deterioration of Flint's housing inventory, a very large program would have to be operated simply to maintain the status quo of local residences.

Another negative effect relates to the feasibility of continued rehabilitation of inner-city housing; maintaining the standard condition of such housing simply perpetuates it as a human environment without encouraging change. This means that racial and poverty impacting is also perpetuated, while no incentives are available to change this.

1-C. Expanding housing inspection to a regular schedule would be very costly because of a very large increase in personnel. Only a small and uncertain portion of this added cost would be offset by taxes generated by home improvements.

1-D. Curtailing major demolition will frustrate that fraction of the population still owning and/or living in housing in urban renewal areas who believe or expect to be bought out incidental to acquisition prior to clearance.

1-E. No adverse effect is projected, although it must be recognized that seeking housing maintenance through educational efforts has its limits of effectiveness.

2-A. No adverse effect is projected, although not all residents will be interested in forming block clubs or other organizations.

2-B. Protecting residential neighborhoods from encroachment or conversion to more intensive uses has always been stated to be desirable as a general goal, but also often has been violated in specific situations. This appears to be a reality of land use planning and control. Part of the problem seems to be that economic and short-term benefits appear larger and more attractive than do uncertain and longer-term detriments. Given the essentially economic forces at play here, the corollary is that, protecting residential low-density development will guarantee that the tax base will not improve. This assumes that such residential land could be redeveloped at higher housing density, as commerce or as industry.

Whether or not the introduction (as via conversion by rezoning) of commercial uses to residential areas is negative is uncertain and in general a mixed situation. Acting to "protect" residential areas from commercial encroachment may simply reduce local retail services that are useful to residents, which would be a negative impact.

3-A. Adoption of RMSP, like any other basic change in procedures, is difficult to introduce to organizations accustomed to working in a different way for a long period of time.

3-B. As noted above, there is always a negative implication when a basic change in procedure is to be introduced. Revamping the capital budgeting and programming process to accommodate additional inputs would also add complexity and possibly cost. This is uncertain.

4-A. Adoption of a "fair share" regional housing plan has a variety adverse effects, mainly those dealing with the difficulty of introducing new policies and procedures, and also, of coordinating the workings of several units of government. The difficulties are not unlike the prospect of introducing a single metropolitan form of government to the area. Such difficulties may be aggravated by the fact that a often highly controversial element is the subject, that of diffusing minority and lower-income housing throughout a three-county area. Given the difficulties of "bussing" school-age minorities to more affluent areas, such a proposed undertaking may have severe implications within the social environment of the City.

4-B. Encouraging new construction for the affluent has minor and speculative negative effects; this is mainly because such a policy has not been operative in Flint. In the typical American city the wealthy seldom live within the city, but when they do they tend to move out, in time. Many cities have actively pursued a policy that promotes redevelopment that encourages higher-income tenants and owners. However, such programs tend to work at the expense of urban poor minorities. Knowledge of this is reflected in federal priorities that favor minority poor and reduce the feasibility of assisting the wealthy either directly or indirectly (via the construction of middle-income housing).

4-C. As noted above, continued participation in subsidized or assisted housing programs tends to work at the expense of conventional or middle-income housing. Also, such participation is limited by the local and nonlocal structures of government. It is also possible, although this has not been studied, that given the increase in certain categories of needy families, local production of housing for lower-income groups simply has the effect of encouraging the in-migration of more such families.

Although the above suggests a competition for scarce resources -- land and capital -- and therefore may appear to be contradictory, local redevelopment planning has emphasized the need for both lower- and higher-income residents. Such vertical integration is seen as desirable even though its implementation costs may exceed traditional single-class housing planning, a possible negative or adverse impact.

4-D. No unavoidable adverse long-term environmental impacts are projected if new construction of subsidized units for smaller families is expedited. New construction always has an adverse short-term impact because of dust, noise and other undesirable by-products incidental to such work. Specific impacts would have to be assessed on an individual project basis however and would be subject to mitigating measures. The diversion of funding and other resources may represent a long-term negative impact, but this is difficult to assess since this policy is based on the assumption that such housing construction is necessary to improve community living standards and is therefore beneficial.

No unavoidable environmental impacts are envisioned if existing residences are used for public housing, since most adverse impacts have already been sustained (for example, construction impacts or the development of environmentally sensitive land). Some community objections remain possible. It is possible that the private sector could develop suitable housing for large and small housing, but government assistance will be necessary to align lower incomes to market development costs. Since the "average" new home today is $50,000 plus loan and other costs, the prospect of building public housing residences for families having an annual income of perhaps $6,000 is slight. Finally, some degree of overcrowding and substandard housing will remain until all needs are met, whether for small or large families. Since population change is dynamic there will always be some degree of mismatch between housing supply and demand.

Alternatives to the proposed plan or policy and an analysis.

1-A. Alternatives to additional data-gathering do not provide the needed product, and therefore ignore the need.

1-B. Several basic alternatives exist to expanding housing rehabilitation:

(1) Extension of the status quo or recent existing conditions is not exactly "no project" but does represent a continuing relative low level of project

activity. Current levels are not even adequate to meet the current rate of deterioration in housing, so the City's housing stock is falling but at a slightly lesser rate than if no rehabilitation were taking place. Either rate (with or without current activity) is unacceptable to the City, since projected conditions suggest major deterioration in future years, a dilapidated town housing only the poor.

(2) Maintaining present activities hoping for a windfall from the federal government, whether via Section 312 bonus funds or other programs, represents a viable alternative and one that other governments have followed. However, history suggests too little funding, and future prospects suggest no great improvement. Waiting and hoping for improvement has not been rewarding.

(3) A vast expansion of rehabilitation, on the other extreme, may be possible. This would require diversion of a large part of the City's HUD entitlement and also local funds from several sources. Reallocating a much greater part of the entitlement to rehabilitation would seriously cut into other local projects, since much of the funds are effectively pre-committed by federal guidelines such as the need to reduce land inventories and loan payments, and so on. Local funding sources are presently assumed to be effectively consumed, so nothing else remains.

(4) Another possible alternative would be to reduce emphasis on rehabilitation and promote new construction. This would effectively return the City to the conventional urban renewal activities of the 1960s, which is not acceptable to HUD. Prior experience also shows that the capital needs of total clearance (required for redevelopment and new construction) are far beyond reasonable expectations for future funding.

1-C. The alternatives to establishing a City-wide residential code enforcement schedule are basically, "no project" (or as-is activity) and possibly a much higher level of inspection activity. The latter may be desirable since a five- to seven-year inspection cycle might be excessively long to prevent major deterioration in housing. The present level of inspection is inadequate to prevent progressive deterioration, as data now show. The effective limit to inspection activities is probably political rather than economic, however.

1-D. Alternatives to the curtailing of block-scale demolition are basically, an as-is or limited demolition schedule, or expansion to the higher level characteristic of the period 1973-1975 in Flint. This is because demolition has fallen off greatly and is effectively "curtailed." However, legal action of some residents in renewal areas seeks acquisition of their properties, and this is a prelude to extensive demolition. A limited or small scale and highly selective demolition program is currently deemed to be best, even though it seems to reject acquisition prospects. A return to major renewal programs including large-scale demolition would meet the desires of a few property owners but would work contrary to both local and federal policy as it has evolved in recent years. Large scale demolition would also have negative consequences environmentally. State monitoring of construction activities in St. John (where residential structures are still being cleared for industrial redevelopment, along with other work) have shown significant air pollution, apparently inevitable in such a situation. This suggests that any major demolition activity would result in a degraded physical environment within the City. While it would be possible for the City to acquire slum properties without clearing them, experience has demonstrated that demolition is the only prospect for vacant housing.

1-E. Encouraging housing maintenance through educational efforts, and matching private with public funds, is only one of a variety of approaches that can be taken. It is recognized that education is very limited and can only have major beneficial impact when it is the only deficiency found in homeowners. This is not the case typically, and so a multi-faceted strategy is more appropriate. The probable result is a diversified program aimed that improving the maintenance of homes.

2-A. Alternatives to establishing block clubs or other organizations, are limited and basically resolve themselves to "no activity." Without organization, the City must deal with individuals as they now do, which handicaps progress.

2-B. Alternatives to a policy of protecting residential neighborhoods from rezoning and the encroachment of more intense uses, basically allow for adjustments in level. A "perfect" implementation of this policy would result in no rezoning ever again. This may not be ideal however since circumstances change and all neighborhoods tend to follow life cycles that involve changes in their populations (which may change in age structure, race, ethnicity and so on). The other extreme is similarly difficult to accept, since unlimited or unconstrained

rezoning is hardly feasible or likely. The costs of converting a residential neighborhood to heavy industrial use is improbably great, just as the need for such a land bay is uncertain and possibly nil.

The real alternatives are roughly two: Continuing to handle zoning and other City controls on land use as has been done, with some uneveness and prejudice to compatible uses and also abuses; or implementation of the proposed policy of conservative change and the protection of residential neighborhoods. Thus a policy is offered without strong promise of enforcement. For if City incomes continue to decline or remain stable in the face of rising costs, pressure to rezone or otherwide change land use to improve local incomes, will become great and such conversion of uses will occur given an opportunity to redevelop residential land. Although there has been some shift away from local government's total dependance on property taxes (as to personal income tax) real property still pays most of the expenses, and therefore will continue to have primacy as an income source.

3-A. The alternative to adoption of the Responsive Municipal Services Program is maintenance of the existing measures system.

3-B. As above, the alternative is maintenance of the existing system. Both are deemed unsatisfactory to meeting local community needs.

4-A. Alternatives to a regional housing plan are many and mixed. The essense of the proposed policy however, is that the City should be relieved of its traditional burden of housing the poor. Either the City will remain as the repository of poverty and minorities or the metropolitan area and region will open up to accept assisted housing for these needy families. The feasibility of this is uncertain and appears to be slight. Local experience with a metropolitan form of government, as has been proposed, suggests reluctance by local units to combine when any loss of power or authority is apparent, or when some other loss will take place. The introduction of the poor and minorities is conventionally taken to be a disadvantage. If federal agencies required such a regional housing plan and fulfillment of housing assistance plans as a condition precedent to disbursing the HUD entitlement (and possibly revenue sharing), more substantial progress, and possibly new alternatives, might develop.

4-B. Alternatives to encouraging higher-income housing within the City seem to approximate the existing condition,

whereby the development of conventional or market-level housing is largely left to the private sector. Given the very limited amount of vacant land left in the City and the demands of upper-income families, the development of appropriate housing is only possible outside the City. The only exception to this is Doyle redevelopment, which is a conventional urban renewal project near the City center. There also appear to be some middle- and upper-income residents who prefer to live in better quality existing housing, some of which is relative old (as noted in the Residential element). However, overall population trends suggest that if the City does not actively promote the development of housing, whether new or existing, for higher-income families, the continuing in-migration of lower-income groups will effectively displace the higher-income. If this population shift continues, the result would be that the City will largely house lower-income families and persons or groups that cannot afford quality housing including the maintenance of such housing. This is also related to code enforcement. The residence of lower-income groups will also be affected by City policy and the development of assisted housing.

4-C. The principal alternative to active participation in subsidized or assisted housing, is default or not meeting the needs for lower-income housing for various population groups. This would be unacceptable from the federal point of view and could result in a loss of funding and consequently a catastropic emergency in City government. Such default would also have a long-term adverse effect on the peoples not being housed in standard units. There would also probably be a perpetuation of poor housing conditions because of the resulting pressure on the low end of the housing market. Therefore, were the City to elect not to participate in assisted housing, "slum" or substandard housing would effectively place the City in the position of promoting slum conditions and their several negative multiplier effects. One of the adverse effects is that upper-income residents would have a disincentive to remain within the City of Flint.

4-D. The principal alternative to expediting assisted new construction for smaller families, is to be met wholly by the private sector. This approach has not been satisfactory in the past (as evidenced by a serious lack of such housing today). Deficiencies apart from numbers of units needed to meet demand, include poor maintenance and a rising number of poorly maintained housing units. While this is typical of rental units, poor maintenance is also common with owner-occupants. Expecting lower-income families to compete for conventional market housing either forces them to live in low-rent and poorly

maintained units or to buy poor condition housing that they cannot afford to repair or keep up. There is also a ghettoization aspect to this since low-cost housing is typically where minority poor are concentrated. One solution, is to provide government subsidies, either as direct assistance to renters or assistance to developers; this is consistent with the City proposed policy.

Meeting deficiencies via new construction is not necessary; there may be an adequate number of housing units existing to meet the needs of smaller families, the elderly and the handicapped. However, older homes tend to be larger than necessary which introduces the burden of costly wasted space to those who can least afford it. Most such homes also require rehabilitation. Existing units are generally not satisfactory to meet the special needs of elderly and handicapped tenants. Special barrier-free architectural features are easily incorporated into new construction but can be prohibitively expensive when added later. In general, the average existing home is poorly suited to a smaller family (one averaging three persons) of lower income. It is doubtful that very many old homes could be utilized to meet the total demand.

The obvious alternative for using existing homes to meet the need for housing large families, is new construction. This is prohibitively expensive relative to the capabilities of the local housing authority, and also politically unpalatable to an electorate progressively losing access to any prospect of owning a new home. The critical assumption however, is that the large family is a transitional problem, and the large home of today will become an unmarketable white elephant at some future date. There is a secondary alternative as well. Existing homes in Flint range in price from (one dollar to over $100,000 and average about $20,000, with standard housing available at less than $10,000. Unit costs can be reduced even more if extensive rehabilitation is considered in combination with less desirable locations. Thus, a much broader range of existing housing is available than would be the case for economically accessible new construction.

<u>The relationship, under the proposed plan or policy, between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity</u>.

1-A. Establishing a housing data base should improve the relationship between short- and long-term productivity by providing a rational basis for decision-making. This would not require a major cost.

1-B. Continuing and expanding support of housing rehabilitation to improve housing assets will improve both the short- and long-term productivity of man's environment. Economic analysis suggests that rehabilitation is the most cost-effective approach to providing housing. Although the costs are partly carried by government, most cost is the responsibility of the homeowner beneficiary. The only exception is the relatively small number of low-income owners who require rehabilitation grants. While residential owners and tenants are the prime beneficiaries, all City residents are expected to benefit to some extent, with some improvement as well to City tax incomes.

1-C. Establishing a City-wide residential code enforcement schedule will improve both short- and long-term productivity by restoring housing to standard levels. Beyond the need to fund additional inspection staff, all costs will be carried by homeowners who must pay for code correction work. This will benefit all persons in the City and also City incomes.

1-D. Curtailing major demolitions is designed to improve the long-term productivity of man's physical environment by retaining structures to the greatest possible extent. Short-term environmental impacts, primarily noise and air pollution, would also be reduced. Such conservation will also reduce costs. Some demolition will be limited to a relatively few structures.

1-E. Encouraging housing maintenance through education will improve both short- and long-term productivity. Focusing efforts to organized groups will enhance efficiency of effort. Matching private with public dollars will improve cost-effectiveness and tend to reduce costs.

2-A. Promoting the formation of block clubs and citizen action groups will improve both short- and long-term productivity by improving coherent action and government relationships. Costs will be minimal.

2-B. Protecting residential neighborhoods from encroachment and/or conversion to more intensive uses will improve short- and long-term productivity of housing. The effects on commercial and industrial productivity are uncertain. But it is assumed that necessary commercial uses will be accepted within or adjacent to residential areas. City policy now promotes industrial uses within industrial parks which are separated from residential areas. Assigning high priority to neighborhood preservation should not have an adverse effect on other uses, and will enhance City tax incomes from residential uses.

3-A. Adopting the Responsive Municipal Services Program is designed to improve both short- and long-term productivity of residential areas.

3-B. This is similarly true for improving capital budgeting and programming procedures to allow for inputs from local areas and their citizens.

4-A. Encouraging formulation and adoption of a regional housing plan is designed to improve both short- and long-term productivity of our land resources by utilization of all land available within the three-county region. At present there is competition for prime residential land, while a great deal of land is either vacant or is poorly used. The decentralization or scattering of housing may also have the effect of reducing impacting of minorities or the poor, which groups are now relatively concentrated in the City.

Since vacant land outside the City is less costly, a regional plan would also improve the cost feasibility of housing, a benefit to all.

4-B. Encouraging new construction within the City to attract upper-income families seeks to improve both short- and long-term productivity by adding tax and other income plus valuable human resources. The cost benefits are uncertain; simply "encouraging new construction" has no intrinsic cost per se. But financial assistance (which is not proposed) would require evaluation.

4-C. Continuing participation in subsidized housing programs will improve both short- and long-term productivity by stabilizing the community and restoring standard housing. It is assumed that cost-benefit ratios are attractive, but this is uncertain; each assisted program requires specific and individual analysis to assess its attractiveness.

4-D. Expediting assisted new construction to provide housing for smaller families is specifically geared to enhance local short-term uses of our environment, to support a large number of such families. However, new construction that conforms to current environmental regulations and controls will maintain the quality of our environment. The projected long-term outlook, specifically the continuing shift to smaller family size, will enhance long-term productivity by assuring a continued market.

Meeting public housing needs for larger families similarly addresses short-term local uses, especially since it is projected that large families will disappear, in time.

The maintenance and enhancement of long-term productivity will represent that period of time corresponding to the useful life of such housing.

Any irreversible and irretrievable commitments of resources which would be involved if the proposed plan or policy should be implemented.

1-A. Establishing a housing data base has no impact on resources other than the cost of gathering the data.

1-B. Continuing rehabilitation has no irreversible or irretrievable impact other than cost, since such housing could easily be cleared and the land be restored substantially to its original condition. Rehabilitation acts to enhance land use and stabilize population, a beneficial effect.

1-C. Establishing a City-wide code enforcement schedule would not have an adverse effect, as noted in rehabilitation above. Code and other City inspections have already been applied to historic properties, with beneficial effects (see Historic Preservation). Had such inspections been more rigorous in the past, the City's National Register property would probably now be in better condition and require less restorative investment.

1-D. Curtailing major demolition acts directly to reduce the loss of resources, primarily in the form of existing structures, many of which have viable re-use utility. Reduced demolition also avoids the irreversible and irretrievable commitment of resources by eliminating unnecessary clearance and related costs to government. In connection with occupied clearance and related costs to government. In connection with occupied residential, and commercial properties, the cost of acquisition has been very high, far in excess of the final step or demolition of the structure.

1-E. Encouraging housing maintenance avoids wasting resources by preservation of housing. Encouraging coherent group efforts reduces costs.

2-A. Promoting block clubs and groups should improve the utilization of all resources and avoid waste.

2-B. Protecting residential areas from non-residential uses will preserve housing and avoid wasted resources. Allowing rezoning and other use changes inevitably requires the commitment of resources. Very often, especially when other uses have failed, such resources are wasted and there is also risk of other negative multiplier effects. It has been argued that some City

meet all local housing demand, a subsequent tri-county plan would have little significance; variously, if housing was developed on a tri-county basis the City would be over-commiting its resources and there would be waste. A regional plan however is presently unlikely.

Statement setting forth applicable Federal, State and local environmental controls.

The following authority and related guidelines are applicable:

National Environmental Policy Act of 1969 (PL 91-190)
Housing and Community Development Act of 1974 (PL 93-383), Sec. 701, Housing and Community Development Act of 1954, as amended, Title XVI, Housing Act of 1968, as amended (Goal statement)

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## IV. ENVIRONMENTAL ASSESSMENT - HISTORIC PRESERVATION

Summary or abstract of the proposed plans or policies.

Durant-Dort Carriage Company Office Building Historic District.

The Durant-Dort building and site may be the most important historic preservation project undertaken by the community to date. The property was registered by the National Register of Historic Properties September 2, 1975, the second Flint City property to be listed by the National Register. The Michigan State Historical Register added the property September 17, 1974 (site 343) as the Durant-Dort-Nash Historic District which includes 316 Water Street (the office building) and the Charles Nash house at 307 Mason.

The building is important not just as the office of the most important carriage producer at the turn of the century, and the office of Flint magnate William C. Durant, but because it was the physical focus of the origin of General Motors. Charles Nash was then Durant-Dort superintendent, later to become GM executive and finally head of Nash Motors (now American Motors).

The Durant-Dort building was selected for priority treatment because it was in jeopardy of deteriorating seriously, was located in a historic area which was also designated for a variety of major community projects, and had potential for re-use housing public or private offices relating to community needs. Both historic preservation organizations, along with several community groups including the Flint Bicentennial Commission, recommended immediate acquisition and limited restoration. This was proposed in an application to the Michigan History Division, seeking recognition by the National Register Grant Program, and requesting $55,000 for acquisition of the property. The local match will provide security rehabilitation and necessary repairs. The 1976 application was funded and the property was acquired by the City. Private funds are now being obtained, along with contributed labor and professional services, by the community. Initial work is directed at restoring the exterior to prevent further structural deterioration, and to meet safety and other City Code deficiencies. Largest items are major structural repairs, windows and roof repair.

The impact (beneficial and adverse) of the proposed plans or policies, if they are carried out.

Beneficial impacts are generally those given in the local policy stated incidental to the drafting of the proposed City ordinance (See VI.) or: the protection and perpetuation of historic districts, and physical evidence of Flint's past; stabilization of property values; promotion of tourism; the fostering of city pride. The Durant-Dort building will also provide a public facility to house community organizations such as an office for the Riverfront Park nearby.

The only adverse impact is the loss of tax income to local government since the Durant-Dort building was purchased by the City. This loss is small since the building was under-used by its former owners, a fraternal group.

Any adverse impacts which cannot be avoided should the proposed plans or policies be carried out.

Since being acquired by the City for public use, property tax income to local government is lost.

Alternatives to the proposed plans or policies.

Since the subject property is by definition unique, no alternatives, other than "no project," are possible. No project would result in the continuing deterioration of the building and its eventual loss.

The impact of proposed plans and policies on the long-term maintenance and enhancement of National Register properties.

Since the Durant-Dort building was listed on the National Register, maintenance and enhancement is facilitated and is being pursued locally. Current activities seek to stabilize and protect the building and district, and only later add improvements and detail restorations.

Applicable Federal, State and local controls or programs for conserving and enhancing historical properties.

Matching grants for historic preservation are available from either the Department of the Interior (Historic Preservation Act of 1966, PL 89-665) or Department of Housing and Urban Development (Housing Act of 1961, PL 87-70 as amended). Applications may be submitted to either agency for 50% grants for the acquisition and restoration of structures listed in the National Register of Historic Properties (24 CFR 4.211).

Under the Historic Preservation Act of 1966, the Department of the Interior's National Park Service is responsible for expanding the National Register, for providing assistance to the states for preparing statewide historic surveys and preservation plans, and for awarding grants for the acquisition and restoration of historic sites and structures ("Grants for Historic Preservation - A Guide for State Participation," National Park Service, January, 1969).

Under an amendment made by the Housing and Urban Development Act of 1970 to the open-space land program authorized by the HUD Act of 1961, the DHUD's Office of Community Development is authorized to make 50% grants to public agencies for the acquisition and complete restoration costs of historic properties (24 CFR 4.245).

The State of Michigan, under Act 169 - Public Acts of 1970, provides for the establishment of historic districts, for the acquisition of land and structures for historic purposes, for preservation of historic sites

and structures, for the creation of historic district commissions, for the maintenance of publicly owned historic sites and structures by local units.

Public Act 10 - Public Acts of 1955, established in Michigan the State Register of historic sites.

The State established the Michigan History Division, Department of State, Lansing, to administer local programs and refer sites to the National Register while maintaining a state historical register. The State Division must approve all referrals.

The Genesee County Historical and Museum Society, a private organization, located in Flint, has had a variety of programs over the years including the development of Crossroads Village (outside the City) with County assistance. With the establishment of a new City organization, historic preservation within the City was largely separated.

No local (City) ordinance exists, but a draft is being formulated.

Policy proposed incidental to the drafting of a City Ordinance covering historic preservation, has been stated to be:

A. To provide for the protection, enchancement, perpetuation and use of those districts and structures which are illustrative of the growth and development of the City of Flint and which are of particular historic or aesthetic value to the City;

B. To recognize and insure the preservation of those elements of the City's past which represent many and varied architectural, artistic, and cultural achievements which cannot be duplicated or otherwise replaced;

C. To promote the use of Preservation Districts and Protected Structures as a means of providing enjoyment and unique educational benefits by perpetuating the physical evidence of Flint's past;

D. To stabilize and improve property values in such areas and otherwise promote their re-use;

E. To protect and enhance the City's attractions to tourists and visitors and the support and stimulus to business and industry thereby provided;

F. To foster civic pride in those elements of the City's past which gives Flint its unique character and set it apart from other cities.

Under Michigan Public Act 169 (1970) local government may establish historic districts, a commission to administer and maintain such properties and otherwise control designated areas. The envisioned "Flint Historic

District Commission" will have primarily responsibility for (1) review of building permits that seek to demolish or modify building exteriors, (2) property maintenance, (3) acquisition of Commission-designated properties; and function in concert with the Flint Planning Commission.

A final draft of the City Ordinance to be proposed has not been completed by the Flint Historic District Study Commission.

The Flint Historic Preservation Study Committee, a quasi-public organization, was established in 1975 with City support, and via Flint City Council Resolution. The Committee had two objectives:

1. To survey the City for places of sites of historic and/or architectural significance;

2. To draft an ordinance to preserve the continuity, and integrity of any of the above mentioned sites and/or areas.

Toward the first objective, the Committee worked with the State to formulate a workable plan to identify appropriate sites/areas. Four core districts were identified with general study areas:

1. Water Street Area registered as Durant-Dort-Nash Historic District, focus of Flint's beginning with prehistoric location on the Saginaw Indian Trail.

2. Grand Traverse Street and Grand Traverse South, an early residential neighborhood.

3. East Street, with Central Park an early residential neighborhood.

4. Delmar Street and Forest Hill including civic Park, which grew greatly when intensively developed as Flint's first planned community.

A variety of other sites and areas have already been addressed, some currently listed in the registers, and still others have been proposed for study and possible registration, such as Burroughs group and Civic Park.

The City, mainly via the CDBG funding (FY 1975), has provided support to this volunteer organization, largely to provide some funding for minor operating expenses. No funds have been provided for acquisition, construction and other operative costs.

Toward the second objective, the Committee has formulated a draft now under study as the possible City Ordinance covering historic preservation activities.