



500 West Big Beaver
Troy, MI 48084
troymi.gov

CITY COUNCIL AGENDA ITEM

Date: May 15, 2024

To: Mark F. Miller, City Manager

From: Robert J. Bruner, Deputy City Manager
Megan E. Schubert, Assistant City Manager
R. Brent Savidant, Community Development Director

Subject: PUBLIC HEARING - CITY OF TROY MASTER PLAN 2040

The draft Master Plan was considered for adoption by Troy City Council on January 29, 2024. City Council took no action on the item. On February 19, 2024 City Council sent the draft Master Plan back to the Planning Commission for further study, specifically to review two Neighborhood Nodes (Wattles & Crooks and Square Lake & Livernois).

In an effort to expedite this process, the Subcommittee met on February 27, 2024 to discuss the two Nodes. The recommendations of the Subcommittee were discussed with the Planning Commission on March 12, 2024. The recommendations were incorporated into the Draft Master Plan.

On April 9, 2024 the Planning Commission held a public hearing to solicit public comment on the Draft City of Troy Master Plan 2040. The Planning Commission recommended approval of the Master Plan by a vote of 8-1, with some proposed revisions.

City Council is authorized to adopt the City of Troy Master Plan 2040. If City Council wishes to reject the proposed Plan, the MPEA requires the following: "If the legislative body rejects the proposed master plan, the legislative body shall submit to the planning commission a statement of its objections to the proposed master plan. The planning commission shall consider the legislative body's objections and revise the master plan so as to address those objections".

A public hearing is scheduled for May 20, 2024.

Attachments:

1. Minutes from April 9, 2024 Planning Commission meeting (excerpt).
2. Draft City of Troy Master Plan 2040.

CITY OF TROY MASTER PLAN

6. PUBLIC HEARING – CITY OF TROY DRAFT MASTER PLAN

Mr. Carlisle reviewed the draft Master Plan discussion at the March 12, 2024 meeting and presented language to reflect the comments from the public and the Planning Commission on Neighborhood Nodes F (Crooks and Wattles) and Node L (Livernois and Square Lake).

Chair Perakis addressed language she suggests that was not incorporated in the language as presented and redlined in the Planning Consultant report. She asked for the Board's comments on striking the verbiage *low-scale multiple family residential* and adding the word *intensity* before the wording of "scale and orientation of the neighborhood" in the first paragraph of Node F. In Node L, Chair Perakis asked for the Board's comments on whether the area and homes should be defined as *historic*.

Mr. Carlisle provided definitions of multiple family residential and single family attached residential, as relates to massing, transition, and density. He cited examples of single family attached residential as ranches, townhomes, duplexes and triplexes.

A lengthy discussion followed on:

- Whether language relating to multiple family residential in Node F should be stricken.
- Whether the area and homes in Node L should be defined as historical, historical in nature or eliminate any historical designation(s).

PUBLIC HEARING OPENED

- Jerry Rauch, 4187 Penrose; present also to represent Woodland Homeowners Association, addressed transition to existing neighborhoods, encouraged striking multiple family residential, cited number of units as relates to acreage.
- Carey Martyniuk, 95 W Square Lake; owner of Noble Heating and Cooling, addressed the hardship of his business should their property be removed from the Neighborhood Node classification.
- Nannette Gearhart, 6197 Livernois; shared favorable comments she receives on her home and addressed renovation/maintenance of her home to preserve historic feel.
- John Casadi (spelling/address not legible); addressed aesthetic sense and value of existing homes, commitment of homeowners to improve and maintain neighborhood, encouraged striking multiple family residential.
- Ann Coleman, 6091 Livernois; addressed density, traffic, property loss and existing mishmash development, site is not historical nor walkable.
- Larry Cronin, 130 Telford; addressed existing hodgepodge development of area, asked for consideration of existing residents, definition of low-scale multiple family.
- James Parrott, 6209 Livernois; addressed historic nature of his home, keeping original character of homes and preservation of single family neighborhoods, family enjoys open space and wildlife.

- Fabrice Smieliauskas, 4607 LeHigh; encouraged denser residential development, approval of the PUD application on tonight's agenda, addressed comments of the new City Manager as relates to City housing market.
- Thomas Syazbelk, 1707 Devonwood, Rochester Hills; said he would like to move to Troy but the housing is not affordable, encouraged multiple family residential, support diverse housing to attract younger adults and families, celebrate walkability. Support PUD application on tonight's agenda.
- Daryl Dickhudt, 4143 Glencastle; addressed comments of Troy Mayor and Planning Commission Chair in Troy Times regarding density, transition and multiple family residential.
- Dilip Khanal, 4180 Carson; support striking language of multiple family residential in Node F.
- Sheila Lenz-Shomo, 6464 Fredmoor; addressed Node L, preference for single family attached and not multiple family, existing mishmash of development, process of rezoning parcels after adoption of Master Plan.
- Dave Pampreen, 6408 Canmoor; addressed vague definitions of Master Plan wording, encouraged single family housing to fit in with existing family neighborhoods, opportunity for affordable housing in different locations.
- Madeline Szymanski, 287 E Square Lake; asked for clarification of reference to Node E, addressed concerns with density and traffic.
- Jerry Lootens, 287 E Square Lake; stated preference for single family residential.
- Ralph Schick, 4117 Penrose; addressed concerns with infrastructure and drainage, turn lane at Wattles and Crooks intersection.
- Marsha Bossenberger, 369 Ottawa; addressed Facebook posting of City data relating to preliminary site plan applications approved in 2019-2023, preference is for more single family residential, R1-B zoning classification.
- Deborah Louzecky, 6327 Donaldson; addressed mishmash development, asked for more conformity in development, definition of low-scale as discussed in study session, requested no adult stores.
- Kamal Shouhayib, no address given; addressed future development of single family homes that will complement Stonehaven Woods subdivision.
- Shelley Stenger, 437 Hurst; addressed concerns with density, traffic and stormwater management.
- Karen Wilson, no address given; realtor who has worked with Mr. Shouhayib for years. addressed his existing residential developments in the City and a future development at Wattles and Crooks.

PUBLIC HEARING CLOSED

Mr. Carlisle clarified the reference of Neighborhood Node E in the Master Plan is the neighborhood node zoning district located at John R and Wattles.

Discussion continued among Board members on proposed wording for Node F and Node L in the Master Plan and the process of a recommendation to the City Council.

Resolution # PC-2024-04-016

Moved by: Krent
Seconded by: Buechner

RESOLVED, To adopt the following language in the Intent Statement of Neighborhood Node F, Crooks and Wattles:

The southeast corner of this node satisfies the commercial, service and multi-family residential uses to serve the immediate neighborhoods. Any development or redevelopment of the northwest corner shall be of a scale and massing to complement the existing low-scale nature of the area and protect the existing natural resources including Lane Drain. Additional commercial development is not desirable for this corner. Low-scale single family attached residential is encouraged if it models the intensity scale and orientation of the single family attached neighborhood at the northeast corner of the Node E (Wattles and John R). Development in the northwest corner shall also ensure appropriate transition to adjacent properties via increased setbacks, reduced heights, and enhanced landscape buffers.

Due to the existing traffic patterns along both Crooks and Wattles, incorporation of a park use, or low intensity and scale residential, including the expansion of the Stonehaven subdivision into the southwest corner of this node, utilizing the already existing entrances from Crooks and Wattles would be appropriate. If a continuation of Stonehaven is not possible, any future development of this corner shall limit access to Crooks and Wattles, to not increase existing traffic conflicts. The City may consider rezoning the southwest corner to a one-family attached or single-family zoned designation. The City also recognizes that expansion of the White Chapel Cemetery or the continuation of single-residential uses in the northeast corner of this node would be appropriate. The City may consider rezoning the northeast corner to a single-family zoned designation.

Yes: Buechner, Faison, Fox, Hutson, Krent, Lambert, Malalahalli, Perakis
No: Tagle

MOTION CARRIED**Resolution # PC-2024-04-017**

Moved by: Fox
Seconded by: Krent

RESOLVED, To adopt the following language in the Intent Statement of Neighborhood Node L, Livernois Road and Square Lake Road:

Development in this area historically known as Troy Corners should be especially considerate of the historic past of the area. Any new development should integrate various types of community gathering spaces, such as parks, public art, historical elements, plazas, community centers, and recreational facilities into the design. Adaptive reuse of existing historic structures should be considered before demolition or relocation of these resources. This node will have low intensity uses of a non-automotive oriented nature that creates a central neighborhood village, that is walkable and accessible. Any automotive oriented use shall not be considered in this node. Low-scale single family attached residential may be permissible if it models the scale and orientation of the single

family attached family neighborhood at the northeast corner of Node E (Wattles and John R).

Discussion on the motion on the floor.

Mr. Carlisle assured the owners of Noble Heating and Cooling that the Neighborhood Node zoning classification of their property does not change with this motion. He assured the owners they would be notified if in the future particular parcels of the node are proposed to be rezoned, and in which case the owners would have the opportunity to state their case.

Vote on the motion on the floor.

Yes: Buechner, Faison, Fox, Krent, Lambert, Malalahalli, Perakis, Tagle

No: Hutson

MOTION CARRIED



PLAN TROY 2040

CITY COUNCIL

Ethan Baker, Mayor
Rebecca Chamberlain Creanga,
Mayor Pro Tem
Ellen Hodorek
Mark Gunn
Theresa Brooks
Hirak Chanda
David Hamilton
Ann Erickson Gault (2021-23)
Edna Abraham (2021-23)

PLANNING COMMISSION

Chair

Dave Lambert

Members

Marianna Perakis, *Vice Chair*
Toby Buechner
Carlton Faison
Michael Hutson
Tom Krent
Lakshmi Malalahalli
Tyler Fox
John Tagle
Sadek Rahman (2021-22)
Jerry Rauch (2021-22)

CITY MANAGER

Mark Miller

**COMMUNITY DEVELOPMENT
DIRECTOR**

Brent Savidant

PLANNING DEPARTMENT

Paul Evans,
Zoning and Compliance Specialist
Jackie Ferencz, *Office Manager*

**INFORMATION TECHNOLOGY
DEPARTMENT**

Alex Bellak, *I.T. Director*

CITY PLANNING CONSULTANT

Carlisle/Wortman Associates

PHOTOGRAPHER

All Troy photos, unless otherwise
credited, were provided by Acacia
Photography of Troy, MI



Resolution #2023 To Be Included



Executive Summary

In 2008, the City of Troy adopted a new Master Plan, the first updated Master Plan since 1965. The 2008 Master Plan recognized Troy’s place in a changing post-Recession world. Rather than control growth, the 2008 Master Plan identified opportunities and strategies for competing in the global economy.

2015 Revision:

In 2015, the city determined that the 2008 Master Plan still represented Troy’s long-term vision, goals, and policies for development and growth. However, while the plan was still relevant and effective, due to shifts in economic, demographic, and development patterns the City felt that the 2015 plan update should focus on specific geographic areas. The 2015 plan update incorporated three (3) special area plans. Special area plans were chosen for areas where substantial development and redevelopment activity was likely to occur. Special area plans provide an illustrative framework to guide development in a way that fosters a sense of place and establishes community identity in key locations. The special area plans provide schematic representations of potential development areas at a variety of scales and levels of detail, and may include illustrative configurations for new streets, buildings, parking, open space, and circulation as may be appropriate to the area.

**2015 Special Area Plans:
Rochester Road**

The Rochester Road Special area plan provides a unifying framework built around public and private improvements that will change the function and character of the corridor over time. The plan identifies three (3) complementary concepts for dealing with these issues and creating a solution that all users will welcome. The first concept deals with restructuring the pattern of land use and development lining the corridor, the second involves incorporating the redesign of the public right-of-way, and finally, the third creates a cohesive image and stronger identity for the corridor.

Maple Road

Maple Road presents an opportunity to build on the existing diversity of land uses, transportation options, and proximity to residential properties. For properties lining the corridor, revitalization requires a restructuring of development patterns, with less emphasis on land use and more focus on quality, accessibility, and innovative redevelopment. For those parcels in the industrial areas located off the corridor, a focus on protection and reinvestment of the industrial and technology development base should be emphasized. The repurposing of Maple Road offers three (3) key priorities based on the following land patterns: the development nodes at major mile intersections, the linear segments of the corridor between the major mile intersections, and the industrial and employment areas located off the corridor.

North Troy

North Troy faces a turning point. Its original development pattern must evolve to meet new challenges in the marketplace. Both employers and employees must be flexible and nimble to respond to demands in competition. As such, their facilities must adapt to fulfill evolving, diverse requirements in the workplace. Many of today’s knowledge workers expect entertainment and service amenities nearby as well as opportunities and spaces to connect and share ideas. The isolated buildings in North Troy do not reflect this trend. There is no central, defining place that represents the heart and vision of North Troy. Creating this balanced mix of uses and a sense of place will create a symbiotic relationship with the adjacent neighborhoods, where employment, service, and residential uses are interconnected. Fortunately, North Troy has ample opportunities to evolve and create a modern, preferred employment hub.

2023 Revision:

In 2020, the City again reviewed the Master Plan to determine if it was still relevant and continued to represent Troy’s long-term vision, goals, and policies for development and growth. This review was conducted during the COVID-19 Pandemic, one of the most impactful events of

the 21st Century. The City found that many of the strategies that aided the recovery from the Great Recession – flexibility in use, encouraging mixed use, permitting residential density in appropriate locations – are the same strategies that should assist the City as it recovers from the effects of the Pandemic.

At the start of the process, it was agreed upon that the Master Plan continued to be relevant. It was forward thinking at the time and many of the issues that were focused on are still applicable. However, there were a few key issues that needed updating, specifically the planning for the Neighborhood Nodes.

Revised Neighborhood Node Intent Statement
The Neighborhood Node Intent Statement lays out the overall purpose of the neighborhood nodes. The revised intent statement reflects the historical past and current conditions, and better articulates the planned vision of the nodes.

Revised Neighborhood Node Language
The City reviewed each node in detail to revise their specific intent based on the revised node intent statement, historical past, current conditions, and future anticipated vision. Each node was revised based on this detailed review.

Language has been revised for the following nodes:

- B (Maple and Dequindre)
- C (John R. and Maple)
- D (Big Beaver and Dequindre)
- E (Wattles and Dequindre)
- F (John R and Wattles)
- I (Crooks and Wattles)
- J (Dequindre and Long Lake)
- K (John R and Long Lake)
- N (Dequindre and Square Lake)
- O (John R and Square Lake)
- P (Rochester and Square Lake)
- Q (Livernois and Square Lake)
- R (John R and South)
- T (Livernois and South)
- U (Crooks and South)

Based on detailed review, the City eliminated the following nodes:

- A (Dequindre and Maple)
- G (Rochester and Wattles)
- H (Livernois and Wattles)
- L (Rochester and Long Lake)
- M (Livernois and Long Lake)
- S (Rochester and South)

Concept Plans
To best visually portray the intended vision for the nodes, three (3) concept plans were included. These concept plans include elements of mixed use, architectural quality, transitions between intensity on roadways to adjacent single-family neighborhoods, infill development, and landscape buffers.

Future Land Use Plan
The Future Land Use Plan was updated to reflect changes in Neighborhood Nodes. In addition, the Future Land Use Plan for Big Beaver Road on the northside of Big Beaver Road between Crooks and Coolidge is amended to be consistent with the existing zoning and land use pattern of the surrounding area, and to provide an appropriate transition.

Introduction
The Master Plan introduction was strengthened to clearly articulate the relationship between Master Plan and Zoning Ordinance.

Eliminate Big Beaver Pedestrian Special Area Plan
This was made redundant with the construction of the I-75 Diverging Diamond Interchange and the adoption of the Downtown Development Area Landscape Plan.

Refresh Format and Layout
The Master Plan layout and format was updated including graphics and images. In addition, relevant data and demographics were updated based on the most current data.



Page left intentionally blank

Table of Contents

- 8 // 1. Introduction
- 22 // 2. Troy's Context: From Local to Global
- 27 // 3. A Place to Learn and Play:
The Quality of Life in Troy
- 37 // 4. A Place of Posterity:
The Economy of Troy
- 46 // 5. The City in Motion: Local and
Regional Mobility
- 58 // 6. Infrastructure: The Assets and
Care of the City
- 64 // 7. Green City: Responsibility to Natural
& Energy Resources
- 74 // 8. People: The Changing Face of
Housing Demand
- 82 // 9. Land Patterns: City Design
and Image
- 128 // 10. Special Area Plans
- 204 // 11. Appendix



1 – Introduction

Fueled by necessity and inspired by a changing population, economy, and region, the City of Troy has determined that the preparation and periodic revision of the Troy Master Plan is critical to help the community cope with the realities of the 21st Century in Michigan. The Master Plan is the official policy guide for the resolution of community development issues, and is relied upon to illustrate the desires of the City with regard to future growth and development.

The City derives its authority for the preparation of a Master Plan from the Municipal Planning Act, P.A. 33 of 2008.

In 2008, the City of Troy adopted a new Master Plan. This document was the culmination of a comprehensive effort to rewrite the plan that was originally adopted in 1965. It represented a dramatic shift in land use policy. The 1965 plan was crafted to control the rapid growth that occurred from the 1960s through the 1990s. The 2008 Master Plan recognized Troy's place in a changing post-Recession world. Rather than control growth, the 2008 Master Plan identified opportunities and strategies for competing in the global economy.

The 2008 Master Plan was updated in 2015 with the inclusion of four (4) Special Area Plans: Rochester Road, Maple Road, North Troy and Big Beaver Road. The document otherwise remained essentially unchanged.

In 2020, the City again reviewed the Master Plan to determine if it was still relevant. This review was conducted during the COVID-19 Pandemic: one of the most impactful events of the 21st Century. The City found that many of the strategies that aided the recovery from the Great Recession – flexibility in use, encouraging mixed use, permitting residential density in appropriate locations – are the same strategies that should assist the City as it recovers from the effects of the Pandemic.

The 2008 Master Plan, as amended in 2015, remains relevant and needs little revision. However, specific goals and policies within this document have been revised to respond to the changes that have taken place in Troy. These changes in goals and policies are necessary to respond to new conditions and projected trends in order to continue to ensure that Troy is an attractive place to live and work. Community planning is the process which involves a willful effort to draw from a variety of sources to develop those new goals and policies. In addition, background data which serves as the foundation of the Plan has been updated.

What is this Master Plan’s true function?

The Plan serves many functions and is to be used in a variety of ways including, but not limited to, the following:

- **Vision:** The Master Plan lays out the future vision of Troy, as well as a road map - with goals policies, strategies and actions - to achieve that vision.
- **Aid in daily decision-making:** The Master Plan guides the Planning Commission, City Council, and other City bodies in their deliberations. It provides a stable, long-term basis for decision making.
- **Statutory Basis:** The Master Plan provides the statutory basis upon which zoning decisions are made. The Michigan Planning Enabling Act (P.A. 33 of 2008, as amended) requires that the zoning ordinance be based upon a plan designed to promote the public health, safety, and general welfare.
- **Public/Private Coordination:** The Master Plan attempts to coordinate public improvements and private developments supported by the Capital Improvements Plan. For example, public investments such as road or sewer and water improvements should be located in areas identified in the Plan as resulting in the greatest benefit to the City and its residents.
- The Master Plan serves as an educational tool and gives citizens, property owners, developers, and adjacent communities a clear indication of the City’s direction for the future.

The difference between the Master Plan & the Zoning Ordinance

<p>Master Plan</p> <ul style="list-style-type: none">• Is a long-term guiding policy document• Applies 5-20 years into the future• Has goals and objectives based on community input• Includes analysis and recommendations on economy development, housing, transportation, infrastructure, land use, etc.• Must be reviewed once every 5 years by State Law• Is not intended or expected to serve as law	<p>Zoning Ordinance</p> <ul style="list-style-type: none">• Is the law• Applies now• Is subject to Federal and State law, and Federal and State case law• Regulates land use, building size, form, placement, parcel area, width, depth, parking, landscaping, etc.• Must be based on a Master Plan, per State Law• Is used to implement the Master Plan
<p>Future Land Use Map</p> <ul style="list-style-type: none">• Is a visual guide for future planning• Applies now and up to 20 years into the future• Has future land use categories, which describe what may be considered if zoning changes• Provides descriptions on types of uses that are appropriate in particular areas and details on desired density, height, design, landscaping, etc.• Show possibilities, not guaranteed changes• Changed as a Master Plan Update, which has extensive community input, a recommendation by the Planning Commission, and approval by the City Council.	<p>Zoning Map</p> <ul style="list-style-type: none">• Is the law• Applies now• Has zoning districts, which state what land uses, building types can be built now• Mandates land use, building size, form, placement, parcel area, width, depth, etc. for each zoning district• Must be followed for all new development• Can only be changed by a Rezoning or Zoning Map Amendment process, a multi-step approval process that includes a public hearing and recommendation by the Planning Commission, and two readings before the City Council.

What is a Master Plan?

A Master Plan is all of the numbered items working together. Planners need a Master Plan document and city planning principles to create a city that is functional and sustainable well into the future.

What is city planning?

City planning is used in tandem with a Master Plan. Planning helps guide city growth, influence policy decisions, ensure a successful future, and is critical for sustainable growth.

1

Guide for City Leaders to decide “what goes where”

2

Is used by City Staff to make policy decisions about transportation, parks, utilities, economic development, land use, etc.

3

Reflects the needs and balances the wants of residents, businesses, property owners, and other stakeholders.

4

Policy document that provides a “roadmap for the best path from a known present into an unknown future”

The Creation and Care of the Master Plan

The Planning Commission of the City of Troy is the primary agency responsible for the preparation of the Troy Master Plan. Supported by City staff, consultants, and public involvement, it is the role of the Planning Commission to develop and adopt this Plan and encourage its implementation.

In a large, complex community such as Troy, however, the Planning Commission must broaden its planning process to go beyond conventional land use planning and explore a variety of topic areas which play a role in the development, redevelopment, and well-being of the community. This Plan was designed from the ground up to relate to a broad range of topics and build momentum for the future of Troy.

Master Plan Leadership

The Master Plan is a document that should and must be embraced by as large a representation of the leadership of the City of Troy as possible. While ultimately the responsibility of the Planning Commission, the Master Plan must inspire consistent decision making throughout the community to live up to its potential. The Plan serves as a basis for the fundamental responsibilities of the Planning Commission, such as review of development proposals and maintenance of the Zoning Ordinance, but also serves a larger purpose to inspire informed, innovative community development. In that spirit, it is also the responsibility of the Planning Commission to advocate for the Master Plan outside of its own reach, to ensure that it is implemented community-wide.

Studies Related to the Master Plan

The concepts introduced in the Master Plan are drawn from many sources, including the previous Master Plan, other planning documents in the City, such as the Big Beaver Corridor Study, the goals of the City Council, and the Ten Tenets of Smart Growth, (see sidebar, next page) explored in depth during this Plan’s development. The Big Beaver Corridor Study shall be considered an integrated component of this Master Plan, and is also adopted as part of the Master Plan adoption process.

The Plan was further inspired by the previous efforts of the Troy Futures Group; an organization of motivated “civic entrepreneurs” who collectively developed a document entitled “Vision 2020.” Troy Futures consisted of over 150 volunteers who served on seven (7) separate task forces eager to work on important issues such as infrastructure, community image, lifestyles, learning, mobility, the role of Troy in the region, and economics. These areas of study, along with the Ten Tenets of Smart Growth, in part inspired the topic areas covered in this Master Plan.



The Ten Tenets of Smart Growth are those principles adopted by the Smart Growth Network to encourage the idea that growth can improve conditions. These Tenets are:

1. Create a range of housing opportunities and choices.
2. Create walkable communities.
3. Encourage community and stakeholder collaboration in development decisions.
4. Foster distinctive, attractive communities with a strong sense of place.
5. Make development decisions consistent, fair, and cost-effective.
6. Mix land uses.
7. Preserve open space, farmland, natural beauty, and critical environmental areas.
8. Provide a variety of transportation options.
9. Strengthen and direct development towards existing communities.
10. Take advantage of compact building design.

www.smartgrowth.org

Organization of the Plan

In order to bring together the wide variety of topic areas relating to community development beyond conventional land use planning, the Troy Master Plan represents a new generation of community planning document. The Plan is more strategic in nature and focuses on a series of subjects, such as transportation, urban design, or housing, and is designed to go beyond a simple basis for decision making. The Plan will also act as a vehicle for the development of new ideas in the City.

In many traditional community plans, the Master Plan is arranged around the process, and seeks to explain the steps taken to complete the Plan, rather than focus on the subject matter itself. While this conventional approach has worked in the past, it is far more useful to a smaller, less developed community for which land use allocation is still a primary concern. In a community such as Troy, where the City is nearly built out and in which the land use pattern is firmly established, new issues emerge. A more focused and strategic approach is necessary to fully appreciate the character, assets, and potential of the community.

In addition, many conventional master plans are simply impractical to use on a daily basis. A burdensome document with hundreds of pages of background data and exhaustive analysis is difficult to navigate. While this Plan is supported by similar research and analysis, such supporting elements are collected in an appendix and are distributed throughout the document within the topic areas where they are most appropriate. Therefore, when the reader is investigating a topic such as transportation, the salient research and data necessary to substantiate the policies for that topic are found in the most relevant Chapter.

The Plan is also designed to be used as a series of stand-alone documents, where an individual interested in a topic can rely upon the applicable Chapter of the Plan to learn where the City stands and where it desires to go.

In that spirit, the Plan has been arranged around the following topics:

Infrastructure: The Assets and Care of the City

In order to implement most of the measures that will ultimately be recommended by the Master Plan, upgrading and maintaining civil infrastructure must be considered. In that regard, this Chapter will contain the Master Plan’s discussion of sewer, water, and stormwater infrastructure. It will describe some of the key needs or opportunities with regard to these utilities and discuss the City’s ability to maintain them, while describing and recommending alternative methods of meeting the needs of the City.

Green City: Responsibility to Natural & Energy Resources

This Chapter will provide the City with a forum for establishing itself as a regional and national leader in the responsible treatment of natural resources and energy. The concept of sustainability will appear throughout the Chapter in many areas, from stormwater management to green building technology, to the preservation of natural features.

Specific techniques to preserve the quality of existing natural spaces and features related to development and redevelopment will be discussed. Formal programs such as Low Impact Development (LID) for watershed protection and Leadership in Energy and Environmental Design (LEED) for architecture and site design will be included.

Potential next steps beyond Master Planning will be outlined to provide additional guidance to the City in an effort to allow for the continued growth of green elements in the City while allowing for a balance of new construction and reconstruction.

People: Planning a Community for All Ages & Stages

This Chapter will analyze the changing nature of Troy’s population and compare local trends to regional and national trends. Topics such as household size and age will be used to make recommendations to improve the utility of the City’s housing stock to meet the changing demand for housing types of many varieties. The concepts of affordability and housing an aging population will be covered in detail.

Land Patterns: City Design & Image

The goals and objectives established in the previous Chapters of this Plan will be translated into land use policy within this Chapter. The Future Land Use Map will formalize the input, research, and conclusions of the Plan by establishing clear land use policy. While it is intended to be a fluid document, the Future Land Use Map establishes a continuous basis for land use decision-making through changes in the makeup of elected and appointed boards, and therefore encourages the implementation of the long-term goals and objectives adopted within the Master Plan.

This Chapter will also expand on the Future Land Use Map and discuss visual and design characteristics in the City of Troy. The physical differences which affect the daily function and success of developed areas, especially corridors, will be pointed out in order to more accurately focus on those areas which could benefit from change.

The Chapter will promote smart growth principles related to compact, mixed-use development, and will describe the benefits to Troy in this regard. This Chapter will center on a series of sub-area plans and will highlight the importance and utility of form-based codes.

Special Area Plans

As part of the 2015 Master Plan update, the City undertook a special area study of four (4) areas of the city: Rochester Road, Maple Road, North Troy, and Big Beaver.

While the future land use plan ensures compatible and coordinated growth throughout Troy, key areas of the City will undergo significant change. In those areas where substantial development and redevelopment activity is likely, special area plans provide an illustrative framework to guide development in a way that fosters a sense of place and establishes community identity in key locations.

The plans provide schematic representations of potential development areas at a variety of scales and levels of detail, and may include illustrative configurations for new streets, buildings, parking, open space, and circulation as may be appropriate to the area. They are accompanied by descriptive text that explains existing site characteristics, planning challenges, design considerations, and planning goals for each area.



How Will the Plan Be Used?

Day-To-Day

On a daily basis, the City staff will refer to the Master Plan when conducting the regular business of the City. Whether discussing development options with a potential developer, working on drafting new Zoning Ordinance amendments, or making recommendations to the Planning Commission or City Council, the Master Plan will inform and guide the policies of the City’s professionals. In addition, the Plan will serve as a reference for neighborhood groups, the local investment community, and for non-profit community development organizations.

Month-To-Month

On a weekly or monthly basis, the elected and appointed officials of the City will refer to the Master Plan when making decisions about land use development proposals, and in the setting of City policies relating to community development. The improvement of infrastructure, development of regulations and ordinances, and budgeting of the City will all be influenced by the goals and policies established by this Master Plan.

Year-To-Year

It is critical that the Master Plan be annually evaluated to ensure that it still represents the policy direction of the City. The City should audit its effort on a regular basis to reflect on the Plan and recognize the accomplishments it has made towards the execution of the goals and policies of the Plan. Revisions and updates to the Plan should be considered annually to make sure the Plan continues to enjoy widespread support.

Community Participation

The development of a community’s Master Plan must involve not only elected and appointed officials within that community, but also leaders within the community at large. The community participation measures taken throughout the process are essential in establishing public support for the policies within the document, and to ensure that the plan is indicative of the preferences of as broad a representation of the population as possible.

Therefore, during the planning process, the importance of “civic entrepreneurship,” such as that displayed by the Troy Vision 2020 group, becomes significant. These and other community leaders have brought their considerable knowledge and experience to the table to ask difficult questions about the future of the City, and to do their part to help the City evolve. The Planning Commission has called on groups such as Troy Vision 2020 to participate in the planning process, as well as other boards, commissions, and agencies throughout City government and beyond.

Civic Entrepreneurs

The phrase “Civic Entrepreneur” was coined in 1997 in the book “Grassroots Leaders for a New Economy—How Civic Entrepreneurs are Building Prosperous Communities” by Collaborative Economics. The main theme of civic entrepreneurship as stated by the authors is that an individual of influence, be it social, economic, political, or some combination of these, chooses to volunteer their time and attention for a greater good at a large scale. Often associated with regional initiatives, civic entrepreneurs are known to use their connections and resources to lead opinions and bring visibility to large-scale initiatives.

Collaborative Economics state that civic entrepreneurs “...have the personality traits commonly associated with entrepreneurial business leaders. They are risk takers. They are not afraid of failure. They possess courage born of strong conviction. They are people of vision. They are passionate and energetic. They bring out the best in people and know how to encourage them along.”

Workshop

An extensive public engagement program was conducted in conjunction with the Master Plan adopted in 2008. A Master Plan workshop which involved a selected participant list of over 150 invitees initiated the public engagement process. Those invited to participate on the workshop process represented a wide cross section of Troy’s population, and included residents, business owners, City officials, volunteers, and other participants.

In this workshop, the participants were engaged to employ the “Smart Growth Readiness Assessment Tool,” (SGRAT) a new program designed by the Michigan Land Policy Institute at Michigan State University. The tool is designed to help communities learn how to incorporate “Smart Growth” principles into their land use management practices. “Smart Growth” is a term conceived in 1996, when the Environmental Protection Agency led a group of organizations to form the Smart Growth Network. The Smart Growth Network is a group dedicated to creating new land development practices which “...boost the economy, protect the environment, and enhance community vitality,” as stated by the Smart Growth Network.

A comprehensive document including the results of the June 21, 2007 workshop and an analysis of the findings uncovered by the SGRAT can be found in an appendix to this Plan.

The five common traits of civic entrepreneurs according to the authors of “Grassroots Leaders for a New Economy” are that they:

- 1. See opportunity in the new economy
- 2. Possess an entrepreneurial personality
- 3. Provide collaborative leadership
- 4. Are motivated by broad, enlightened, long-term interests
- 5. Work in teams, playing complementary roles

(Information from “Grassroots Leaders for a New Economy— How Civic Entrepreneurs are Building Prosperous Communities” Collaborative Economics, 1997 and “The civic entrepreneur— a new leadership model is taking root, but not here” Charleston Regional Business Journal 07/30/2001, http://www.charlestonbusiness.com/pub/4_16/news/1875-1.html)



2015 Master Plan Public Engagement

For the 2015 revision of the Master Plan, public engagement was equally extensive but more targeted to specific subject matter. The following summarizes the content of each workshop:

Real Estate Forum

The City of Troy hosted a Real Estate Forum on Tuesday, April 29, 2014 at the Troy Community Center. Over 60 community leaders, business owners, real estate developers, and interested citizens participated in a productive dialogue regarding the future direction of key economic areas of the city, specifically Maple Road, Big Beaver, North Troy, and Rochester Road. Participants were presented with target area snapshots and were asked to identify and describe the assets and challenges of these four areas. Participants also offered strategies for reinforcing assets, re-envisioning challenges, and ultimately attracting new development that is right for the corridor and the community. Participants emphasized the need for collaboration between city departments and community stakeholders, as well as a coordinated vision that is responsive to market demands and focused on quality of life. By building on the unique strengths of each area, activating established nodes and reinforcing new development with pedestrian amenities, transit connections, and a desirable mix of uses those sites that were once viewed as challenges will appear as opportunities for reinvestment.

Key takeaways from Real Estate Forum:

- Density is key
- Plan should be market driven and forward thinking
- Transportation and pedestrian improvements are important
- Zoning should align with the Master Plan and offer flexibility to encourage the right development at the right time
- North/South corridors provide important connections between the target areas and adjacent communities
- Residential development should attract and accommodate different ages, lifestyles, and income levels
- New developments should be connected
- Strategic, tactical, and creative placemaking strategies can activate node

High School Forum

In order to gain input from the future leaders, a session was held with twenty high school students (ten each from Troy and Athens High Schools). The students were intended to serve as a cross-section of the high school population.

Attendants were asked to use one word to describe Troy today and one word to describe Troy in 10 years:

Troy Today	Troy in 10 Years
Versatile	Fun
Peaceful	Advanced
Family-oriented	Utopia
Upscale	Safer
Quiet	Educated
Potential	Expanded
Diverse	More Diverse
Well-rounded	Innovative
Residential	Modern
Safe	Creative
Fun	Changing
Busy	Less-Congested
Close	Professional

Engaging	Busy
Boring	Beautiful
Suburbia	Affordable
Opportunity	Home-owner oriented

The students were then asked a series of questions about Troy including what they like best about living in Troy, what they like least, their desire to move back to Troy after school, and Troy’s most pressing needs. The full results are located in the appendix. The students enjoy the quality of schools; however, most students noted that they do not plan on moving back to Troy in the future. If they did move back to Troy, it would be because of family and the quality of the schools. They note that Troy is missing entertainment options, and “cool” housing options, and does not provide walkable or bike-able places. Most students desire to live in a big city after college graduation.

Neighborhood Association Forum

City of Troy hosted a neighborhood forum with Presidents and representatives from the various neighborhood associations. All geographic residential portions of the city were represented.

We started the discussion with asking those in attendance one word to describe Troy today and one word to describe Troy in 10 years:

Troy Today	Troy in 10 Years
Suburban	Advanced
Future	Economic Leader
Random	Attractive
Evolving	Progressive
Bedroom-community	Education
Attractive	Birmingham; More Parking
Youth	Envied
Opportunity	Futuristic
Diverse	The standard
Accommodating	Smart
Modern	Advanced

Participants were asked a series of 15 questions. The full results are located in the appendix. The questions focused on neighborhood issues affecting their neighborhoods including property upkeep and maintenance, transportation improvements, land use transitions and buffers, desired community amenities, and need for housing options.

There were two big takeaways from the neighborhood forum discussion. The first takeaway was that residents like living in Troy and cited a number of reasons including high quality of the public schools, entertainment options, safety, and housing stability. Maintaining a quality school district was cited as of critical importance, especially for neighborhood and property value stabilization. The second major takeaway was the biggest issue facing Troy is a lack of services within walking distance and lack of non-automobile transportation options.

Boomer & Shaker Forum

The City of Troy hosted a Boomer and Shaker Forum on Monday, August 17, 2015 at the Troy Community Center. The purpose of the forum was to meet with Troy residents to identify issues and determine strategies to ensure Troy assists its aging population and creates an aging friendly place. The intent was to focus on issues facing Troy’s baby boomer and senior population but also address issues that cross-generational lines:

- Housing
- Transportation
- Placemaking
- Walkability
- Safety and Security
- Health Services
- Recreation and Cultural Activities

Over 80 community residents participated in a productive input session to make Troy an aging friendly location.

Most of the participating residents are likely to remain living in Troy as they age. Many noted the high quality of life living in the city. For those that identified that they are likely to leave Troy, the most listed reason was a lack of housing option and a lack of transportation options. Underserved senior housing options and a need for increased public and dedicated senior transportation options was a common discussion point of the Forum.

The first major takeaway was there is an identified underserved housing type of senior-friendly housing such as smaller, single-family homes, condominiums, or apartments with first floor master bedrooms. Housing affordability was listed as a significant housing limitation. Many remarked that they are on a fixed income and cannot afford a \$400,000 house/condo. They noted that affordable, smaller housing options are difficult to find in Troy and the city should push development of those types.

The second major takeaway was the need for improved transportation options, particularly serving seniors. Most attendees noted that because they are able to drive, they are able to obtain their daily needs (health services, retail goods, social, recreational, and cultural). However, they are unsure if they will be able to do so once they are unable to drive.

To improve transportation options, the City should work with SMART to increase bus hours and locations. While RIDE, a transportation service for Troy disabled residents and those age 60 years and older, provides a valuable service, the hours are limited and should be expanded. Medi-go should be complimented with a dedicated transportation system or on-call shuttle service for seniors for daily needs in addition to just medical appointments, like grocery shopping, recreation activities, etc. Lastly, the City should focus on improving the sidewalk system and street crossing at major thoroughfares, and build trails. The results from the community engagement were used to establish the vision, priorities, and policies as set forth in the plan.

2022 Master Plan Public Engagement

For the current revision of the Master Plan, public engagement was equally extensive but more targeted with a focus on updating vision and policy of Neighborhood Nodes.

Survey

An online and paper survey was created to seek resident and stakeholder input. The survey was advertised in emails, social media posts, on the City website, as well as a flyer posted at public locations such as the library, city hall, and community center.

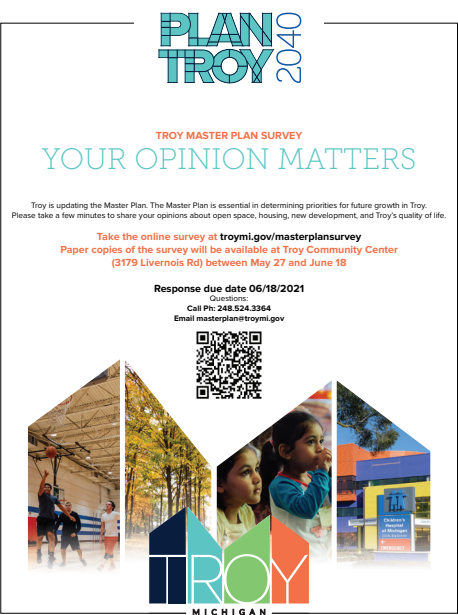
The survey sought input on identified important city topics including the future of neighborhoods, parks and green space, housing options, and overall quality of life.

Over 1,650 people, responded to the survey conducted in the spring of 2021. Survey results are in the appendix and referred to throughout the Master Plan.

Top MP priorities

- 1 - Need for additional parks and open space (overwhelmingly)
- 2 - Desire to protect existing neighborhoods
- 3 - Desire to protect natural environment

Survey Flyer >



Neighborhood Nodes Walk & Talk

In October and November, Troy held a series of six (6) walking tours of selected neighborhood nodes. The walking tours were open to all residents and stakeholders. The purpose was to visually survey the nodes, collect stakeholder input about existing development, and discern a vision for the neighborhood nodes in general.

Major Overall Takeaways

- Each node needs a unique approach. One size does not fit all.
- Where appropriate, limit specific uses, specifically townhomes, that are inconsistent with the surrounding housing type.
- Design matters, especially in terms of size of yards, height, building materials, and landscaping.
- Onsite mixed use in nodes is appropriate and desired.
- The zoning should allow or incentivize uses that serve the local neighborhood.
- Building placement at roadway and parking behind creates a better built environment, but a greater buffer between roadway to building should be provided. Multiple participants expressed safety concerns about parking in the rear yards only, but felt comfortable with parking in side yards.
- Landscaping can soften the built environment.
- One-story is appropriate; however no more than two stories even at the corner.
- As much buffering and landscape as possible should be preserved and/or required.



Images from Nodes Walk & Tour

Steering Committee

The Master Plan Node Steering Committee, which consisted of four (4) members of the Planning Commission, met three (3) times to discuss revisions to the Master Plan vision of the neighborhood nodes. The Steering Committee went through each node individually to discuss specific strategies.

- First Meeting: Revised node intent statement and an individual review of Nodes A-I.
- Second meeting: Draft revised node intent statement language and an individual review of Nodes J-U.
- Third meeting: Final revisions and review of the Dequindre and Long Lake concept plan.

The Steering Committee drafted a revised node intent statement, revised language for each node, and provided direction on concept plans.

Planning Commission

Four members serving on the Steering Committee and all members of the Planning Commission played an active role in the vision, strategy, and drafting of the 2022 Master Plan amendment. In addition to holding a public hearing and attending various public engagement sessions, the Planning Commission discussed, reviewed, and provided insight into the Master Plan at eight (8) separate meetings. On _____, 2023, the Planning Commission held a public hearing and recommended unanimously to the City Council to adopt the 2022 amendment to the Master Plan.

City Council

The City Council has been actively engaged in the planning process. On March 12, the City Council toured three (3) neighborhood nodes to consider previous Planning Commission and resident input and make their own recommendations. This input was utilized to formulate the Neighborhood Node strategies. On _____2023, the City Council by Resolution, adopted the 2022 Master Plan update.

2 – Troy's Context: From Local to Global

Troy is a Leader in Michigan.

Home to a large number of international corporations, and about 6,000 individual businesses, the City of Troy has a workforce of over 129,000 and a daytime population of over 170,000. Given the scale of these estimates, it is clear that Troy possesses a business culture rivaling any major city in the Midwest. Building on this success, the City has seized upon the opportunity to establish itself as the international gateway to Southeast Michigan for the global business community.

The national manufacturing economy is becoming a “Knowledge Economy.” The Knowledge Economy, which will be explored in subsequent Chapters, is essentially a new competitive environment empowered by the availability of information from new sources. This Master Plan includes many topics which relate directly to managing change in Troy to capitalize on this fundamental shift. Troy has a head start in this regard, given its substantial office presence, and its lesser dependence on conventional manufacturing land uses, when compared with other local communities.

Knowledge Economy businesses depend on global communication and 21st century technology to reach out to markets around the world. The emergence of such businesses demands a new

set of assets for a City to attract the best new companies and workforce. Knowledge-based businesses, for instance, rely on telecommuting and home-based businesses more than ever before. Businesses that conduct much of their business over the internet may have specific building and use needs, which could benefit Troy in that it has a great deal of available light industrial and office complex property.

The integration of communities like Troy into these worldwide markets also creates opportunities for them to expand their horizons and introduce themselves to new, expanding, or relocating businesses that may never have been aware of them otherwise. **Competing for these businesses and the workforce necessary to support them will be a major focus of this Master Plan.**

A Global Market

Troy has adopted a strategy to position itself globally, in terms of international business connections and with regard to marketing its assets to attract worldwide investment. Southeast Michigan is a region founded on innovation in industry. Troy is a community within that region with unique attributes which will empower it to serve as a gateway in the 21st century between this important region and the rest of the world.

City of Troy Facts

Population (Census 2020) - **87,294**
 Retail Space - **7,000,000 sq. ft.**
 Office Space - **21,000,000 sq. ft.**
 Industrial Space - **16,000,000 sq. ft.**
 Businesses - **6,000**
 Employment - **125,000**
 Number of Households - **34,488**
 Median Housing Value - **\$335,000**
 Median Household Income - **\$107,550**

source: U.S. Census Bureau, www.troymi.gov

The International Population

Troy has embraced international populations and now benefits from a great deal of diversity. Troy has a much higher percentage of foreign-born residents than any community in the area, over 38 percent, or almost three times that of the Oakland County average. Troy’s foreign-born population is overwhelmingly southeast Asian, which provides a unique opportunity to link Troy with the fast-growing markets of Asia. The Troy Vision 2020 Wealth Creation Task Force specifically mentioned Troy’s Asian population as an asset for worldwide outreach.

By engaging the international population of Troy more actively and collaborating with people from around the world, Troy will benefit from broad points of view and an international perspective.

Empowering International Investors

This City plays a central role in the establishment of a new business or the redevelopment of an old business. Approvals and permitting for new facility construction, provision of City services, taxing policies, and other elements of City governance are taken into account when a business investigates potential locations or markets. These complex elements become even more intimidating for international businesses, who may be facing hurdles with regard to language or understanding of Federal, State, or local laws and regulations.

With this in mind, the City has formed a strong partnership with Automation Alley, home of the International Business Center.

Troy in the Regional Economy

The use of effective communication is a key ingredient of building and nurturing partnerships or celebrating social, economic, and physical diversity. Communication must include all forms of transmission and media. The importance of regional collaboration, a sentiment echoed by Troy Vision 2020 stresses that Troy is part of a greater region. The Regionalism Task Force for Troy Vision

2020 dealt exclusively with developing visions for all of Southeast Michigan, with the goal of contributing to a region with a cooperative spirit, willing to coordinate and consolidate services, and to improve relationships pertaining to water and sewer regional service.

Cities cannot thrive alone. Systems and relationships are needed between the public, private, and non-profit environments. Coordination and consolidation efforts between public entities are also critical as resources become more expensive and services more difficult to sustain. Partnerships between the City and these other agencies, as well as partnerships that are regional in scope, have a place for the City of Troy. Through communication and partnering, the City can take an active part in making all of Southeast Michigan a better place to live and work.

Troy will continue to take the lead within Oakland County and Southeast Michigan to arrange networking functions, lead regional discussions, host events and functions, and take responsibility for managing projects relating to regional cooperation.

The City of Troy can advocate for common goals in the region by sharing its findings, plans, and studies with other communities. The City can be a model community, and develop consensus on important issues like the environment and transportation.

Leadership

Becoming a regional leader in the areas of transit, environmental concerns, and civic infrastructure is an important theme of the Master Plan. While the City does have an opportunity to advocate for regional cooperation, it must also establish firm precedents that will gain it increased credibility in the region to position itself as a leader and authority.

In order to provide the most successful example of a community thriving in the 21st Century economy, Troy must think strategically about focused areas which represent community

values and which will differentiate Troy amongst its peers. If Troy is to provide leadership to other Southeast Michigan communities to establish firm partnerships geared toward regional improvement, it must select focused areas that serve the dual purpose of inspiring other communities, and in which Troy can be competitive. The City must find niche markets which build upon its strengths in order to lead the Midwest and the nation. Two areas where the City of Troy can excel, and which are important throughout the region, are preservation of the natural environment and enhanced transportation.

Transportation

Troy is a complex place that contains diverse neighborhoods, business districts, industrial and educational campuses, and a wide variety of roads, from freeways to neighborhood streets. These ingredients are in place and complement one another to make up the City of Troy. To sustain the positive relationship between land uses and street characters, linking and connecting the City through multiple methods is critical. Linking the City to other communities and to the greater region is just as important.

Advocating for enhanced regional transportation is an important step in Troy’s goal to become a regional leader. The development of the Troy Transit Center in 2014 brought Troy to the forefront of Southeast Michigan in providing an example of coordinated planning for new transportation options in Michigan.

Mobility, which is presented in a comprehensive Chapter later in this Master Plan, will be a crucial area for the City moving forward with regional cooperation and enhancement. Connecting the employment centers of Troy with a wide variety of housing markets in the area, including those in other nearby communities, and regional shopping, entertainment, and educational facilities is an important strategy for bringing Southeast Michigan together. Shared access to a successful multi-modal transportation framework will be a major step in providing access between communities for all residents, to allow people to experience other regional communities in new ways.

Regional Collaboration

The City of Troy, in collaboration with public and private-sector partners, is focused on helping businesses grow. The City of Troy has formed a strong alliance with key stakeholders including Automation Alley, Walsh College, Troy Chamber of Commerce, Oakland County’s Economic Development Office, and the Michigan Economic Development Corporation to provide targeted business assistance. Troy’s economic development staff assists local companies by identifying specific business needs and providing the information, infrastructure, and connectivity necessary to address those needs. By leveraging Troy’s unique community assets, partnerships, and available tools to promote business growth, the City is creating an environment for investment.

One of the key regional assets that the City makes use of is Automation Alley. There is no better example of regional collaboration than Automation Alley with the bulk of its members located in Oakland, Macomb, Wayne, and Washtenaw Counties and membership growing in Livingston, Genesee, Ingham, and St. Clair Counties.

Sustainable Development

An area where the City can accomplish a variety of objectives is the adoption of a strong philosophy toward sustainable development. Continuing to incorporate sustainable development standards into City policies will encourage environmentally, socially, and economically responsible development and enhance the preservation of the City and regional assets. This philosophy will also demonstrate to the greater Southeast Michigan Community that Troy is leading the effort to promote sustainability.

This important topic is being addressed in many Michigan communities, providing Troy with another opportunity to promote regional cooperation.

Another positive benefit from a City-wide philosophy encouraging sustainable development would be the creation of a new global reputation for environmental stewardship, under which the City could market itself to eco-conscious businesses throughout the world. The Master Plan will describe many techniques for enhancing the City's natural features in Chapter 7.

By demonstrating and marketing the City's commitment to sustainability, and specifically eco-friendliness, a new niche to attract green energy and other environmentally concerned businesses would emerge. Troy can become the model of an environmentally friendly community envisioned by the Image and Feel Task Force of Vision 2020, while enhancing its attraction to the Creative Class and welcoming Knowledge Economy businesses operating with a renewed interest in environmental protection.

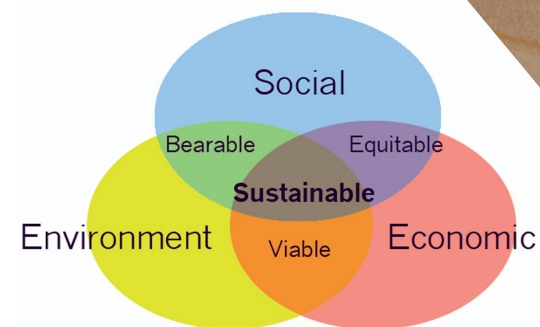


FIGURE 2.3: Sustainable Development
Graphic by Carlisle/Wortman, Content from Johann Dréo

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” Sustainable development essentially means improving quality of life without increasing the use of natural resources to the point of exhaustion or compromising economic or social well-being.

Sustainability covers many areas, including the environment, economics, and social responsibility. In terms of the Master Plan, sustainable development may be the most important concept to be familiar with. Environmentally friendly building design and a reduced dependence on the automobile, for instance, are elements that contribute to a philosophy of sustainable development. A simple, common definition for sustainable development was originally presented in the report “Our Common Future.”

Information from <http://www.epa.gov/sustainability/>, World Commission on Environment and Development (WCED). *Our common future*. Oxford: Oxford University Press, 1987 p. 43 and <http://www.sdgateway.net/introsd/definitions.htm>

Troy Transit Center

Located on a three-acre parcel of land behind the Midtown Square at Coolidge Highway and Maple Road in Troy, the Troy Transit Center serves as a central hub for train, taxi, rental car, or bus service. Opened in 2014, the project replaced the train in Birmingham with the new facility, located in the City of Troy.

www.michigan.gov/mdot

3 – A Place to Learn & Play: The Quality of Life in Troy

Quality of life is what makes a community thrive. Elements like schools, parks, and cultural amenities contribute to the quality of life, but must be complemented by innovative development and supporting infrastructure. A dedication to learning, healthy citizens, and strong institutions will help create a community which attracts a workforce of educated and talented members of young generations. Excellence in these areas will enhance Troy beyond expectations, and therefore this Chapter provides a foundation for all other areas of this Master Plan.

People have a choice of where to live, and every community has its own unique elements to attract residents. What makes Troy a special community where people aspire to live and work? Troy Vision 2020 explored this issue in depth. Beyond strong employment, attractive and affordable housing, and efficient access to goods and services, people seek communities with the amenities that will enhance their lives.

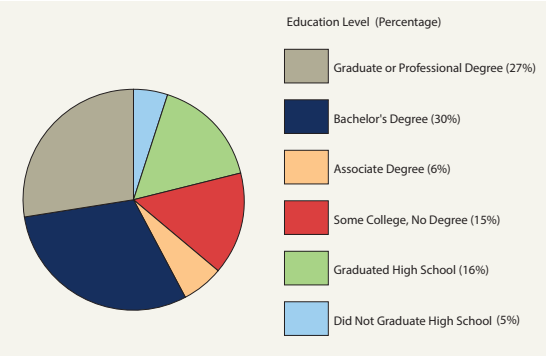


FIGURE 3:1 EDUCATIONAL ACHIEVEMENT OF RESIDENTS OVER 25 YEARS OF AGE
U.S. Census

Troy has invested greatly in its parks and cultural amenities and must continue to do so to grow as a community and differentiate itself from other Southeast Michigan communities. Troy must embrace innovative development styles which capitalize on economic and social diversity, and cultural, educational, and recreational amenities. In that spirit, this Chapter will focus on the enhancement of quality of life issues to secure Troy’s status as a global city.

A Philosophy of Learning

A critical theme to emerge from the Troy Vision 2020 was the concept of “Lifetime Learning.” In order to become a competitive community in the Knowledge Economy and a community renowned for its attention to the enhancement of its citizens’ changing educational needs, the City must adopt a new philosophy. This philosophy includes, but goes beyond, conventional formal education and introduces the idea that all aspects of community life must consider and promote the continued enhancement of Troy’s citizens. The way in which learning is regarded in the City of Troy will continue to support and impact the future enrichment of the community in this area.

As indicated in the results of the 2020 American Community Survey, over eighty-three percent of Troy’s residents have some college education. Sixty-three percent of residents have bachelors and graduate/professional degrees. Only 4 percent of residents did not graduate high school.

The Troy Vision 2020 Lifetime Learning Task Force developed ideas to ensure that “Troy will be globally recognized as a community that provides its citizens with the opportunity to achieve social enrichment and personal growth via lifetime learning.” The Troy Vision 2020 Report indicates that the Lifetime Learning Task Force was asked to examine “access to personal, professional, and organizational intellectual stimulus and growth” within the Troy community. The Executive Summary from this Chapter of the Report states that the Task Force created a vision statement and goals for learning in Troy:

“Our vision is for Troy to be globally recognized as a community that places a high value on lifetime learning for its citizens. A collective

community effort is required for this effort to be successful. The vision can be achieved by taking action on five broad goals:”

1. Coordinate the efforts of our learning institutions: establish a new City of Troy committee focused on lifetime learning, with the responsibility for strategic coordination of Troy’s learning resources. This will strengthen the connection between the needs of the community and Troy’s lifetime learning assets.
2. Improve communication about the learning opportunities that are available in the Troy community: establish and maintain a “Learning Clearinghouse” and make it the primary resource for information about lifetime learning resources within the Troy community. This will increase the awareness of lifetime learning opportunities, establish a focal point for this information, and make efficient use of the resources of the Troy Public Library.
3. Utilize the expertise and knowledge of Troy citizens: maintain and expand programs (ex. Sights & Sounds, APT to Succeed) that encourage the shared personal knowledge and discourse among different cultural, professional, public, and private organizations. This benefit will strengthen the sense of community in Troy.
4. Invest in world-class lifetime learning services and facilities: build a bigger and better library. Now. The Troy Public Library is extremely popular and far too small. Additional parking and program space are desperately needed.
5. Provide opportunity, encouragement, and recognition for the highest levels of academic achievement: actively pursue regional and national academic competitions (ex. Math Olympiad) and host them in Troy. Publicly celebrate academic achievement more often than once a year. This will enhance Troy’s reputation as a center of high-quality K-16 education.

These formal goals must be supported by other measures which enhance Troy’s culture of learning. To attract the Creative Class, Troy must continue to evolve into a regional leader for innovation. Troy Vision 2020 accurately observes that Southeast Michigan has historically been an “incubator” for innovative ideas, within the industrial sector

especially. Troy has an opportunity to rekindle this reputation.

The development of formal City programs and facilities, like the “Learning Clearinghouse” introduced by Troy Vision 2020, and the further improvement or replacement of the Troy Library represent active steps the City can take to establish a basis for lifetime learning. Continuing education, higher education, job training, career counseling, and a renewed cooperation with local public and private schools, colleges and universities are measures Troy should take to build momentum for a culture of learning.

The enhancement of educational opportunities throughout all phases of community life will allow people from a wider variety of economic and age groups to enjoy a quality of life



High Quality Schools
The Troy School District operates an Early Childhood Center, twelve elementary schools, four middle, and three high schools within the City. In addition to the schools, the Troy School District has other properties in the City, including the Troy Continuing Education Building, the Administration Building, bus garage, and several vacant properties. The Troy School District encompasses most of the City, but small segments along its perimeter are served by six other school districts. Three of these school districts, Birmingham School District, Warren Consolidated Schools, and Avondale Schools, have elementary schools in Troy.



already enjoyed by the most educated residents of Troy. Increased job opportunities and better income, as well as a more visible and meaningful role in community life can in this way be made available to anyone in the City. Complemented by the strong reputation of Troy schools, the regional image of Troy as a community dedicated to lifelong enhancement and engagement will continue to grow.

The Integral Role of Educational & Cultural Institutions

Schools, parks, vibrant downtowns, natural features, and many other land uses which factor into a community’s quality of life consequently play a large role in the physical development of the community. The location of schools, for instance, has a profound effect on residential housing values. In fact, central civic uses like schools have always driven the success of whole communities, especially colleges and universities, which can greatly influence community development.

School Location

With this in mind, the City must closely monitor the demographics to prepare for the changing nature of schools. Given that schools, from elementary through college, are such a critical component of how cities develop, the continued presence of existing facilities and the placement of future facilities must be anticipated by the City through close communication with local public and private school leaders, and university and college officials. This Master Plan can suggest physical planning and land use policies which support and

improve the educational framework in the City by enhancing access and vitality of those areas where educational centers are located. Given the correlation between a good neighborhood school and its effect on nearby property values, the City must ensure that these institutions remain relevant and successful.

In order to secure continued enrollment in neighborhood schools, the City must permit residential densities within their districts which support and are compatible with their student capacity. Furthermore, the City can integrate safe, walkable school access into new mixed-use development in instances where such development is nearby existing or proposed neighborhood schools. As the demand for new or different schools arises, the City must partner with local school leaders to encourage the establishment of schools within mixed-use areas, rather than automobile-dependent locations, to promote interaction between classrooms and the greater community.

A City of Villages

Troy does not have a conventional “city center” or downtown. The vibrant core of many successful communities known for their ability to attract the creative class is often cited as a primary determinant of that community’s image. Respondents to the Master Plan survey felt strongly that while Troy may not be able to have a single focused center, it must create activity nodes throughout the City, capitalizing on the diversity of Troy for shopping and entertainment experiences. This type of response was preceded by Troy

Safe Routes to School

Michigan’s Safe Routes to School program is managed by the Michigan Department of Transportation (MDOT), with support from the Governor’s Council on Physical Fitness, Health and Sports. A State coalition and steering committee provide leadership for all aspects of the program. The Federal Safe Routes to School program was created by Section 1404 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), (P.L. 109-59) of August 10, 2005 (www.saferoutesmichigan.org) The purposes of the Safe Routes to School program are:

- To enable and encourage children, including those with disabilities, to walk and bicycle to school;
- To make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age;

For the period from 2005 to 2009, at total of 612 million dollars has been set aside for this program across the United States. In this period, Michigan will receive a total over five years of 19.26 million dollars, based on its share of national enrollment in grades K-8.



Vision 2020, which introduced the concept of “Villaging” in Troy. The idea of “Villaging” could be described as a means of staging complementary development in a focused manner intended to create vibrant “nodes” of activity which have an identifiable character. Similar to smaller towns, these areas would be compact, would have a clear edge, would generally be supported by a common theme, and would incorporate dense, mixed-use development. Such “Villages” should incorporate common community elements, be designed to encourage active living, and should have uses which support a successful business foundation.

The Big Beaver Corridor Study supports the concept of focused development areas. The area described by the Study as the “Troy City Center” is intended to be the “ultimate people place,” an area which would build off of its most successful commercial and office tenants, such as Somerset Collection, to foster a mixed-use, vibrant area with significant year-round activity. The Study aspires for the Troy City Center to become the “heart” of Troy, where urban residents can live, work and play in a single area. The predominant building uses prescribed by the Study in the City Center are large mixed-use buildings with retail at grade and office and residential uses on upper floors.

Cultural Spaces

The Big Beaver Study also includes an area labeled “The Promenade” designed for restaurants and entertainment uses in close proximity to hotels and business meeting places. The Promenade would also serve as a large local draw, and could include a gathering public space for enjoyment for residents, visitors, workers, etc. Within Troy’s focus areas, the City has an opportunity to leverage physical development to casually introduce cultural life to the City.

How can a City “casually” introduce cultural life? What should a Master Plan, a document focused on land use and physical planning, have to do with cultural life? While it may not be the direction of this document to introduce techniques for programming cultural activities, it can establish a direction for the provision of space for such activities to occur, either formally or informally. A city must have central, unprogrammed open spaces in close proximity to its homes and businesses to encourage a flourishing cultural atmosphere.

While many communities are home to traditional brick-and-mortar cultural facilities, such as theaters and art museums, those communities renowned for cultural atmosphere are so recognized for the things that take place in public spaces. Art in the park, street performers, summer theater programs, and many other forms of cultural expression are common in cities that allow for such activity by providing central, unprogrammed open space. Thousands of European cities have supported central parks or small unprogrammed open spaces for centuries.

The introduction of small, intimate public open spaces in select areas could be a positive step in encouraging a thriving cultural atmosphere in Troy. Those efforts outside of the Master Plan, such as the introduction of formal cultural facilities, are critical for the enhancement of Troy, but they must not be left to stand alone if Troy wishes to achieve the regional reputation expressed by Troy Vision 2020. To be successful, these spaces must have some of these traits:

- Little or no programming; that is, the space cannot be dominated by formal gardens or active recreation, such as baseball fields.
- The space must be located directly adjacent to vibrant, mixed-use development with both residential and commercial concerns nearby, to draw people throughout the day.

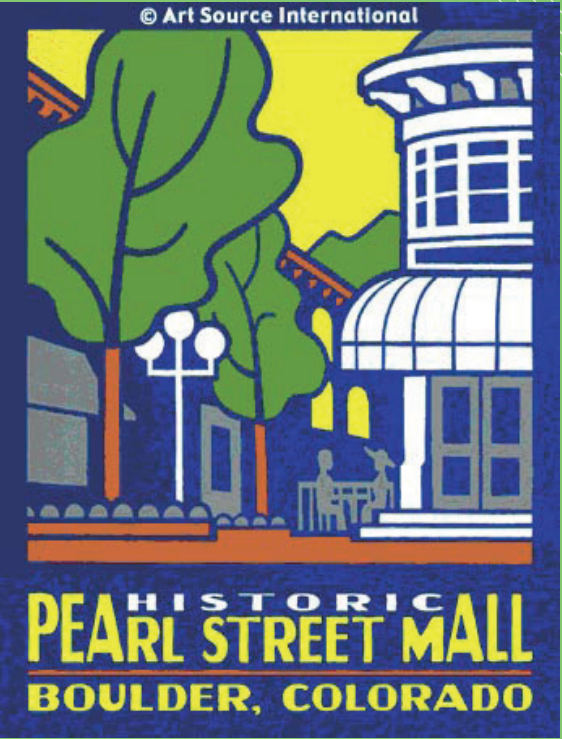
- The spaces must be walkable and accessible for pedestrians.
- The space must be located in a central area. Large unprogrammed spaces are located in many European cities at the intersection of major roads. In a community like Troy, they could be best located very near a major corridor, such as Big Beaver, but surrounded by a mixed-use development.
- The space should be intimate, that is, surrounded on several sides by buildings, to provide a feeling of enclosure and protection from the elements.

The creation of common areas for social interaction is a theme that threads throughout the Big Beaver Corridor Study. Along Big Beaver, the Study described potential “Experiential Moments,” like a walk along the boulevard, interaction within a large public plaza enhanced by public art, and experiencing pocket parks throughout the community. The Study specifically calls for mixed-use development that makes Big Beaver a round-the-clock “people place,” which attracts cultural and entertainment uses to the Corridor.

The central philosophy of the Big Beaver Corridor Study is that social interaction, and therefore quality of life, can be improved by the careful design of new elements and select redevelopment within the Big Beaver Corridor. The provision of public greens for example, is described in the Pedestrian Circulation and Greenspace Plan as focal points amid denser development to help draw people to these focus areas: a strategy for implementing the casual introduction of cultural life in Troy.

Quality of Life, the Knowledge Economy, and the Creative Class

In order to attract a premium workforce and support the long-term health of the City, Troy must recognize that the working world is changing. Many of the most valuable members of the new



A good example in the United States of unprogrammed open space is Boulder, Colorado’s Pearl Street Mall. Pearl Street Mall is a section of blocks in the center of Boulder which were closed off to automobile traffic and finished with seating areas, landscaping, and most of all, large areas of open, unprogrammed space. These areas have become popular for political and artistic expression in the summer months. Given their strategic location and limited space, they provide a series of intimate outdoor “rooms” that enhance the surrounding businesses.



Pearl Street Mall in Boulder, Colorado. Photo by Mark Ruckman

workforce come from the Creative Class. The term was coined by the sociologist Richard Florida who describes the Creative Class as an emerging class of working professional from a younger generation. The Creative Class is a demographic of worker with more education and a greater focus on high-tech or intellectual fields, rather than the previous generations, which were primarily based on agriculture and industry.

The Knowledge Economy, put very simply, is a competitive economy centered on knowledge-based industries which require high-tech facilities and which are empowered by the availability of information from new sources around the world. Knowledge-based businesses are less likely to manufacture a product as they are to conceive or design one.

In light of the struggling manufacturing economy of Michigan, the State has initiated programs to help communities more fully understand what they can do to attract the workforce and the employers functioning in these new areas. Troy Vision 2020 explored this concept and developed specific ideas about what Troy can do to become a leader in the cultivation of the Creative Class in Southeast Michigan.

Today, employers are no longer tied to railroads, rivers, highways, or resources to succeed. Knowledge-based businesses, especially, rely totally on the availability of a good workforce comprised of the most talented and creative individuals available. Quite commonly, emerging knowledge-based businesses will succeed in college towns or other communities reputed for an educated workforce and a high quality of life. This is a critical notion: the idea that communities with a high quality of life attract the potential workers who attract the businesses that need them.

What attracts the valuable workforce for knowledge-based businesses? In addition to diverse, vibrant mixed-use areas, which will be explored in depth in subsequent chapters of this Master Plan, these individuals seek communities that embody the lifetime learning philosophy and the availability of amenities that enhance

“...the casual introduction of cultural life is part of the historic mission of cities.”

-Jane Jacobs , Death and Life of Great American Cities

their lives, like quality parks and recreation programs, cultural amenities, and a diverse and welcoming community.

Parks & Recreation

Similar to schools and downtown areas, parks have the potential to transform a neighborhood. Recreational development in Troy is guided by the Parks and Recreation Plan, which is developed under criteria established by the Michigan Department of Natural Resources (MDNR). The current Parks and Recreation Plan was developed with strong public input and contains a series of goals and objectives relating to recreation improvements.

The City must be diligent in executing the Parks and Recreation Plan, which calls for many improvements to the City’s existing parks and recreation inventory, and provides a basis for the introduction of new facilities. Successful parks, with good access and a focus on active lifestyles, will be a strong asset in the competition for a globally recognized workforce.

Much of the public input suggests that people consider trails and pathways to be more than simple recreational amenities, and genuinely consider them valid transportation corridors for access to the important places and institutions discussed in this section. Furthermore, they drive property values and can be seen as an amenity for real estate development.

The development of a trail system in Troy is the City’s number one recreational priority based on the results of the public input. There is a wide range of benefits associated with the establishment of a trail system:

- Improves health and physical fitness
- Increases property values
- Promotes community enrichment/character
- Provides connectivity to neighboring communities
- Improves landscape aesthetics
- Offers recreation for diverse users
- Provides income for Michigan’s tourism related business
- Linkages for a statewide network of trails
- Safe non-motorized transportation routes

Top 10 Reasons Parks Are Important:

1. Public parks provide the opportunity to be physically active. Physical activity is an essential part of an individual’s efforts to stay healthy, fight obesity and prevent chronic conditions that lead to coronary disease, high blood pressure and diabetes.
2. Parks have true economic benefits. Proximity to a park improves property value. Parks provide increased local and regional revenue from heritage tourism, steady jobs, and numerous small business benefits.
3. Parks provide vital green space in a fast-developing American landscape, and keep our living environment healthy.
4. Parks preserve critical wildlife habitat while providing enjoyment and educational opportunities for children and families.
5. Parks provide a meeting place where community members can develop social ties, and where healthy behavior is modeled and admired.
6. Leisure activities in parks improve moods, reduce stress and enhance a sense of wellness.
7. Recreational programs provide organized, structured, enjoyable activities for all ages. Quality recreational programs facilitate safety, good sportsmanship and community participation.
8. Community recreation services provide a refuge of safety for at-risk youth and give valuable life lessons to help steer young people to success.
9. Therapeutic recreation is an outlet that individuals with disabilities have to be physically active, socially engaged and cognitively stimulated.
10. Public parks embody the American tradition of preserving public lands for the benefit and use of all.

Summarized from the original by Richard J. Dolesh, Monica Hobbs Vinluan and Michael Phillips

- Conservation of green space and wildlife habitat
- Environmental quality education opportunities
- Transportation alternative
- Connect with existing and proposed bicycle lanes

In 2018, the City implemented Troy’s first trail facility, a project decades in the making. The 1.3-mile asphalt trail runs from the Troy Town Center, through P. Terry & Barbara Knight Park, past Wattles Road (where a pedestrian safety island has been installed), and finishes at Troy Historic Village. The hope is that this trail will spur further pathway development with connections to surrounding regional and national trail systems.



Cultural Amenities

Cultural institutions, like museums and theaters, must be complemented by a wider appreciation of the importance of cultural life in the community. As noted earlier in this Chapter, perhaps the most critical thing Troy can do to enhance the cultural life of the City is to provide the venue for cultural life to emerge in small parks and unprogrammed open spaces.

The Task Force most closely examining the issue of cultural facilities or events was the Vision 2020 Lifestyles Task Force. This group explored a number of concepts selected to help Troy continue to grow into a truly diverse, unique, global community. The Lifestyles Task Force established a direct call for the improvement and encouragement of existing and new cultural facilities in its “Preferred Future 5” which states that “In 2020, Troy is a ‘Gotta Have Art’ type of place, with opportunities to celebrate and experience all of the fine arts. This preferred future describes potential public spaces to experience art and suggests music in the park events, theater, a symphony, art galleries, and public art as areas of focus.

Another important area where the City can be active in introducing cultural amenities is the encouragement of diverse, mixed-use development. One of the many positive attributes of mixed-use development, which will be explored throughout this Master Plan, is the creation of new areas for social



interaction. Rather than isolate homes from entertainment and dining venues and separate places of work from places of play, mixed-use development is uniquely capable of creating energetic, memorable places where a person can experience new points of view, witness personal expression, and enjoy a variety of activities with other people. While this can be said for many types of communities, those places where mixed-use development occurs are more likely to succeed.

Public Art

The importance of public art can not be overstated. Many of the great communities of the world are identified by their public works of art. Public art makes a statement that the community supports the arts and contributes greatly to the creation of unique, memorable urban places. The City of Troy can support public art by encouraging private development to include public art, by reserving public funds for art projects, and by pursuing grants for public art initiatives. As part of the development review process, the City has been incorporating public art in private development.



The City of Troy offers a wide range of recreational facilities and programming to its residents. Troy has six community parks, ten neighborhood parks, and one dog park covering over 400 acres of land. All parks are open daily from sunrise to sunset. The City also owns and maintains a number of special use facilities, including the following:

- Jeanne M. Stine Community Park
- Troy Community Center
- Two (2) 18-hole golf courses
- Lloyd A. Stage Nature Center
- Troy Farm
- Troy Family Aquatic Center and Recreation Center
- Daisy Knight Dog Park
- Troy Trail
- Troy Historic Village and Museum
- Troy Skate Park

A comprehensive study of each facility can be found in the Troy Parks and Recreation Plan at <https://rec.troymi.gov/parksfacilities/parks/index.php>

Troy is home to several notable formal cultural amenities and is in a region famous for its cultural diversity. Some amenities in the City of Troy itself include:

- The Troy Museum and Historic Village, which is intended to encourage hands-on learning, especially on topics relating to Troy's heritage. The Museum is also responsible for the preservation of cultural heritage through physical structures, collection of artifacts, and archival materials. The Museum is located in the former Troy Township and City Hall.
- The Lloyd A. Stage Nature Center is a 100 acre sanctuary with a wide range of programs, including school programs.
- The Troy Public Library is a popular, award winning facility which provides free wireless internet service. The Troy Public Library is #1 in Michigan among libraries serving populations of 50,000 or greater per Hennen's American Public Library Rating Index.
- The Ridgedale Playhouse is home to the Ridgedale Players, one of the oldest community theaters in Michigan. The Players are in their 75th season.

4 – A Place of Prosperity: The Economy of Troy



Troy is in a unique position among Southeast Michigan communities. The assets of Troy lend themselves to a rapid transition from the manufacturing economy to the knowledge economy. The high quality of life, availability of prime office and light industrial real estate, and an emerging regional commitment to building a new foundation for global economic leadership make Troy a competitive choice for 21st Century businesses. County-wide programs that focus on Mobility and Defense such as the Oakland County Emerging Sectors program and regional organizations like Automation Alley provide the resources for a community like Troy to emerge as a national leader in business growth.

This Chapter will expand on the concepts alluded to in Chapter 2, will discuss sustainability in business, and will describe the needs of new businesses in the changing economy. It is these changing needs that Troy can focus on, coupled with the quality of life elements described in Chapter 3, to become an economically stronger and more sustainable place to live and work.

A Hub For Employment

With a large number of employees and robust economic activity, it is not surprising that Troy is home to nearly 170,000 jobs. Of the people who work in Troy only 14% actually reside in Troy.

The major industry of employment are knowledge-based services, which will continue to grow at a much higher rate than any other employment sectors. Currently, 35% of the

workforce is employed in a knowledge-based industry. The next three highest sources of employment are retail trade, private education, and health care.

Sustainable Business

A critical theme in Troy Vision 2020 was the concept of sustainability. As noted in Chapter 2, sustainability involves social responsibility, environmental stewardship, and economic vitality. These three elements contribute to one another. A commitment to sustainability makes good business sense in that companies can realize a reduction in operating costs, energy consumption, and win over customers with reduced prices and a good image by becoming a good neighbor. In other words, the first two elements of sustainability, social and environmental responsibility, can contribute to the third component, economic vitality.

The City can promote sustainability in a variety of ways. Leading by example by managing and governing itself using sustainable practices is a start, but the City can also promote sustainable development amongst its businesses, residents, and visitors. It is critical that the City of Troy encourage sustainable development practices to enhance the quality of life for this generation and future generations. Furthermore, the City can secure a positive financial future while protecting the natural environment by supporting sustainable business practices.

There are many measures the City can take with regard to sustainability, perhaps most notably those measures directly relating to environmental protection. Alternative fuel city-owned vehicles, innovative stormwater management, recycling programs and many other programs allow communities to lead by example. Many of these techniques will be described in Chapter 7.

Troy’s Economic Development Plan will focus in on “Best Practices” which include Business Retention, Expansion, and Attraction. Business Retention is the cornerstone of Troy’s plan. Working to retain our existing business base by calling on advanced manufacturers, engineering, financial, and mobility firms will ensure that Troy continues to lead Oakland County with knowledge based businesses.



Sustainable Business is a non-traditional strategy that strives to maximize efficiency and effectiveness while restoring environmental quality, building social equity, and increasing long-term profitability. Since the industrial revolution, industry has intensified environmental degradation by exploiting natural resources and releasing unfathomable quantities of hazardous pollutants into the biosphere. On the other hand, business has spent billions of dollars to comply with governmental regulations aimed at minimizing contamination by prescribing the amount of toxic substances that can enter the air, water and landfills. An adversarial relationship has developed between business people and environmentalists, each seeing the other as a main source of the world’s problems.

Emerging just under two decades ago, a movement began within the business sector to change the way companies operate. People began to recognize that environmental degradation and commerce do not have to go hand in hand. Some of the changes have included:

- The reduction and, in some cases, elimination of hazardous materials from industrial processes
- Equitable treatment of employees, which in turn increases productivity and worker retention
- Operating as a responsible member of the community

The same business practices that improve social and environmental capital have been shown to also improve long-term profitability. When implemented, sustainable business practices provide an avenue to achieve mutual benefits in the natural world, the community, and the economy.

Aquinas College Center for Sustainability www.ceneterforsustainability.org

There are expansion projects that evolve from our Business Retention program because these are national and international firms that reside in Troy. These firms compete against other divisions nationally and internationally for new product lines. Troy will focus on assisting these firms with their business cases in order to win new business that will create additional jobs and investment in Troy which help pay for the great city services like fire and police that we provide to our residents.

Business Attraction is a key element for the continued growth of Troy’s business community. Promoting Troy as a destination for mobility firms defined as electric/hybrid/autonomous fits the profile of Troy’s firms. Business travel nationally and internationally is a component of business attraction. A Troy representative, or representatives when appropriate, will travel alone or with the Detroit Regional Partnership/Michigan Economic Development Corporation to market why Troy is a great location for a new business.

Troy can assist in areas such as business development, market analysis, logistics, Geographic Information Systems (GIS), finance, human resources development, talent recruitment, supported employment, site selection, utility issues, building permits and inspections, planning, zoning, and other areas. By leveraging Troy’s unique community assets,

partnerships, and available tools to promote business growth, the City is creating an environment for investment. The advantage the City of Troy enjoys in this regard is that developers seek Troy as a desirable place to live and work with a broad portfolio of assets. This puts the community in a position to offer benefits to those who choose to develop sustainable projects which include mixed-use, innovative stormwater management, green buildings, and excellent architecture in exchange for increased density or other benefits. In other words, the City can become the carrot rather than the stick.

The Changing Economic Environment

Shopping, working, communicating, and socializing are all aspects of our daily lives that have been impacted by the advent of the internet. While industrial properties have traditionally been located near railroads or waterways, new technology-based clean industries are locating nearly anywhere. In many cases, the prime determination a company must make is where does it want to locate, rather than where must it locate. Chapter

3 detailed the quality of life characteristics of successful communities in the knowledge economy and recommended courses of action to raise the City’s profile in this regard. This section will address three core areas of the local business environment and describe ways in which the City can preserve and enhance its position in these areas:

- retail and service
- office and information technology
- research and research technology

Retail and Services

The past 20 years have seen a revolution in the way people buy goods and secure services. The emergence of the internet has forever changed the way companies do business around the world. Small shops and family owned businesses can reach customers around the world, while giant corporations can maximize economics of scale and improve their position immeasurably. In this way, the internet can be both a blessing and curse for retail. Those businesses that have embraced the internet to promote and sell their goods and services have an advantage over all but the strongest brick and mortar stores. Convenience and selection have become greater than ever.

There are a number of immediate advantages that traditional retail establishments have over e-commerce businesses. First, web-based businesses do not allow for consumers to see products in person or to speak face-to-face with salespeople who can assist the buyer in determining needs and preferences. Convenience is also a factor in many consumers’ choice to purchase goods in person. Selecting an item in person and taking it home immediately requires a trip to the store but usually does not involve a wait or additional costs associated with shipping.

Perhaps one of the more critical elements of retail success is the act of shopping as a social activity. Troy has an advantage in that it has a critical mass of large-scale retail developments, such as Somerset Collection and Oakland Mall, and has the opportunity along Big Beaver Road and other corridors to encourage retail in mixed-use

B2B—Business-To-Business

A transaction that occurs between two companies, as opposed to a transaction involving a consumer. The term may also describe a company that provides goods or services for another company.

B2C—Business-To-Consumer

A transaction that occurs between a company and a consumer, as opposed to a transaction between companies. The term may also describe a company that provides goods or services for consumers.

www.investorwords.com

developments with integrated residential units, open spaces, and other uses. The emerging trend of walkable, mixed-use areas enhances traditional retail establishments in that it counts on retail uses as anchors for neighborhood development. Book stores, coffee shops, shopping centers, and other retail and restaurant uses allow for social interaction and contribute to the City’s quality of life.

B2B and B2C

It would be unwise to not consider the impact of e-commerce on the traditional retail community. E-commerce sales in the United States 2021 accounted for over 14 percent of total retail sales, up from about 7 percent in 2015¹. Troy serves as a retail hub for the region and must be prepared to support brick and mortar retail establishments in order to help them remain viable moving forward. Given the central role the primary retail areas in Troy have within the City, it is critical that the continued success of these areas is taken into consideration.

It is important for the City to understand and consider that there are two types of retail or service businesses: business to business (B2B) and business to consumer (B2C). B2C businesses are those conventional retail establishments offering goods and services

Michigan’s Premier Address for Business, Retail and Commerce

Troy is a prime location for businesses like yours. Troy’s business environment is progressive and diverse with a solid mix of major corporations and small local businesses. Troy is an internationally recognized business center in a variety of sectors including Technology, Research & Development, Engineering, Advanced Manufacturing, Financial Services, and Health Care.

Grow Your Business Here

The City of Troy, in collaboration with our public and private sector partners, is focused on helping your business grow. Troy’s economic development staff assists our local companies by identifying specific business needs and providing the information, infrastructure, and connectivity necessary to address those needs.

By leveraging Troy’s unique community assets, partnerships and available tools to promote business growth, the City is creating an environment for investment.

https://www.troymi.gov/WorkHere/LocateYourBusinessHere

1: United States Census Bureau

directly to consumers. Comparison shopping, convenience shopping, and restaurant and service uses fall in this category.

Given Troy's considerable office, commercial, and industrial presence, the City should devote significant marketing and promotional efforts specifically towards B2B uses to make up for any real decline of conventional B2C uses due to e-commerce or other factors. While conventional retail and service remain strong in Troy for many of the reasons outlined above, there is no guarantee that this trend will continue indefinitely. In many cases, B2B companies are not the first to come to mind when planning for commercial uses. Given that these uses are not always open to the public, often require warehousing, and rarely market themselves directly to the public, they are not as readily understood.

B2B businesses have embraced the internet as well, and where brick and mortar B2C businesses are still relevant for both practical and social reasons, B2B businesses cater to a market concerned only with convenience, quality, cost, service, and availability. B2B businesses, in other words, may have an even easier time transitioning to an e-commerce platform than conventional retail.

The City should investigate the needs of B2B businesses in the information age. The availability of office space in Troy can provide easy entry for a B2B business, while the available high-quality industrial properties in Troy's strategic location allows for B2B businesses to develop warehousing and shipping centers nearby. The presence of a significant business community in Troy and throughout Southeast Michigan provides an immediate market for B2B businesses.

Office and Information Technology

The Wealth Creation Task Force for Troy Vision 2020 suggests that Troy must become a link to international business. The City has a head start in that many of its largest office tenants are international corporations based in countries around the world. Troy has 14 million square feet of office space, providing facilities in every imaginable shape,



size, and form with any package of amenities a potential tenant may require. The Big Beaver Corridor is home to over 100 businesses and the headquarters for companies like Kelly Services, Kojaian Companies, Bank of America, Behr, National City Bank, Altair Engineering, and Kirco.²

What are information technology and other knowledge economy businesses looking for when seeking new office space? Assuming that many new information-based businesses can be very selective in their location, given that they are no longer tied to availability of materials or railroads, etc., when a business has chosen Troy based on other factors, what is a company looking for in a specific facility? If Troy is able to attract new office and high-tech businesses, it must then address the second part of the equation and ensure that the City's office spaces are qualified for the businesses it attracts.

Infrastructure for advanced technology offices and businesses includes fiber optics, wireless communication, multiple carriers, power redundancy, and other components. Troy must ensure that new office spaces have this essential technology infrastructure. When new buildings are developed incorporating new technology standards, they enjoy lower vacancy rates and increased lease income based on higher rents.³

The City should consider encouraging physical

components to ensure that new or redeveloped office spaces are more conducive to knowledge economy businesses. These elements will contribute to the economic sustainability of the structure and, when complemented by green building design, will ensure that new or redeveloped structures are competitive and viable for generations to come. These elements could include:

- Elevated Ceiling Heights
- High Floor Load Capacity
- Power Redundancy Components
- Telecommunications Space
- Raised Flooring
- Flexible Connectivity
- Advanced Fire Protection Systems
- Closed Circuit Security Television Monitoring
- Tenant Controlled HVAC
- Flexible Work Stations

Given a choice between a conventional office space and one having many or all of the features described above, with all other factors being equal, the facility with these upgrades will be far more competitive. The City can explore incentives and regulations which enhance the City's stock of existing office space with an even more technologically advanced stock of desirable spaces. In this way, the City can ensure that those businesses attracted to Troy by the quality of life and other factors will find a physical space which allows them to excel in their sector and provide an optimal environment to attract the highest quality workforce.

Research and Research Technology

Troy has a tradition of innovation in research and research technology in a variety of sectors. Troy's top employers include Magna, Kelly Services, Aptiv, Altair and PNC Regional Headquarters. It is a mix of companies like these, and especially companies in a growing field such as green energy like ECD Ovonic, for which the City of Troy must compete moving forward.

Oakland County strategy includes:

- Attracting high-tech businesses from around the world to Oakland County.
- Facilitating new collaborations between existing

Oakland County businesses and outside companies looking to expand into North America.

- Assisting Oakland County companies as they identify and promote new applications for their existing technologies in domestic and international markets.
- Linking research and development projects at local universities with proven entrepreneurs to accelerate participation in the global marketplace.
- Aggressively identifying and increasing local sources of venture and growth capital for emerging sector companies.
- Continuing to attract and develop a highly-skilled workforce.⁴

One of the primary initiatives the City of Troy has undertaken with regard to targeting technology businesses is the establishment of the Smart Zone. The Big Beaver Corridor Study envisions the Smart Zone as an area in which high-technology uses at the cutting edge of innovation are cultivated. The Study calls this location a "paragon of innovation" and prescribes a combination of "signature" light industrial, research and development, and office uses.

As noted previously, Troy is also part of Automation Alley and is home to the Automation Alley headquarters and Technical Center. Automation Alley is actually a broader multi-community Great Lakes Interchange Smart Zone, with a focus on business and technology in the advanced automotive, information technology, and defense sectors.⁵

The Land Use Balance

A balanced tax base is an essential element of effective community governance. A balanced tax base ensures that residential taxes can be kept at reasonable levels without having to sacrifice quality of services.

The City has a reputation of strong, diversified tax base. However, as with many Michigan communities, there are challenges. The

2: Real Estate Knowledge Center

3: Troy Chamber of Commerce: <http://www.troychamber.com/gli/whytroy.htm#office>

4. Troy Chamber of Commerce: <http://www.troychamber.com/gli/whytroy.htm#office>

5. Real Estate Knowledge Center

Automation Alley

Automation Alley is a “regionally-focused technology organization” intended to bring local business, educational institutions, and local units of government together in order to coordinate and promote technology-based businesses in Southeast Michigan.

The organization’s members are located in Genesee County, Livingston County, Macomb County, Monroe County, Oakland County, St. Clair County, Washtenaw County, Wayne County, and the City of Detroit. The mission of the organization is to “...act as a catalyst to enhance the image of Southeast Michigan to help members grow their businesses.”

Automation Alley provides products and services to its members to stimulate and highlight technological excellence and economic diversity. Ultimately, Automation Alley aims to help industry, government, and academia attract, develop and retain the skilled workforce required to be competitive in the new knowledge-based economy.

Automation Alley assists its members through three specific programs:

- International Business Center: the Automation Alley International Business Center helps small and medium size companies become export ready, organizes trade missions and conducts international business attraction services.
- Technology Center: the Automation Alley Technology Center leverages businesses, educators and government to help entrepreneurs bring new technologies to market quicker and more efficiently.
- GLIMA Network: GLIMA, Automation Alley’s association for technology professionals, provides significant learning opportunities for individuals within Michigan’s technology community.

www.automationalley.com

community’s taxable value was \$5.0 billion for fiscal 2020. This compares to \$4.8 billion for fiscal 2019 values and indicates a recovery from the significant declines incurred from the 2008 great recession.

In the 2020-2021 fiscal year, the City issued 2,689 (valued at \$220M) building and construction permits. Troy includes two Fortune 500 company headquarters and 5 North American headquarters.

Despite the challenges faced by the great recession, Troy’s diversified business community, strong residential market and conservative financial management perpetuates a stable economy through regional and national market fluctuations. A wide range of industries in the business community, well maintained neighborhoods, excellent schools, and continued investment into roads and infrastructure all contribute to Troy’s resilience.

Mixed-Use and Tax Base

One of the many advantages of mixed-use development is its ability to help offset residential development’s impact on the tax base by integrating it with commercial development. That is, while new residential development alone would help tilt the land use balance towards residential overall — therefore requiring that residential pay a larger portion of the overall tax obligation — incorporating commercial, office, or even light industrial development can offset that obligation. Depending on the scale, nature, and location of the mixed use project, the non-residential component could be calculated to directly offset any increased burden created by adding the new residential uses. Employed consistently, mixed-use development could ensure that the tax base balance is maintained as new residential units are developed in Troy.

Troy as a Hub for the Regional Economy

In many ways, Troy is a primary center of urban

Oakland County. Over 100,000 people come into Troy every day for work, and thousands more City residents also work in the City. Troy’s workforce is approximately 130,000 people, yet only about fourteen (14%) percent of those workers actually reside in the City.

Troy is an educational hub, with its strong tradition of higher education and exemplary school systems. Troy is also a financial center in Southeast Michigan, as it is home to a large number of international banking and financial institutions. Troy is also home to regionally acclaimed retail and entertainment, and is a central location for shopping in Southeast Michigan. The City must capitalize on these facts and adopt the philosophies contained in Chapter 3 in order to encourage more of its daytime workforce to consider Troy the best place to live.

The DDA as a Center for the Regional Hub

The Downtown Development Authority Area is highly visible when compared to the rest of Troy and when compared to the surrounding area. While Troy may not have a traditional, small-scale downtown, its DDA is a regional center of activity. Within Troy’s Downtown Development Authority boundary, there is approximately 1.1 billion dollars of building market value. The parcels within the DDA comprise only 3 percent of those in the City as a whole, and 1.6 percent of the acreage, but account for about 36 percent of the overall community building market value.

The City of Troy can capitalize on this role by allowing the evolution of the DDA to include increased residential uses and other mixed uses as envisioned in the Big Beaver Corridor Study.

The Study is a forward-thinking blueprint to the continued development of the Corridor, and includes a series of recommendations that will help Troy capture more of the dollars spent by the over 100,000 commuters who enter and leave Troy everyday. Mixed-use projects with integrated residences will allow more people to live and work in Troy. The inclusion of more such properties will open Troy up as a popular place for young professionals who seek new residential styles in close proximity to their places of employment. Often, these individuals have money to spend at Troy retail businesses, and can contribute to the dynamic and vibrant community Troy desires to be.



Oakland County

- Oakland County is Michigan's employment hub with nearly 690,000 workers employed here
- More than 260,000 workers commute into Oakland County everyday
- The county has seen the addition of more than 97,000 jobs since the low-point of the recent recession in the first quarter of 2010
- Oakland County is forecast to add another 49,032 jobs through 2017
- Oakland County has a diverse economy with the top three employment sectors being Professional and Business Services (26%); Trade, Transportation, and Utilities (18%), and Private Education and Health Services (16%)
- The county's unemployment rate has dropped to 4.9% since hitting a high of 15.0% in July 2009; the rate is forecast to drop even further, to 4.3%, by 2017
- With a per capita income of \$57,035, Oakland County has the highest per capita income in the state and the 12th highest nationally among all counties with at least a million residents
- Oakland County is home to more than 1,000 firms from 39 foreign countries
- With nearly \$54 billion in goods exported from the area, the Metro Detroit region ranks 4th nationally for total exports

Sources: U.S. BLS, U.S. Census Bureau, U.S. ITA, Oakland County Economic Outlook

5 – The City in Motion: Local and Regional Mobility

Mobility is changing as rapidly as the economy.

Companies are more mobile than ever, telecommuting is rising as a popular way to work, and e-commerce is taking a share of the conventional retail market, all of which have a dramatic effect on transportation needs. Fuel prices have changed the way consumers choose their homes or even plan their daily errands. Non-motorized transportation is becoming a viable option in many communities, especially when integrated with other forms of transportation to create a true multi-modal system. In that spirit, this Chapter will analyze the existing transportation network within the City of Troy and explore new ways the City can think about transportation.

Previous work by the Vision 2020 Task Force established a series of five preferred futures in the City. These five visions address the need for safer transportation, more transportation options for all age groups, and the desire for a regionally prominent non-motorized transportation network. Vision 2020 also acknowledged the emergence of virtual pathways and their importance as communication supplants transportation in many applications. The final vision of the Mobility Task Force was that Troy will become a “green” city where a series of actions contribute to make Troy an environmentally sustainable place within which to travel.



Stakeholder input also reveals that strong support exists for many of the concepts envisioned by Troy Futures, and specifically for the enhancement of non-motorized transportation options in the form of pathways or bike lanes.

Troy's Existing Transportation Infrastructure

This Section will detail the existing conditions of the transportation infrastructure in Troy and also describe City programs and entities charged with maintaining and developing that infrastructure.

Existing Conditions: Roadways

The primary method of transportation as it stands today in Troy is the private automobile. The City has a comprehensive roadway network, described in the following subsection.

Streets and Roads

The surface street network in the City of Troy is developed and maintained jointly by the City of Troy and the Road Commission for Oakland County (RCOC). Table 5.1, on the following page, demonstrates the major roadway jurisdictions in Troy, from north to south, then west to east.

The complete road network consists of 364 miles of roads, when all local and County roads are included. The City also maintains over 500 miles of sidewalks in Troy.¹

¹: www.troymi.gov

Table 5.1: Roadway Jurisdiction
Source: City of Troy Traffic Engineering

Roadway	Jurisdiction
Interstate 75	State of Michigan
South Blvd.	Road Commission of Oakland County
Square Lake Rd.	City of Troy
Long Lake Rd.	Road Commission of Oakland County
Wattles Rd.	City of Troy
Big Beaver Rd.	Road Commission of Oakland County
Maple Rd.	City of Troy and Road Commission of Oakland County
14 Mile Rd.	Road Commission of Oakland County
Adams Rd.	Road Commission of Oakland County
Coolidge Highway	City of Troy
Crooks Rd.	Road Commission of Oakland County
Livernois Rd.	City of Troy and Road Commission of Oakland County
Rochester Rd.	City of Troy
Stephenson Highway	City of Troy
John R. Rd.	Road Commission of Oakland County
Dequindre Rd.	Road Commission of Oakland County

Roadway Improvement Program

The City has a sophisticated Roadway Improvement Program which forecasts maintenance and enhancement needs for the City’s streets. This program identifies timetables, projected costs and scheduling, and assists the City in obtaining transportation dollars and grant funding for road projects.²

²: City of Troy Traffic Engineering Department

Functional Classification

The National Functional Classification (NFC) System is a planning and identification tool used by most transportation agencies. The classifications are used to group streets and highways into classes according to the character of traffic service they are designed for.

Principal Arterials

These roadways are at the top of the classification hierarchy. The primary function of such roadways is to carry relatively long distance, through-travel movements. Examples include interstates and other freeways as well as state routes between larger cities.

Minor Arterials

Minor arterials include roads connecting intra-urban land uses. These roads tend to accommodate slightly shorter trips than principal arterials.

Major Collectors

Major collectors provide access and mobility within residential, commercial, or industrial use and connect local roads to arterials. Major collectors generally carry more traffic than minor collectors.

Minor Collectors

Minor collectors also provide access amongst varying land uses, but generally have less traffic than Major Collectors.

Local Roads

Local Roads provide access to individual properties and typically have moderate to low speeds. The improvement of local roads typically rates the lowest priority. Most residential streets in Troy are classified as local roads, and are often located in subdivisions.



FAST-TRAC

The City of Troy is a participant in the Road Commission for Oakland County FAST-TRAC (Faster And Safer Travel Through Routing and Advanced Controls) program. The system is a computerized real-time traffic signal timing program employing hardware and software to monitor and adjust traffic signalization in order to constantly optimize signals based on current traffic demands at times when traffic demand exceeds roadway capacity. The City of Troy has participated in the program since 1992 and has grown its reach within the City from 28 signals to over 300 signals.³

Traffic Committee

The City of Troy has a Traffic Committee which consists of seven members appointed to three-year terms. The Committee includes the Police Chief, Fire Chief, and Traffic Engineer as ex-officio members. The Traffic Committee advises the City Manager and City Council with regard to traffic regulations and safety considerations.

Existing Conditions: Highway Access

The City of Troy is bisected by Interstate 75. The Interstate has access to the City at 14 Mile Road, Rochester Road, Big Beaver Road, Crooks Road, and Adams Road. Interstate 75 is over 1775 miles long and extends from southern Florida to Northern Michigan and provides regional access to the City of Detroit, Canada, Northern Oakland County, and beyond.

Existing Conditions: Air Travel

The Oakland/Troy Airport is owned and managed by Oakland County and provides executive airport service for private, corporate, and charter air travel. The Oakland/Troy Airport is located at 2672 Industrial Row and is also used for limited air freight service. Aircraft maintenance and fuel are also available.

The Oakland County International Airport is located in Waterford and is the nation’s 6th busiest general aviation airport. Originally known as Pontiac Municipal Airport, it provides corporate and general aviation service to Oakland County and

³: Road Commission of Oakland County

Metro Detroit and also provides a more advanced ground support network including major repair and full contract maintenance, fueling, catering, and charter services.

The majority of commercial air passengers in Troy utilize the Detroit Wayne County Metropolitan Airport in Romulus, Michigan. The Airport is owned and operated by Wayne County and is managed by The Wayne County Airport Authority. Detroit Wayne County Metropolitan Airport has undergone significant enhancement in recent years, including the construction of a new terminal and runway.

Existing Conditions: Transit

The City of Troy is served by the SMART (Suburban Mobility Authority for Regional Transportation) System. SMART is Southeast Michigan’s bus system, which provides fixed route service over 44 routes and also provides a variety of curb-to-curb services, including Dial-A-Ride and flexible routes, to access otherwise inaccessible locations.

SMART’s primary routes within the City of Troy provide access to Big Beaver Road between Coolidge Road and Livernois Road, all across the City’s south boundary, and north to Auburn Hills via Coolidge Road, Long Lake Road, and Interstate 75.

The SMART system extends throughout Oakland, Wayne, and Macomb Counties, and provides regional service to and from major employment centers in Southeast Michigan, including the City of Detroit. SMART also provides a wide variety of special, charter, private, and remote access services.

Transit Center

As mentioned in Chapter 2, the City developed the Troy Transit Center to provide a central, multi-modal hub primarily for rail and bus service. The Troy Transit Facility will serve the region by strengthening the existing transit options in the area through a centralized facility that will allow users to access intercity rail service, regional bus routes and other modes such as air and taxi services. A bridge over the railway line will provide a barrier-free non-motorized link between the regional bus terminal in Troy with the rail platform in Birmingham. This facility is included as a hub in the Detroit Regional Mass Transit plan (DRMT) and

will serve included as a hub in the Detroit Regional Mass Transit plan (DRMT) and will serve as a catalyst for coordinated regional and mass transit in Southeastern Michigan.

The Future of Mobility in Troy

Mobility needs are continuing to evolve. As mentioned in the opening paragraph of this Chapter, many significant factors are changing the way Americans address transportation. This section will introduce new measures intended to ensure that all people in Troy, regardless of age, remain mobile, that the attributes of the City and region are accessible, and that the transportation infrastructure of Troy contributes to a positive quality of life in the City.

Thoroughfare Plan

The City of Troy Thoroughfare Plan (see map, next page) is incorporated as a part of this Master Plan. The Thoroughfare Plan enables the City to better direct resources for roadway improvement by basing its decisions on the planned right-of-way and other enhancements provided on the Plan. The Thoroughfare Plan also enables the coordination of efforts between various levels of government responsible for the building and improving of roads.

Transit Improvements

On November 8, 2022, the residents of Oakland County approved the Oakland County Public Transportation millage. This voter-approved, 10-year, .95 millage is dedicated to maintaining and expanding public transit services throughout Oakland County. As a result of the transit millage, SMART is planning a new bus route, called the "492 Rochester" Route, which would be a fixed route with service on Rochester Road north from Troy to downtown Rochester and continue west on Walton Blvd through Auburn Hills.

Access Management

Access management is the development of a program intended to ensure that the major arterials, intersections, and freeway systems serving a community or region will operate safely and efficiently while adequately meeting the access needs of the abutting land uses along

the roadway. Implementing access management techniques can help increase roadway capacity, manage congestion, and reduce crashes. In the case of businesses, there are also less obvious benefits such as a reduction in maintenance and other costs by utilizing shared driveways or eliminating entrance and exit points. Increased road frontage and improved aesthetics are also a result of eliminating driveways.⁴

The Big Beaver Corridor Study included an analysis of access management concerns within the Big Beaver Corridor. The Study concludes that while there are many positive attributes with regard to access management in this critical area, there is room for improvement in the future. Specifically, poor spacing between driveways, frequency of driveways, and driveways too close to certain intersections are areas where access issues have a significant effect on traffic management in the Corridor.

Successful access management practices in the Big Beaver Corridor that were noted by the Study include the area surrounding Somerset Collection, where limited, protected driveway “throats” provide access to consolidated areas. This design results in fewer overall driveways and reduces potential conflict between internal circulation and the entering traffic from Big Beaver Road. The Study also identifies several areas throughout the Corridor where consolidated driveways to Big Beaver Road or to other major north-south roads are used to provide access to multiple sites via collector streets or internal shared driveways.

Complete Streets

The Michigan Complete Streets legislation was signed into law in 2010 through two public acts, Public Act 134 and Public Act 135. The Michigan Planning Act was also amended to require the consideration of complete streets in the Master Plan. The legislation defines Complete Streets as “roadways planned, designed, and constructed to provide appropriate access to all legal users... whether by car, truck, transit, assistive device, foot or bicycle.” It gives new responsibilities to local government and county and state transportation agencies to address transportation needs of all

4: Federal Highway Administration

SMART — Suburban Mobility Authority for Regional Transportation

SMART is Southeast Michigan’s bus system. SMART provides fixed route service over 44 routes and also provides a variety of curb-to-curb service including Dial-A-Ride and flexible routes, to access otherwise inaccessible locations.

SMART bus routes provide access to more than 67,000 businesses and 850,000 jobs. Over 9 million people including seniors, students and professionals use SMART to travel to work, school, doctor’s offices and shopping centers annually

SMART serves nearly all of Wayne and Oakland Counties and all of Macomb County.

www.smartbus.org

Thoroughfare Plan



legal users (including pedestrians and bicyclists) in their community Master Plans.

Communities with Complete Streets policies help to ensure that roadways are designed to accommodate all users, not just motorists. Facilities that make a street “complete” depend on existing conditions and the intended users. It’s never a “one-size-fits-all” scenario. Examples include curb ramps, audible or tactile signals for blind pedestrians, longer crossing times, smooth sidewalks, and bike lanes that are free of obstacles.

The Road Commission for Oakland County (RCOC) developed Complete Streets guidelines for use when designing future road improvements and considering the transportation needs of all legal users. The guidelines evaluate issues such as liability, funding, maintenance, connectivity, local involvement, environmental concerns, and specific user needs.

To that end, the City will need to address the following key principles in all planning related to Complete Streets:

1. Consider all legal users — vehicles, bicycles and pedestrians of all ages and abilities — in the discussion of its transportation system.
2. Encompass all modes of transportation.
3. Ensure that the improvements identified in the Plan are appropriate to the context of the community.
4. Identify the means of cooperating with the Road Commission or MDOT when implementing transportation elements of the plan.

Non-Motorized Transportation Plans

The City of Troy has initiated a significant City-led effort to construct and improve trails and pathways in the City. As evidenced by the overwhelming support for trails received during the Parks and Recreation Master Plan development, the Master Plan Survey, and within Troy Vision 2020, the community has expressed a great deal of interest in alternative transportation.

With that in mind, the City of Troy created the Troy Trails and Pathways Committee, a group charged

with developing a world-class trails system in Troy. The Committee was allocated funding for assistance in developing strategies for trails and pathways. The City intends to fund the Parks and Recreation Department for Committee activities in each budget year for the foreseeable future.

The Trails and Pathways Committee determined that there are three main purposes for the development of trails in Troy:

- Interconnectivity between retail, restaurants, public facilities, and other trails
- Recreation
- Improved walkability and an opportunity for non-motorized transportation

In the summer of 2007, the Trails and Pathways Committee developed a series of long term and short term goals. Some of the predominant themes in the long term goals are:

- Provision of scenic trails throughout the City
- Overall safety, security, and sustained funding
- The inclusion of bike lanes, trails, and pathways into road construction projects
- The development of bicycle and pedestrian friendly destinations throughout Troy
- The incorporation of trails and pathway systems into private developments
- The development of community education programs about trails and alternative transportation

As noted in Chapter 3, the responses collected from the Parks and Recreation Plan Survey and the input of the SGRAT suggest that people consider trails and pathways to be more than simple recreational amenities and genuinely consider them valid transportation options that drive property values up and can be seen as an amenity for real estate development.

The Transit Center and Transit-Oriented Development

A central theme of the Master Plan includes the establishment of activity nodes with a connected sense of place, centered on a range of different concepts or themes. These areas would be compact, walkable, and would provide a mix of

Access Management

Basic design principles:

1. Provide a specialized road system; design roadways according to the function they are intended to provide.
2. Limit direct access to major roadways; preserve the traffic function of higher volume roads serving regional thru traffic.
3. Promote intersection hierarchy; transition from one classification of roadway to another.
4. Locate signals to favor through movements; proper placement of signals allows for better coordination of signals, continuous movement of traffic at the desired speed and reduces delays.
5. Preserve the functional areas of intersections and interchanges; the area where motorists respond to the intersection or interchange, decelerate, accelerate, or complete turns.
6. Limit the number of conflict points; collisions and mistakes occur when the driving environment is complex.
7. Separate conflict areas; traffic conflicts can also be reduced by separating conflict areas.
8. Remove turning vehicles from through traffic lanes; when turning vehicles are removed from through traffic lanes, better traffic flow and is maintained, capacity is preserved and safety is improved.
9. Use non-traversable medians to manage left-turn movements; the majority of access-related crashes involve left turns.
10. Provide a supporting street system and circulation system; interconnected street and circulation systems better support alternative forms of transportation.

TRB Access Management Manual, 2003

uses to contribute to an atmosphere of vitality and diversity. The “Villages” throughout the City would each have a unique character and would allow visitors or residents to have access to services, entertainment, and even employment within walking distance, with access to the other nodes, the rest of the City, and areas around the region available by transit.

The “Villaging” concept can be achieved by following the principles of Transit Oriented Development, or TOD. The TOD principles are centered on the basic idea that mixed-use, walkable, compact development surrounding transit stations contributes to the health of the community and helps support the transit itself. The non-profit group Reconnecting America, an organization dedicated to encouraging TOD development, states that a TOD is more than development near transit, it is also development that achieves the following:

- It increases “location efficiency” so people can walk, bike, and take transit
- It boosts overall transit ridership and minimizes the impacts of traffic
- It provides a rich mix of housing, jobs, shopping, and recreation
- It provides a value to the public and private sectors, and for both new and existing residents
- It creates a sense of community and sense of place⁵

In order for TOD to work, there are a number of coordinated efforts that must succeed. First, the City must demonstrate commitment to the provision of transit. The City of Troy has already expressed its support of transit, and the regional SMART system shows that the region is interested in expanding and enhancing its transit capabilities. The Transit Center project constitutes a strong local commitment to the provision of efficient, equitable, and world-class transit options for Troy residents.

A successful TOD strategy must also have the support and leadership of elected officials and investors. This is ultimately expressed by the adoption of policies that coordinate development with transit corridors and facilities. Strategies can

5: Reconnecting America, “Why Transit Oriented Development and Why Now?”
6: http://www.mass.gov/envir/smart_growth_toolkit/pages/mod-tod.html



Complete Streets

Complete Streets provide a number of benefits including, but not limited to:

- Improved safety for all users, including pedestrians, bicyclists, transit riders and drivers;
- Improved human health by encouraging walking and bicycling;
- Decreased car traffic, reducing dependence on gasoline and petroleum products, and improved air quality;
- More transportation options; and
- Fosters livable communities and improved quality of life.

be incentive-based or regulatory and could include the development of station area plans, the adoption of higher density, mixed use zoning, the development of design guidelines for station areas, strong public investment policies, and incentives like the sharing of infrastructure development costs, providing for brownfield remediation, or streamlining the development process for TOD projects.⁶

Virtual Pathways

New advances in telecommunications could have dramatic impacts on transportation in the future, but the actual effects are still uncertain. In particular, the advent of telecommuting will allow a great number of people to work remotely, usually out of their homes or satellite offices. This kind of arrangement was not possible before high speed internet and other technological breakthroughs.

According to data scientists at Ladders, Inc., remote opportunities increased from under 4% of all high paying jobs before the pandemic to about 9% at the end of 2020, and to more than 15% by the end of 2021. They further project that 25% of all jobs in North America will be remote by the end of 2022, and remote opportunities will continue to increase through 2023.⁷

On its face, telecommuting would appear to relieve traffic congestion by taking more drivers off the streets and reducing the number of trips per day. However, in the long term, telecommuting could have the same effect that the emergence of knowledge based businesses has had in that workers will no longer be required to locate near their employers. While many employers locate strategically to secure a solid workforce, there are also firms which exist virtually online. That is, employees work all over the country and contribute via the internet.

Given this phenomenon, communities like Troy may have to rely even more heavily on

the quality of life elements of the City to retain residents even if industry and professional offices succeed in the community. In fact, on a regional scale, telecommuting could result in a greater demand for more remote development and could ultimately contribute to urban sprawl. Without the requirement of proximity to an employer, employees can live wherever they wish.

Impacts of Telecommuting

The Research and Innovative Technology Administration of the Bureau of Transportation Statistics, a department within the United States Department of Transportation, identified a number of key issues with regard to the impact of telecommuting on transportation demand. They include, but are not limited to, the following:

- The actual amount and impact of telecommuting in any particular region will depend strongly on the local transportation environment and travel demand measures.
- The congestion and air quality improvements potentially attainable through telecommuting could be substantially diminished if telecommuters removed from the highways are replaced by the emergence of latent travel demand.
- Telecommuting could stimulate urban sprawl and have other adverse impacts on land use and public transportation.
- Factors which will impact the rate of growth of telecommuting include uncertainty of benefits for employers and the considerable time and effort inherently required to bring about major changes in work styles and ways of doing business.

The City must continue to consider the potential needs of telecommuters in order to combat the potential flight of knowledge economy workers in the City.⁸

7: Source: theladders.com: "Research: Remote Work Now Accounts for Nearly 15% of All High Paying Jobs"
8: Transportation Implications of Telecommuting, Bureau of Transportation Statistics

Transit-oriented development (TOD)

TOD is compact, walkable development centered around transit stations, generally including a mix of uses, such as housing, shopping, employment, and recreational facilities. TOD is designed with transit and pedestrians as high priorities, making it possible for visitors and residents to move around without complete dependence on a car.

Components of TOD include:

- Walkable design with pedestrian as the highest priority
- Train station as prominent feature of town center
- A regional node containing a mixture of uses in close proximity including office, residential, retail, and civic uses
- High density, high-quality development within 10-minute walk circle surrounding train station
- Collector support transit systems including trolleys, streetcars, light rail, and buses, etc
- Designed to include the easy use of bicycles, scooters, and rollerblades as daily support transportation systems
- Reduced and managed parking inside 10-minute walk circle around town center / train station

Massachusetts Bay Transportation Authority, http://www.mbta.com/projects_underway/tod.asp
and <http://www.transitorienteddevelopment.org/index.html>

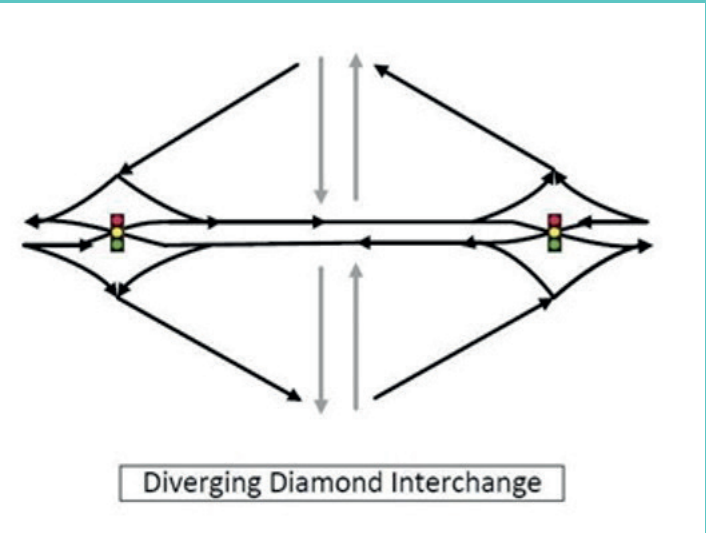
What is a Diverging Diamond Interchange (DDI)?

The Michigan Department of Transportation (MDOT) began construction of the I-75 Modernization Project in 2016. The Project featured a wide range of improvements including widening I-75 and introducing the first High Occupancy Vehicle (HOV) lanes in Michigan, plus replacing numerous bridges and interchanges in Oakland County. Road construction activity in Troy was completed in 2021.

Diverging Diamond Interchanges (DDI's) were constructed in Troy as part of the I-75 Modernization Project. DDI's are currently located along I-75 at Big Beaver (opened in spring 2021) and 14 Mile (opened in fall 2021) in Troy. Both interchanges were constructed as part of the I-75 road widening project completed by MDOT.

A Diverging Diamond Interchange is:

- An innovative interchange design that improves safety and mobility.
- Similar to a conventional diamond interchange, which is the most common in the United States, where the exit/entrance ramps make a diamond shape between the freeway and surface street. Right-hand turns are handled the same at both a DDI and a diamond interchange.
- Different in how it handles left turns, since:
 - The intersections with the freeway ramps smoothly move traffic on the surface street from the right side of the roadway to the left side of the roadway as the road crosses the freeway.
 - Traffic is on the left-hand side of the roadway between the signals at ramp intersections, all left turns occur at the entrance/exit ramps without having to cross opposing traffic.
- Road geometry, signs, and pavement markings working together to make driving through the DDI very simple.



What are the benefits of DDI's?

DDI's help facilitate safer movement for vehicles, pedestrians, and cyclists while increasing throughput.

Safety Benefits:

- Reduces conflict points between vehicles and non-motorists by nearly 50 percent.
- Eliminates many of the most severe crashes, which happen at right-angles.
- Increases visibility for drivers turning.
- Reduces potential of people driving the wrong way on entry ramps.
- Separates non-motorized users (bikes and pedestrians) by routing them through the median or along the sides of the roadway.
- Simplifies crosswalks and involves crossing fewer lanes at a time.

Operational Benefits

- Provides a simple two-phase signal design with shorter cycle lengths (total time for the traffic signal to give a green light for ramp traffic and a green light for the surface street traffic).
- Allows simple left and right turns from all directions.
- Increases the number of left-turning vehicles without the need for additional lanes.
- There is more space between the signalized intersections at the ramps and one less signal.

Cost-Effective Solution

- Reduces the construction cost compared to other interchange forms.
- Requires fewer lanes, and therefore, existing bridges and right-of-way can be utilized.
- Utilizes a smaller project footprint, which means fewer impacts to adjacent areas.

Source: Michigan Department of Transportation (Modernize75.com)



TPL
troy public library

6 – Infrastructure: The Assets & Care of the City

A critical component to Troy's quality of life is the quality of its municipal services.

Excellent water, efficient storm and sanitary sewer facilities, and well-maintained roads are elements that have provided the foundation for Troy's success. For a community of Troy's population and considerable size, providing these services is a vast undertaking.

Infrastructure, such as water and sewer lines, plays a significant role in what can be developed where and must be planned in concert with land use to ensure that the City's capacity matches the City's vision for itself. In other words, planning for highly intensive uses is fruitless if the municipal services in the area are unable to support those uses. The converse is also true; planning for low-density uses in an area where desirable land has ready access to excellent sewer and water service is not practical. Fortunately for Troy, the City has a comprehensive system that allows a great deal of flexibility.

With this in mind, this Chapter will describe significant opportunities and issues related to physical infrastructure and discuss the City's efforts to maintain them. Integral to the discussion of infrastructure is adherence to three key principles: investment, coordination, and innovation. The investment portion of this Chapter will provide an overview of the scope of the City's services and briefly describe how services are currently provided. Coordination will emphasize the importance of planning for infrastructure improvements and address the relationship between land use development and infrastructure. The coordination section will also describe how the City can play a role in regional smart growth based on the strength of its infrastructure. The innovation section will identify and reference concepts to improve current practices with sustainability in mind, and will describe regional initiatives to improve water quality and stormwater management. This Chapter will focus only on the physical assets of the City, and will not discuss the City's public services, such as fire and police protection.

Investment

The City of Troy prides itself on providing the highest quality municipal services. In partnership with the Detroit Water and Sewerage Department (DWSD), the Michigan Department of Environmental Quality (EGLE), and the Oakland County Drain Commission, residents and businesses in Troy enjoy reliable, affordable municipal services.

Water and sanitary sewer service in the City are managed by the City's Water and Sewer Division within the Department of Public Works. The Division is responsible for ensuring that the quality of the City's water supply exceeds expectations and that water is always available and sufficient to fight fires.

Troy is one of 126 customer communities who work with DWSD for regional water service. In Troy, there are 550 miles of water main, more than 6,100 fire hydrants, and over 29,000 water meters. Troy residents and businesses use more than 422 MCF of water annually.¹

¹: 2022 City of Troy

“A civilization’s rise and fall is linked to its ability to feed and shelter its people and defend itself. These capabilities depend on infrastructure — the underlying, often hidden foundation of a society’s wealth and quality of life. A society that neglects its infrastructure loses the ability to transport people and food, provide clean air and water, control disease, and conduct commerce.”

United States National Science Foundation, 1995



The Water and Sewer Division is also responsible for monitoring the discharge of wastewater to the Detroit Water and Sewerage Department (DWSD) waste treatment facility.

Stormwater in the City of Troy is managed in partnership with the Oakland County Drain Commission. The City’s Streets and Storm Drains Division investigates residential stormwater issues and maintains the City’s stormwater drainage as regulated by Oakland County Storm Water Permit and the EGLE. In addition to the hundreds of miles of water mains in the City, there are also many hundreds of miles of storm drains, which empty into 134 detention basins and the City’s 6 lakes.²

The City of Troy falls within two watersheds. The northwest quarter of the City lies within the Rouge River Watershed, specifically, it is entirely within the Main 1-2 Subwatershed of the Rouge River. The remainder of the City is located within the Red Run Subwatershed of the Clinton River Watershed. The City is served by a complex and extensive network of County Drains and many are enclosed. Major open drains in the City include Sprague Ditch, Sturgis Ditch, Big Beaver Creek, and Gibson Drain.

The Streets and Storm Drains Division is responsible for a network of 370 miles of roads and 520 miles of sidewalks, as well as traffic control devices and signs. Troy is a community that is very tightly integrated with its surrounding communities and, as such, is home to many major regional roads and highways. Many of the City’s major thoroughfares are under the jurisdiction of other agencies, as was demonstrated in Chapter 5.

2: 2007/8 Streets and Drains Budget

Coordination

Management of infrastructure assets must include coordination between jurisdictions. Just as with its natural systems, Troy’s infrastructure is largely part of a regional joint effort. Coordination also refers to that between departments and between boards and commissions within the City’s administration itself.

Troy is a leader in many areas within the region. The City is a center of commerce and is second only to the City of Detroit in the State of Michigan in terms of total property valuation. Consequently, relative to other communities in the area, the City has a low millage rate and excellent property values. This results in a financially stable City prepared to maintain its infrastructure at a very high level.³

Regional Smart Growth Development Patterns and Infrastructure Improvements

Given the high quality of Troy’s sanitary sewer, water, and stormwater infrastructure, Troy is able to continue to absorb new development in selected areas. This situation makes Troy unique to other regional communities that suffer from aging infrastructure, facilities already at their maximum capacity, and insufficient finances to update the systems without relying on outside assistance. Therefore, Troy can serve a larger smart growth purpose that extends beyond its own borders in that it can accept a larger regional share of new development than outlying areas in the region.

A national study conducted by the United States Department of Commerce Economic Development Administration (USEDA) showed conclusively that money spent updating or building new urban water and sewer facilities yielded much greater economic benefits than money spent on new systems in largely rural areas. Although construction costs for infrastructure projects in urban locations was slightly higher (1.3 times higher) than those in rural areas, the study concluded that the improvements in urban areas allowed new businesses to create 1.9 times as many

3: <http://www.troychamber.com/gli/whytroy.htm>

new, permanent jobs than those in rural areas. Furthermore, the urban improvements were linked to 2.8 times as much private investment as rural areas realized, and added 2.9 times as much to the tax base as similar improvements in rural areas.^{4,5}

With this in mind, it is plain to see that investment in infrastructure improvements in already established communities results in significant economic and smart growth benefits to the region as a whole. Tenet nine of the Ten Tenets of Smart Growth challenges communities to “Strengthen and direct development towards existing communities.” Given the quality of its infrastructure, Troy is in an excellent position to accommodate and absorb new development. This philosophy towards Troy’s position in the regional growth pattern complements findings of the Big Beaver Corridor Study and Troy Vision 2020 to be both strategic and selective regarding growth.

In other words, by accepting a degree of new development and redevelopment, Troy can use its strong position in terms of infrastructure capacity to accommodate a significant portion of the region’s growth. Consequently, Troy can help alleviate pressure on outlying areas.

Coordination Between Land Use Planning & Capital Improvements

Troy’s capital improvement planning is largely done as part of the City’s budgeting process. As part of the Capital Improvements Plan process, the City forecasts needs and plans projects 5 years in advance. Capital improvement planning done as part of budgeting includes planning for roadway, drain, sewer, sidewalk, and water main maintenance and improvements.

In the next 5 years, the City anticipates investing more than 118 million dollars into the continued improvement of its infrastructure.

As noted previously, it is critical that areas planned for additional development be coordinated with capital improvement planning to ensure that City facilities can accommodate the vision for that specific area. Conversely, the City should be aware that spending on infrastructure improvements in some areas may not be a priority, given the recommendations of this Master Plan.

4: United States Department of Commerce Economic Development Administration, “Public Works Program: Performance Evaluation”
5: Bagli, Fagiri, “Economic Impact of Water/Sewer Facilities on Rural and Urban Communities,” Rural America Vol. 17, Issue 4

Innovation

The City has an opportunity to encourage and practice innovative infrastructure design and management, as well as encourage practices that help protect water supplies and reduce the stress on stormwater management, sanitary sewer, and water services. The primary area where the City of Troy can have an immediate impact with regard to environmental sustainability as it relates to infrastructure is stormwater management.

Low Impact Development

Later in this Master Plan, Chapter 7 will include Low Impact Development (LID) in its discussion of environmental sustainability. LID represents design techniques that manage rainfall at the source using uniformly distributed, decentralized techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source.

The primary concept behind LID is that stormwater runoff must be treated as a resource, rather than a waste product to be eliminated as efficiently as possible. Irrigation is perhaps the most obvious use for collected stormwater, but LID includes far more potential techniques for maximizing the potential of runoff. LID techniques generally stress infiltration rather than detention and reduce the dependency on central stormwater systems. By allowing rainwater to infiltrate on site, there are many environmental benefits and often cost savings which result in a reduced need for underground systems. Innovation in stormwater management must be encouraged in both commercial and residential development.

Specific LID techniques include, but are not limited to, the following:

- Use permeable pavers for emergency stopping areas, crosswalks, sidewalks, road shoulders, on-street parking areas, vehicle crossovers, and low-traffic roads.
- Disconnect the downspouts from roofs and direct the flow to permeable pavement or other vegetated infiltration and filtration practices.
- Use multi-functional open drainage systems in lieu of more conventional curb-and-gutter systems.
- Use green roofs for runoff reduction, energy savings, improved air quality, and enhanced aesthetics.

- Landscape with a rain garden to provide on-lot detention, filtering of rainwater, groundwater recharge, and to reduce runoff volume.
- Redirect the flow from gutters and downspouts to a rain garden or retain rooftop runoff in a rain barrel for later on-lot use in lawn and garden irrigation.
- Combine rain gardens with grassed swales to replace a curb-and-gutter system.
- When parking demands do not dictate, build narrower residential streets or restrict parking and sidewalk areas to one side of the road rather than both. Replace the space gained with pervious areas, bioretention (planted areas designed to retain and filter runoff), or vegetated channels.
- Use a linear bioretention cell in the highway median to treat runoff.⁶

Water Quality

The limitation of contaminants which ultimately enter the water system is the best way to ensure that water supplies will remain clean and viable. This is an area where SEMCOG has invested a great deal of energy locally and which the City of Troy can play a large role. SEMCOG’s “Seven simple steps to clean water” is an example of a successful approach to limiting water supply contamination at its source. This program is designed to educate individuals about basic techniques that they can adopt in order to help limit pollution. They include:

- 1: Help keep pollution out of storm drains: Sweep, rather than hose off your driveway, and keep storm drains clean.
- 2: Fertilize sparingly and carefully: Use fertilizer with low or no phosphorus, allow your lawn to remain taller, and prevent fertilizer from getting on the driveway or other impermeable surfaces, where it is likely to be swept up in runoff.
- 3: Carefully store and dispose of household cleaners, chemicals, and oil: Practice responsible disposal of potential pollutants.

6: Low Impact Development Center, www.lid-stormwater.net

- 4: Clean up after your pet: Practice appropriate pet waste disposal by using refuse containers or by flushing material down the toilet.
- 5: Practice good car care: Wash your car on the grass or go to a car wash facility, where dirty water is treated before it is allowed to leave the site.
- 6: Choose earth friendly landscaping: Choose native plants, use mulch around the base of trees to retain water, and be conservative with watering and irrigation.
- 7: Save water: Collect rainwater for irrigation or use less water generally for lawns and other plants.⁷

7: www.semCog.org/OursToProtect

7 – Green City: Responsibility to Natural & Energy Resources

Every level of government bears responsibility for the protection of the natural environment.

The United States Government sets policy and protects national resources, like the national parks and other important wildlife refuges. The State of Michigan regulates wetlands and sets uniform statewide policies for the protection of critical Michigan resources. The State also empowers local units of government to establish laws to protect those resources in their own front yards. Local units of government are the front line of environmental protection and natural resource conservation. This Chapter will establish the philosophy of environmental sustainability in Troy, framed around a series of policies designed to make the most of the tools available to the City.

Troy is characterized as a vibrant and engaging place to live and work, where environmental and ecological resources play a role in creating a community that will draw the best workforce in the region. Troy can be an environmental leader, demonstrating to others how to grow while embracing its natural resources and making wise use of energy resources. As discussed in Chapter 2, sustainable cities integrate the concepts of sustainability into policies covering social, economic, and environmental topics. Troy and its citizens can use the community's environmental resources responsibly without compromising the ability of tomorrow's residents to meet their needs.

Preservation and Enhancement of Existing Natural Features

Economic growth and environmental preservation are elements that are commonly perceived as two forces that must be at odds. However, environmental considerations have the ability to enhance economic development. Efficiency reduces the cost of products and services, and preservation of natural features increases the value of developed properties.

The City of Troy is nearly built out. However, the City manages over 900 acres of parkland. Some of the existing park land is used for active recreation areas, and some is maintained as natural areas for passive recreation and general open space. The City's current Parks and Recreation Master Plan identifies these City-owned properties and provides a brief description of each.

Development and Natural Feature Preservation

The value of home sites adjacent to open space, parks, wetlands, greenbelts and other green amenities is greater, all things being equal, to similar sites not adjacent to such amenities. A report published by the Metropolitan Council, a regional planning agency for the Twin Cities of Minneapolis and St. Paul and surrounding seven-county metropolitan area, showed a conclusive positive impact of open space on residential property values.¹

In addition, preservation of the existing natural systems can reduce infrastructure costs. For example, the preservation of woodlands and open space reduces the amount of stormwater infrastructure necessary to accommodate the site's runoff. Clustering of home sites is another preservation technique that reduces costs in that the developer does not need to unnecessarily extend underground infrastructure to accommodate a more sprawling site layout. The reduction of infrastructure costs results in a greater return on investment.

¹: <http://www.metrocouncil.org/Directions/development/dev2006/OpenSpaceStudyNov06.htm>

Low Impact Development

Low Impact Development (LID) represents a different way of thinking about stormwater. It is a series of design techniques that manage rainfall at the source using uniformly distributed, decentralized techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source.

Under LID, stormwater runoff is not a waste product, but a resource. For instance, LID techniques such as cisterns and rain barrels use collected rain water for irrigation, or as gray water for toilet flushing. LID also advances the idea that almost all elements of a site plan (open space and built features) can be used for stormwater control. For instance, the parking lot can be made out of porous pavement. When stormwater drains through the pavement, it recharges the groundwater. Similarly, rooftops can be used as planting areas, soaking up rainwater and reducing runoff.

LID techniques often cost less to construct than traditional closed designs. Case studies conducted by the Low Impact Development Center show a 25-30 percent reduction in site development costs over traditional techniques. One reason for the lower costs is that LID techniques keep stormwater on top of the ground, rather than building the infrastructure underground to handle stormwater. Another reason is that small infiltration areas are generally less expensive to construct than one large detention area, particularly if the site is designed to limit the amount of stormwater generated by impervious surfaces.

Low Impact Development Center, www.lowimpactdevelopment.org

Encouraging natural feature preservation can be accomplished through ordinance regulations or guidelines that ensure the least amount of impact on a site so that it continues to function at its pre-development level. This can be done by limiting disturbance, imitating natural systems with built replacements, and mitigating the reduction in vegetation and infiltration when the land is covered with impervious surfaces. These design techniques are called Low Impact Development (LID) techniques. While these techniques generally concentrate on stormwater management, they also help preserve existing natural features, like woodlands, that contribute more to the community than just absorbing stormwater runoff. Troy does not have wetland or woodland protection ordinances in place.

The City of Troy must engage its neighbors to preserve features that cross more than one jurisdiction, such as a wetland system or watershed. Natural features provide significantly more benefits if they are maintained in larger units, such as a complex system of woodlands, wetlands, and rivers or streams. These larger, connected systems are more successful at maintaining their ecological integrity. The less fragmented natural features are, the higher quality they remain.

Urban Redevelopment

Troy Futures suggested several development methods that will influence natural feature preservation within the City. Villaging, for instance, will act to cluster commercial and cultural services in higher density locations within the community. This, in turn, will allow the few remaining greenfields, or undeveloped areas, to be less densely developed, enhancing the possibility of natural feature preservation on these sites.

For the remaining undeveloped parcels, emphasis should be placed on preserving any existing natural features to the greatest extent possible, clustering in already cleared areas of each site, and ensuring that open spaces are contiguous with adjoining open spaces.

Redevelopment of obsolete or underutilized properties provides opportunities to restore or

recreate vegetated communities that enhance the site’s ecological value. While not completely natural systems, tree plantings mimic woodlands or native wildflowers plantings that simulate a meadow can be aesthetically pleasing and provide environmental benefits. For instance, one LID technique is to plant deep rooted plants, such as tall grasses typically found in a prairie. The root systems of these grasses grow up to 8 feet deep, and as they grow and die, they provide tiny waterways through the soil that improves infiltration of stormwater runoff. While these techniques would provide benefits in any situation, they could be especially effective in the case of a redevelopment property.

Brownfield Redevelopment Authority

The City Council established the Brownfield Redevelopment Authority in 1999, expressing Troy’s interest in redeveloping brownfield and other idle or underutilized sites in the City. The Brownfield Redevelopment Authority can offer financial incentives for cleanup and redevelopment or for demolition of functionally obsolete buildings in the form of Tax Increment Financing (TIF) reimbursements.

TIF Reimbursement: The Brownfield Authority may capture the incremental real and personal property tax revenues generated by a developer’s project to pay for eligible environmental clean up and contamination prevention incurred on the property.

Single Business Tax Credit: A tax credit of 10 percent up to ten million dollars is available for an owner or operator of a facility for capital and equipment expenditures for redevelopment.

The Troy Brownfield Redevelopment Authority has assisted in the redevelopment of sites throughout the community. Its first project was the redevelopment of the former Ford New Holland Tractor Plant at the southwest corner of Maple Road and Coolidge Highway. The site, which sat underutilized for nearly a decade because of liability and other issues concerning contamination, is now know as Midtown Square, a \$200 million mixed use development boasting 600,000 square feet of retail space and 285 residential units.

Benefits of Brownfield Redevelopment

There are obvious environmental benefits to cleaning up brownfield sites in a community. These actions create a cleaner and safer environment, reducing risks to public health, safety and welfare, and other benefits:

- Redeveloping a brownfield site transforms property that is most likely not generating substantial tax revenues to a property that contributes to the local tax base, eliminating an opportunity cost. Also, by not redeveloping brownfields, they could potentially have a depressing effect on property values, leading to further tax revenue loss.
- Idle properties that were once viable businesses do not contribute to the job base. Turning them over for new, productive uses creates new job opportunities.
- It is likely that brownfield sites have the infrastructure in place to serve a new land use. This can represent a substantial savings by a community or developer compared to building on a green field site.
- Re-using property in urban areas decreases development pressure in green fields, which in turn, increases the opportunity to preserve open space and combat urban sprawl.

Brownfield Redevelopment Guide; Consumers Renaissance Development Corporation; 1998.

Redevelopment Incentives

Ordinance regulations are the first line of environmental stewardship in many communities. However, there are other ways of encouraging sustainable development. The following incentive-based techniques encourage sustainable development:

- Fee adjustments for infill housing: Riverside, California waives certain fees, such as grading permit fees and water distribution fees, if the property being redeveloped meets the definition of residential infill.²
- Smart Growth Zone: Developments in Smart Growth Zones in the City of Austin Texas are charged reduced fees for zoning, subdivision, and site plan applications, and for water and wastewater capital recovery fees.³
- Primary employer incentives: Incentives such as application fee waivers, utility and transportation improvements, streetscape improvements, and expedited processing of development applications are offered by the City of Austin, Texas to guide large employers to the Desired Development Zone. These types of employers generate significant levels of growth, both within their specific project and in the surrounding area.⁴
- Built Green Program: In partnership with local counties and builders, the City of Seattle promotes best known practices in energy, air quality, stormwater management, and water efficiency to give homeowners added value and home builders a competitive advantage. To stimulate growth in Built Green-certified homes, the City launched a design competition, and highlighted winners on their website.⁵
- Green Review Track: King County, Washington, offers a dedicated “Green Track” for green buildings and projects that incorporate Low Impact Development techniques. Proposals on this track are assigned to a green team, composed of County staff with expertise in green development practices. Staff

provides assistance to customers on sustainable development techniques including green roofs, alternative energy systems (solar, wind, geothermal), rain water collection, resource efficient framing, recycled materials, and Low Impact Development site design. Green developments follow a customized review schedule with a single point of contact.⁶

Transportation

Methods to reduce the dependence on the automobile were introduced in Chapter 5. Improving opportunities for non-motorized transportation, transit-oriented development, mixed-use, and technological pathways will contribute to the changing mobility needs of Troy.

Green Building

There is an emerging, global trend to encourage the development of environmentally sustainable buildings and neighborhoods. Commonly referred to as “green building,” this trend has been fueled by numerous organizations who have worked to develop standards around which architects and builders can design their projects. The most prominent of these groups is the U.S. Green Building Council’s Leadership in Energy and Environmental Design (LEED) program.

The LEED rating system was originally designed for individual buildings. LEED Certification can be achieved through the use of green techniques applied to new construction or renovations to existing buildings, including historic structures. Over 4,000 buildings have either already been LEED certified or are registered and going through the certification process in the U.S. Michigan has almost 200 LEED-certified buildings including office buildings, university buildings, churches, nature centers and private residences.

Many green buildings across the country have been completed because the owner was self-motivated, based on the benefits those buildings enjoy. However, communities can also develop incentives to encourage green buildings and green site design techniques. Incentives could include property tax credits, tax abatement and tax exemptions, density

bonuses, expedited permit review, and waiving of permit fees.

In Troy, several notable green buildings have gained regional notoriety. The Kresge Foundation, highlighted on this page, is a model of green development located on Big Beaver Road. Walsh College is also adopting a green building philosophy. The College’s 15 million dollar expansion at the Troy Campus will seek LEED Certification by choosing recycled or environmentally sensitive material, incorporating rain water harvesting for irrigation and other uses, and using design techniques to capitalize on solar energy for heating.

Troy is also home to the first previously existing building in Michigan to earn LEED Certification. Bank of America’s facility in Troy earned gold status due to its use of many environmentally-friendly technologies. The Bank of America facility has the second largest green roof in Michigan, over 53,000 square feet in area. The building also uses heat generated from the computer servers to warm the building, heat water, and melt snow. Other features include the use of underground well to provide water to the decorative fountain, whose wastewater is used to irrigate the landscaping and pull heat from the building during hotter periods.

In addition to LEED, the National Association of Homebuilders have developed their own, voluntary certification program for residential construction, which the Michigan Association of Homebuilders have adopted as part of their program known as GreenBuilt. GreenBuilt is a program intended to allow Michigan homebuilders to create more sustainable home developments that are energy efficient and more respectful of natural resources. The GreenBuilt program requires that all members who elect to secure GreenBuilt status attend a 3-hour GreenBuilt training session. GreenBuilt also provides professional assistance to members.⁷

In Troy, the Cedar Pines of Troy project is the only entirely GreenBuilt project in southeast Michigan. This project includes homes that are designed to use 52 percent less electricity, 54 percent less natural gas, and 46 percent less water. The development also features homes with dual flush toilets, rain water harvesting, low flow faucets, renewable flooring

materials, no VOC Paints, trim made from sustainable forests and plantations, high efficiency dual stage furnaces, high efficiency water heaters, and photovoltaic solar cells.⁸

Other green development techniques are reflected in projects such as Caswell Town Center, which incorporated innovative stormwater management techniques.

Urban Form and Neighborhood Design

Neighborhoods can be designed to reduce energy consumption by providing opportunities for shorter vehicle trips and the use of alternative forms of transportation. Some techniques include the locating of residential units near neighborhood shops and existing utilities, the provision of bicycle and transit facilities, and proximity to schools and parks.

The U.S. Green Building Council is piloting a program for energy-efficient neighborhoods. The LEED Neighborhood Development Pilot Program includes many site design techniques that preserve natural features, habitat, and open space, such as:⁹

- Limit parking to encourage people to use alternative methods of transportation, like walking or bicycling.
- Promote local food production to minimize the impacts of transporting food long distances. Farmer’s markets allow such goods to be sold locally.
- Use energy saving technology for infrastructure needs such as street lights, water, and waste water pumps.
- Capture and use stormwater runoff and use in place of potable water for irrigation and toilet flushing.
- Use recycled concrete and asphalt for roadways and parking lots.

8: Wake-Pratt Construction Company
9: Pilot Version, LEED for Neighborhood Development Rating System, U.S. Green Building Council

2: www.riversideca.gov/planning/infill.htm
3&4: www.ci.austin.tx.us/smartgrowth/sgincentives.htm
5: www.seattle.gov/dpd/GreenBuilding/OurProgram/DesignToolsStrategies/BuiltGreen/default.asp

6: <http://www.metrokc.gov/dnrp/swd/greenbuilding/>

7: www.greenbuiltmichigan.org

Sustainable Design Projects (SDP)

Troy’s SDP program promotes environmentally sustainable and energy efficient design and development practices for the construction of new and the rehabilitation of existing buildings and sites within the City. It is a voluntary option that encourages property owners to incorporate features designed to minimize the adverse impacts on the environment.

There are numerous categories from which the applicant can seek relief, including lot coverage and front yard parking. Each category has specific design measures that must be met to qualify as a Sustainable Design Project. The design measures offset the effects of granting relief. For example, to offset the relief granted to exceed lot coverage, the applicant could provide measures related to stormwater quality control, stormwater quantity control, and reduction of the heat island effect.

An example of an approved and constructed SDP project is 966 Livernois. The applicant, O’Brien Construction Co. Inc., sought to construct four front yard parking spaces in the IB Industrial and Business Zoning District. To offset the effects of the impervious parking spaces, the applicant provided the following improvements:

- Rain garden and swale
- Underground storage tank to capture rainwater runoff from roof
- Runoff from garage captured in rainbarrels
- Exterior lights on timers

The applicant met the three Prerequisite Measures (Stormwater Quality and Quantity and Light Pollution) and one Qualifying Measure (Water Efficient Landscaping).

City Demonstration Projects

Many of the ideas presented in this chapter for environmental preservation and energy efficiency are long-term techniques. However, there are many initiatives the City can accomplish relatively quickly to communicate its commitment to the environment. These “next steps” will engage citizens and inspire community members to think about the environmental issues Troy is facing.

What is LEED?

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings. LEED gives building owners and operators the tools they need to have an immediate and measurable impact on their buildings’ performance. LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. LEED provides a roadmap for measuring and documenting success for every building type and phase of a building lifecycle.

United States Green Building Council, www.usgbc.org



Hands-On Projects

One way to foster a bond between residents and a particular natural feature, such as a wetland or stream, is to get them involved in a hands-on restoration or clean-up project on City-owned properties. Once people have been introduced to the plants in the ecosystem, and the function that those plants play, they have a greater understanding and appreciation for that place. Hands-on projects give residents a chance to learn about the ecosystems in the City. Once the project is complete, interpretive signage should be installed to describe the “why,” “what,” and “who” of the project.

Maintenance of Parks and Recreation Facilities

Another relatively short-term effort is to ensure that the City staff maintain parks and natural areas in an environmentally friendly way. New alternatives for maintaining turf, ball fields, roadways, and other elements of City parks are now available. Better practices ensure that facility maintenance does not negatively impact adjacent wetlands or other natural features. A regular evaluation of how City activities are done should be considered in light of natural feature preservation objectives. If practices do change, interpretive signage can be used to inform the public of changes to a park’s visual appearance.

Planting Trees

Climate change and stormwater management are two important environmental topics. One common thread between these two is the impact trees have on each. Trees sequester a large amount of carbon. For example, a 2.5 acre Oak woodland can sequester about 3 tons of carbon in one year. Trees also intercept and absorb a large amount of stormwater. A typical woodland can absorb 20,000 gallons of rain in one hour through holding water on its leaves and trunk, absorption into the tree, and absorption into the deep leaf litter on the woodland floor.

The City can lead community planting programs and encourage additional trees with incentive techniques in the Zoning Ordinance.

Planting trees can be an annual community event that is also relatively inexpensive. The City is now working with the Alliance of Rouge Communities (ARC) to conduct a City-wide tree canopy survey using City Green software to quantify and evaluate the City’s urban forest.



Kresge Foundation

In 2006, the Kresge Foundation has completed renovations to its headquarters in Troy in 2006 and 2015, which include the addition of a new a series of environmentally friendly site improvements. The project also restored 19th Century farm buildings on the 3 acre site. The use of green roof materials, geothermal wells, and recycled materials help the facility function efficiently. The Kresge Foundation is one of the top 20 largest private foundations in the U.S. The Kresge Foundation advances its mission to promote human progress by expanding opportunity for people with low incomes in America's cities. A staff of over 100 employees work to expand opportunities in America’s cities for people with low incomes through grantmaking and social investing nationally in arts and culture, education, environment, health, human services and placed-based work in Detroit, Memphis, New Orleans and other parts of the country. (see <https://kresge.org/about-us/careers/>) .

Source: www.worldarchitecturenews.com

LEED Across Michigan

Michigan is a national leader in the area of green building. As of 2013 there are 410 LEED certified projects in Michigan. West Michigan is especially successful in its encouragement of green building. In fact, the City of Grand Rapids has been recognized by the U.S. Green Building Council as a national award-winner in green building. Grand Rapids has more square footage per capita of LEED certified buildings than any other city in the United States. The City itself lead the way with the development of its own new LEED certified Water and Environmental Services Facility, which uses 23 percent less gas and 35 percent less water than similar buildings of its use and size.

Private industry in Grand Rapids has also taken the green building initiative seriously. Steelcase and Herman Miller have voluntarily followed environmentally safe procedures for manufacture of furniture and Crystal Flash, a gasoline station chain, has begun offering biodiesel on a more widespread scale.

These and other Michigan companies, including large corporations like Ford, have begun to realize the benefits to green building in more ways than one. Not only do these companies realize actual savings in terms of building maintenance and energy use, but they also contribute to their public image by encouraging environmental stewardship.

Michigan Business Report; Michigan Economic Development Corporation, Volume 5, Issue 2, 2007



Waste Reduction

While the City has an extensive recycling program for its residents, the City could also institute a waste reduction program for its own operations. Waste reduction makes good business sense because it saves money through reduced purchasing and waste disposal costs. The US Environmental Protection Agency has a program called “WasteWise” that provides free technical assistance to help develop, implement, and measure waste reduction activities.

Adaptive Reuse

The economic impacts of the Covid-19 Pandemic, particularly the office market, continue to play out over time. Many zoning districts in Troy permit flexibility in the use of space, including the repurposing of offices into residential buildings. In October, 2022, the Planning Commission granted Preliminary Site Plan Approval to Forum Flats, a 200-unit multi-family development on Kirts Boulevard. This project included the conversion of a vacant 3-story office into 90 apartments. In addition, the development included two new 4-story, 55-unit apartments. This project had the effect of replacing underperforming office space while adding 200 new housing units to the market. This adaptability is important as Troy continues to evolve.

The City should also continue to identify opportunities for adaptive reuse of obsolete properties within its own facilities network. A good example of City-initiated adaptive reuse is the creation of the Sanctuary lakes Golf Course from a former landfill site. This 18-hole golf course is a critically acclaimed asset to the City and makes use of challenging property to create a significant asset for the community.

Electric Vehicles and EV Charging Stations

Electric vehicles offer an alternative to gasoline and diesel-powered vehicles. The benefits of electric vehicles and EV infrastructure include reduced air pollution and noise and reduced expenditures on gasoline. As the automobile industry ramps up efforts to produce more electric vehicles, EV infrastructure must also expand.

The Southeast Michigan EV Resource Kit and Planning Hub gives local communities and stakeholders quick access to key data and background information, the current status of

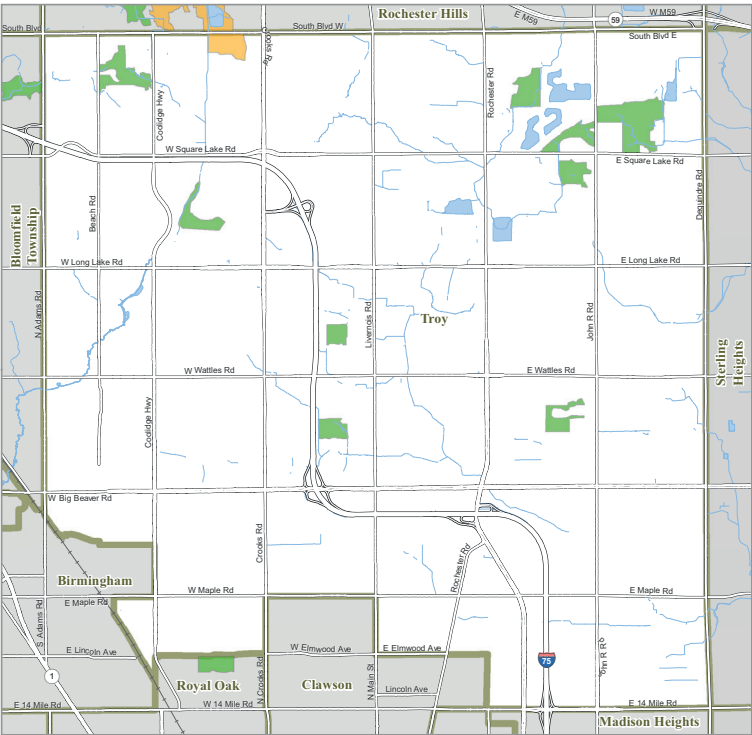
Natural Features Inventory

The Michigan Natural Features Inventory has been documenting and tracking the location and condition of Michigan’s rare species and habitats for more than 40 years. The program is now run by the Michigan State University Extension since 2000.

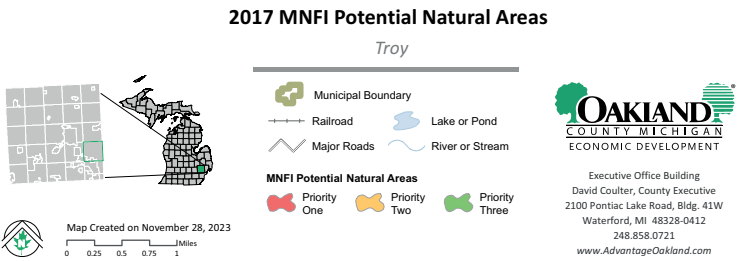
In 2017, MNFI prepared an update for Oakland County. Portions of Troy have been designated as Priority II and Priority III areas. Most of the areas in the MNFI data are located along waterways or related to floodplains that are part of the Gibson Drain, Lane Drain, or Ferry Drain systems that are tributaries to the Clinton River. Additionally other sites are located along the River Rouge watershed tributaries and floodplains within the city.

The MNFI and Oakland County examined each natural area based upon specific scaled criteria to prioritize sites. Criteria included size, stream corridor, landscape connectivity, restorability of surrounding lands, vegetation quality, parcel fragmentation, and number of known rare species and natural communities. Based on scored criteria, sites were ranked high (priority I), medium (II), and low (III) for priority protection status.

For more information please visit:
<https://www.oakgov.com/home/showpublisheddocument/494/638027377124100000>



The information provided herewith has been compiled from recorded deeds, plats, tax maps, surveys and other public records. It is not a legally recorded map or survey and is not intended to be used as one. Users should consult the information sources mentioned above when questions arise.



infrastructure and deployment, funding opportunities, and local case studies and best practices. The EV Hub will be updated and expanded as needed to address emerging issues and respond to changes in technology, the market, grant programs, laws and regulations, state and federal Policies, and requests and recommendations from communities, organizations, educational institutions, and other stakeholders.

The Hub maintains real time data related to publicly accessible charging locations by community. As of November 23, 2022, Troy had the most EV charging stations in Oakland County with 21. Zoning is not a barrier for the construction of EV charging stations in Troy. EV charging stations are permitted by right on any property, subject to review and approval of appropriate permits including electrical permit. (Source: SEMCOG, Electric Vehicle Resource Kit & Planning Hub).

8 – People: Planning a Community for All Ages & Stages

Since 2008, Troy's housing market has changed dramatically.

While the focus on “Urban Villages” and promoting mixed use residential has been a positive force on the market, the foreclosure crisis, economic recession, and the pandemic had serious consequences for homeowners and housing developers. What did we learn in the last 15 years? When change is the only constant, diversity is the City's key to success.

A diverse mix of housing types is essential to meeting the needs of current residents, while attracting new households to the community. The City of Troy is a leader in the Knowledge Economy and should continue to meet the needs of this young, ambitious workforce by providing desirable entry level housing options. The City is also a leader in public education, recreation amenities, and community services; such quality of life factors make Troy an attractive community for families and empty nesters. Housing diversity provides a mixture of housing options that allows people with different housing needs to be able to live in Troy and remain when their needs change. This requires a diversity of housing types at a range of price points, available to rent or own.

The City should continue to protect homeowners and the character of residential neighborhoods, while providing new opportunities and greater housing flexibility. Supporting missing-middle and other multi-family housing options as infill development will allow residents to transition through the various housing types while staying rooted in the Troy community.

This Chapter will analyze the changing nature of Troy's population and compare certain local demographic and housing trends to regional and national trends. Household size, age, and other characteristics of the population will be used to make recommendations designed to improve the utility of the City's housing stock as well as other community elements to meet the changing demand.

The driving force behind many changes Troy will experience is changing characteristics of its population. The median age of Troy's population has increased and according to SEMCOG, by 2045 over 22% of the population will be over 65. While the City will remain very attractive for families, both the younger and older population will desire a community that looks somewhat different than the current one.

Changing demographics can have the most profound impact on housing. A mix of housing types allows communities to retain existing residents while attracting new residents. The supply of entry level housing and housing which allows aging residents to “age in place” must be proportional to the population of those potential buyers. In a community that is also seeking to position itself as a leader in the Knowledge Economy, the most desirable housing to attract a younger workforce must exist at a variety of housing values in order to capitalize on other quality of life factors in the City. In other words, the City must strive to have the right housing for the right workforce at the right time, all without jeopardizing the previous generation's ability to continue their life in Troy.

A healthy and livable city is also one that provides a variety of elements that contribute to a high quality of life including; economic and education opportunities; access to cultural, religious, recreation, shopping and entertainment resources; quality built and natural environment; and the ability to have a safe and healthy lifestyle.

Housing Options in Troy

Ranked as one of the “Best Places to Live” in America in 2012, the City has become a desirable place to call home for people of all backgrounds (CNN Money, 2012). As the greatest challenge to long range planning for housing, a changing population involves taking account of the existing housing stock in the City and understanding in what areas it could be augmented to meet the anticipated changes in demand based on population trends and characteristics. For many years, Troy has been a magnet for families. Excellent schools, a safe environment, and attractive amenities have made Troy a very desirable place to live. The characteristics of the population have also driven the housing stock. As depicted in Figure 8.5, housing in Troy is overwhelmingly single-family detached.

There are several critical themes facing the City with regard to housing. First, national trends and local projections indicate that the residents of Troy are aging. As people mature, their needs change with regard to housing as a result of changes in employment, household size, mobility, income, and personal needs. Secondly, the City desires to encourage homeownership and must therefore be concerned with ensuring that high-quality but affordable housing options are available. Finally, as the City labors to provide modern amenities and foster a globally recognized center for knowledge economy businesses, it must ensure that this workforce finds Troy to be rich with the best housing options in the region.

Nothing in this plan is intended to change the overwhelmingly single family nature of the community. However, changes in the age and characteristics of the population will influence the characteristic of the housing stock. Large three and four bedroom homes appeal to families, but may not be ideal for seniors, young professionals, or small families.

Plans for the future must include a variety of housing options for both a younger workforce as well as an aging population.

Housing an Aging Population

The next generation of older adults is one with a new perspective on aging, one that includes being physically active, staying close to family and friends, moving into a new second career, pursuing education, or accomplishing a lifelong dream. Given the expected shift in the City of Troy’s population, this Plan must address how the housing needs of active seniors will be met. It is important to note that population age shifts and the resulting housing demands are largely cyclical, though not necessarily consistent from cycle to cycle. Many of the concepts described here also provide options both for a younger population as well as persons with disabilities in Troy.

Where the previous generation of older Americans may have aspired to live in a resort-style destination community, today’s active seniors are staying active longer than ever before.

To that end, there is an overwhelming desire of the “over 65” population to age in place. Given the complications, limitations, and expense in retrofitting existing homes to meet the needs of an aging tenant, many homes no longer remain practical as the homeowner ages.

Promoting an Aging in Places strategy will more fully address the full complement of the needs of an aging population. While Aging in Place is the preference of the vast majority of seniors, there can be limitations in fulfilling every need. Active seniors are looking for a rich social environment, walkable neighborhoods, and access to needed services in addition to living in a comfortable home. A full environment for active seniors can be created by addressing housing, well being, and social engagement needs on a more complete basis.

“Universal Design” and “Visitability” are first steps towards making a community and its housing more inclusive and one which can empower a homeowner to age in place. Universal Design is a broad concept which involves design products and spaces so they can be used by the widest range of possible users. Coined in the 1980s, the term “visitability” is used to describe a few basic, affordable design options which

Today’s Seniors
How they are different

- Living longer
- Highly educated
- Diverse
- More single living arrangements
- Wealthy but with debt
- Remaining in workforce
- Technologically savvy
- Physically active

broaden the equity in housing accessibility without necessarily stressing full accessibility for persons with disabilities, or older adults: These design elements are far more important to the functionality and safety of a home than many traditional full-accessibility standards, such as lower mirrors and sinks, etc. These features are critical to even permit the entry of a disabled or aging person into the structure. The elements include:

- At least one no-step entrance;
- All doors and hallways wide enough to navigate through with a walker or wheelchair; and,
- A bathroom on the first floor big enough to get into in a wheelchair and close the door.

In any new development or redevelopment, designers can easily gain a wider market by thinking about access and visitability at the concept phase. The visitability movement argues all new homes should be made visitable, which allows for them to be more easily converted to full-accessibility for an aging resident or to a resident with disabilities, and to provide for increased mobility for all persons, and therefore increased social equity. The proponents of visitability argue that if only those homes occupied by disabled or older adults are designed for visitability or full accessibility, that housing suitable for aging in place of older adults will be effectively cut-off from the mainstream public.

For those residents desiring a more structured housing situation or those that need a higher level of care or assistance, a wide variety of housing

Key Findings of Boomers
and Shakers Forum

Most of the participating residents are likely to remain living in Troy as they age. Many noted the high quality of life living in the City. For those that identified that they are likely to leave Troy, the most listed reason was a lack of housing option and a lack of transportation options. Underserved senior housing options and a need for increased public and dedicated senior transportation options was a common discussion point of the Forum.

The most identified underserved housing type was senior-friendly housing such as smaller, single-family homes, condominiums, or apartments with first floor master bedrooms. Housing affordability was listed as a significant housing limitation. Many remarked that they are on a fixed income and cannot afford a \$400,000 house/condo. They noted that affordable, smaller housing options are difficult to find in Troy and the City should push development of those types.

products are available. Traditional age-restricted multiple-unit senior housing developments continue to thrive in communities across the United States. Assisted living and nursing home care centers, which can provide different levels of care from basic assistance to full dementia care, are also growing.

Missing Middle Housing

In order to capitalize on the quality of life elements that this Plan suggests to create a lively and vibrant community, the City must also have the right housing to retain and attract the changing population. Mobility and proximity between civic elements, quality parks, shopping, dining and other amenities is critical, but what is even more critical is the proximity of those elements to innovative new housing.



Kitchen with accessible countertop, sink and storage. Source: I&E

Over 125,000 people work in Troy every day, but only about 12,000 of those people reside in the City. The City must identify ways to capture more new residents from this critical group. Two factors contributing to this phenomenon could be the cost barrier and the availability of innovative housing styles. The predominant housing type in the City of Troy (73 percent) is a single-family detached home. Twenty-percent of units are multi-unit apartments with the remaining 7 percent being one-family attached homes or duplexes and townhomes.

While most people characterized as part of knowledge economy workforce benefit from rising incomes and a great deal of investment mobility, not all members of this valuable demographic have the means to buy into new housing. Many members of this workforce will be first time homebuyers.

With average median home values above \$300,000, many new home buyers, young families, and senior are priced out of the market. The increase in housing costs is attributable to new construction, the increased popularity of the City of Troy as a residential and business setting within the metropolitan Detroit community, and general rises in housing costs within southeast Michigan.

With new white-collar business also comes a need for additional service industry businesses, which require a high-quality workforce themselves. Many members of the service workforce are priced out of communities they work in and must commute into places like Troy.

There is a mismatch between the current housing stock in Troy and both the characteristics and desires of the population. There is increased preference for living in a walkable environment, near shopping and parks. The solution is found in building neither large single family homes nor traditional multiple family apartments.

The type of housing option that is lacking in Troy is the “Missing Middle.” Missing middle housing is composed of smaller single family homes, duplexes, fourplexes, lofts, townhouses, mid-scale apartments, and live-work units. Missing middle housing achieves moderate density that can be appealing to both younger and older populations. Missing middle housing offers a range of multi-unit or clustered housing types compatible in scale with single-family homes.

High quality entry-level housing does not necessarily mean subsidized or public housing. Housing becomes affordable when supply and demand for different housing types are balanced. For instance, if a majority of housing units in a community are small lot, small square footage, older homes, the few large, new homes with property may be all the more desirable, and vice versa. Conversely, if a community is exclusively single family detached homes and the only attached units are downtown luxury condominiums with 2,000 or more square feet, entry-level housing becomes scarce and the market for it becomes competitive.

In order to combat this in Troy, the City must encourage a variety of housing types to allow for a balanced housing stock. Smaller units for sale in newer developments allow for new homebuyers to invest in the City without a high cost barrier for entry.

Visitability Standards

The concept of “visitability” emerged in the 1980s and has been a growing trend nationwide. Some of the states and localities that have already incorporated visitability standards include Naperville, Bollingbrook, and Champagne, Illinois, Atlanta, Vermont, Texas, Kansas, and Arizona. The term refers to single-family housing designed to be lived in or visited by people with disabilities.

(<http://www.accessiblesociety.org/topics/housing/visitability>)

The Seven Principles of Universal Design

- 1: Equitable Use: The design is useful and marketable to people with diverse abilities.
- 2: Flexibility in Use: The design accommodates a wide range of individual preferences and abilities.
- 3: Simple and Intuitive Use: The design is easy to understand, regardless of the user’s experience, knowledge, language skills, or current concentration level.
- 4: Perceptible Information: The design communicates necessary information effectively to the user, regardless of ambient conditions or the user’s sensory abilities.
- 5: Tolerance for Error: The design minimizes hazards and the adverse consequences of accidental or unintended actions.
- 6: Low Physical Effort: The design can be used efficiently and comfortably and with minimum fatigue.
- 7: Size and Space for Approach and Use: Appropriate size and space is provided for approach, reach, manipulation, and use regardless of user’s body size, posture, or mobility.

When Places are Created, an Integrated Picture Looks Like This:



Creating an Aging in Places Framework for Troy

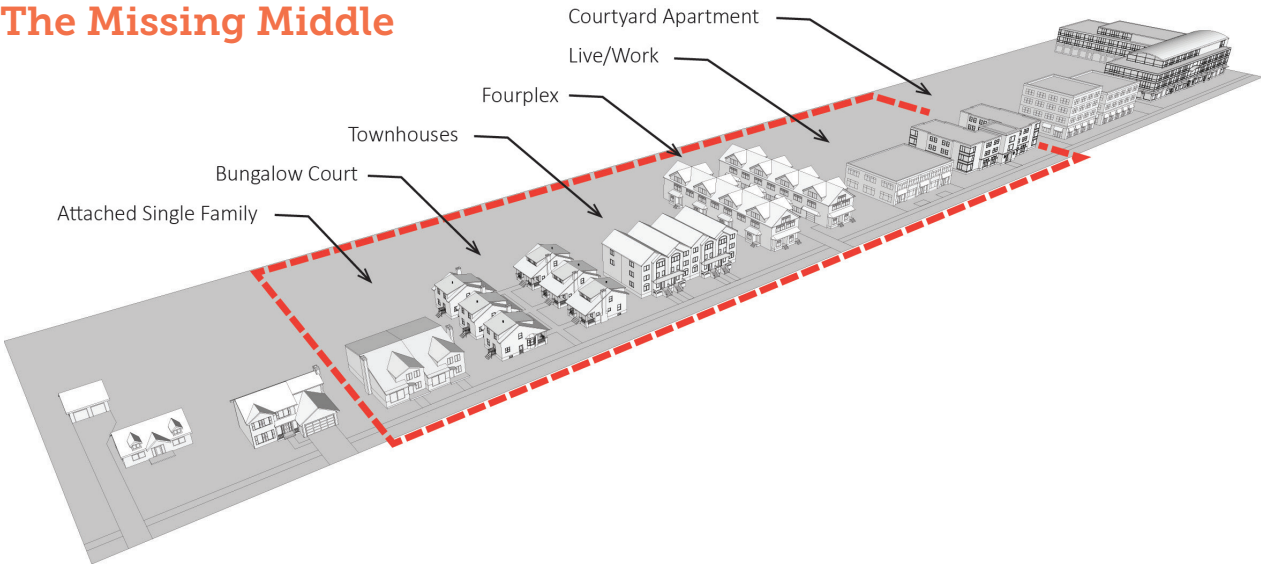
Aging in Places has three spheres:



“Missing Middle” Housing can include attached single-family, fourplex, townhome, live-work, or apartment.



The Missing Middle



Characteristics of Missing Middle Housing

- Walkable context and sense of community - location within an area which is in walking distance of services and amenities is essential. Sense of community is created through shared community space, either within or in close proximity to the development.
- Transitional density - The Missing Middle Market offers an opportunity to create housing at densities which fall between traditional single family and multiple family. Introducing a mixture of design and styles can reduce the perception of density.
- Smaller, well designed units - Combined with smaller footprints, there is a strong emphasis on quality and efficient use of space.
- De-emphasizing parking - Providing too much parking on-site defeats many of the efficiencies to be achieved. Again, location in a walkable environment, preferably near transit, can reduce the need for on-street parking.

(Source: Dan Parolek, blog post, Apr. 3, 2012, Better Cities and Towns)



Targeted Locations in Troy for Missing Middle

- Neighborhood Nodes
- Maple Road
- Big Beaver, as part of mixed use development
- Rochester Road



9 – Land Patterns: City Design and Image

Future Land Use Categories

- 88 // Single Family Residential
- 89 // Neighborhood Nodes
- 108 // High Density Residential
- 110 // Big Beaver Road
- 112 // Rochester Road
- 114 // Maple Road
- 116 // South John R Road
- 118 // Northfield
- 119 // Smart Zone
- 121 // Automall
- 123 // Transit Center
- 125 // 21st Century Industry
- 126 // Recreation and Open Space
- 126 // Public and Quasi-Public

The term “Future Land Use” brings to mind a prescription for isolated, parcel-by-parcel land use classifications that permit the development of a very limited number of land uses.

This model tends to perpetuate the separation of land uses, even when it is not always the best option. This type of traditional land use planning was brought about in an age when zoning was in its infancy and land was readily available. There was less concern about the conservation of natural resources, and economic factors took precedence. While frequently effective, this kind of planning has had unintended consequences.

As cities and regions have grown over the years, traditional land use plans have fostered sprawl in Southeast Michigan and impeded compact communities served by close proximity to jobs, schools, and community services. At risk has been quality of life, an area which is critical to remaining competitive in the 21st Century, as discussed in detail in many Chapters of this Plan.

Today, Troy and many other communities have begun looking for new ways to improve quality of life by creating vibrant, mixed-use areas where jobs, great schools, opportunities for social interaction, excellent services and shopping, and high-quality neighborhoods exist in close proximity. Techniques such as Planned Unit Development (PUD) have been developed for just this reason. PUDs demonstrate that different land uses are compatible and supportive of each another.

As a result, this Future Land Use Plan will expand on the concept of “villaging” established by Troy Vision 2020 and translate that concept into policies that manifest themselves on the Future Land Use Map. It will introduce the concept of the “Social Neighborhood” and describe how it is intended to interact with the “Economic Neighborhood.” It will describe the character and role of places like the Big Beaver Corridor and Oakland Mall, an alternative way to think about Maple and Rochester Roads, and the industrial areas of the City.

There are many traditional land use elements that should be maintained in Troy. Adherence to conventional approaches in all areas of the community will not allow the City to realize its vision. A shortfall of traditional land use planning is the primary focus on land use and the lack of attention toward physical form. The Troy Master Plan will incorporate city design and image as primary areas of focus. This Chapter will establish future land use categories on which the Plan is based and define the urban design characteristics of established categories.

Land Use and City Design

The Troy Future Land Use Map does not allocate specific uses on a parcel-by-parcel basis but represents a graphic illustration of the overall policies of this Plan and describes the intended character of the various areas of the City. The primary categories will be supported by urban design guidelines and, in certain cases, sub-area plans which provide additional detail with regard to the intended styles and patterns of development. The Future Land Use Plan of the City of Troy will be implemented through a variety of techniques. The most significant of these tools is the application of Zoning Classifications consistent with the Plan. It is important to note, however, that the Future Land Use Map is a long-range guide and is not a “Zoning Map” intended to indicate the geographic extent of all land use classifications or to enable all indicated uses to occur immediately. The Future Land Use Map is included on page 86. Neighborhoods are vital components of the City. Historically, neighborhoods provide societal, educational, recreational, and economic needs within a half-mile walking distance. The Vision 2020 strategy establishes the idea of fostering “villages” within the City. Residents want to enjoy a personal sense of place which is best found at the neighborhood scale. For Troy, the ingredients are in place for classic walkable neighborhoods. Major thoroughfares delineate square mile grid patterns. Elementary and Middle Schools are centrally located within many of the neighborhoods. The corners of most neighborhoods are developed with convenience retail and service businesses.

The Master Plan recognizes that current lifestyles warrant modifying the walkable neighborhood concept. Not every person will walk a half-mile to get to a store or school. Most people will walk five minutes, or about one quarter of a mile. Typical comparison shopping for clothing, hardware, and the like are measured by service radii related to drive times which are not realistically walkable. Furthermore, Michigan has cold winters that limit year-round walkability. Troy’s neighborhoods, now and in the foreseeable future, will serve its residents in two roles: the Social Neighborhood and the Economic Neighborhood. The Social and Economic Neighborhoods of the City are shown on this Neighborhoods Map on page 87. The circles surrounding the Neighborhood Nodes and the circles within the Social Neighborhoods are meant to demonstrate a rough service area for each neighborhood. While not necessarily precise, the circles are meant to demonstrate the basic relationship between the Social Neighborhood and the Economic Neighborhood. The circles are not meant to establish a formal land use category or policy in and of themselves, but rather to validate the planned uses at and around the Economic Nodes.



Elements of Great Streets and Neighborhoods

Great Streets:

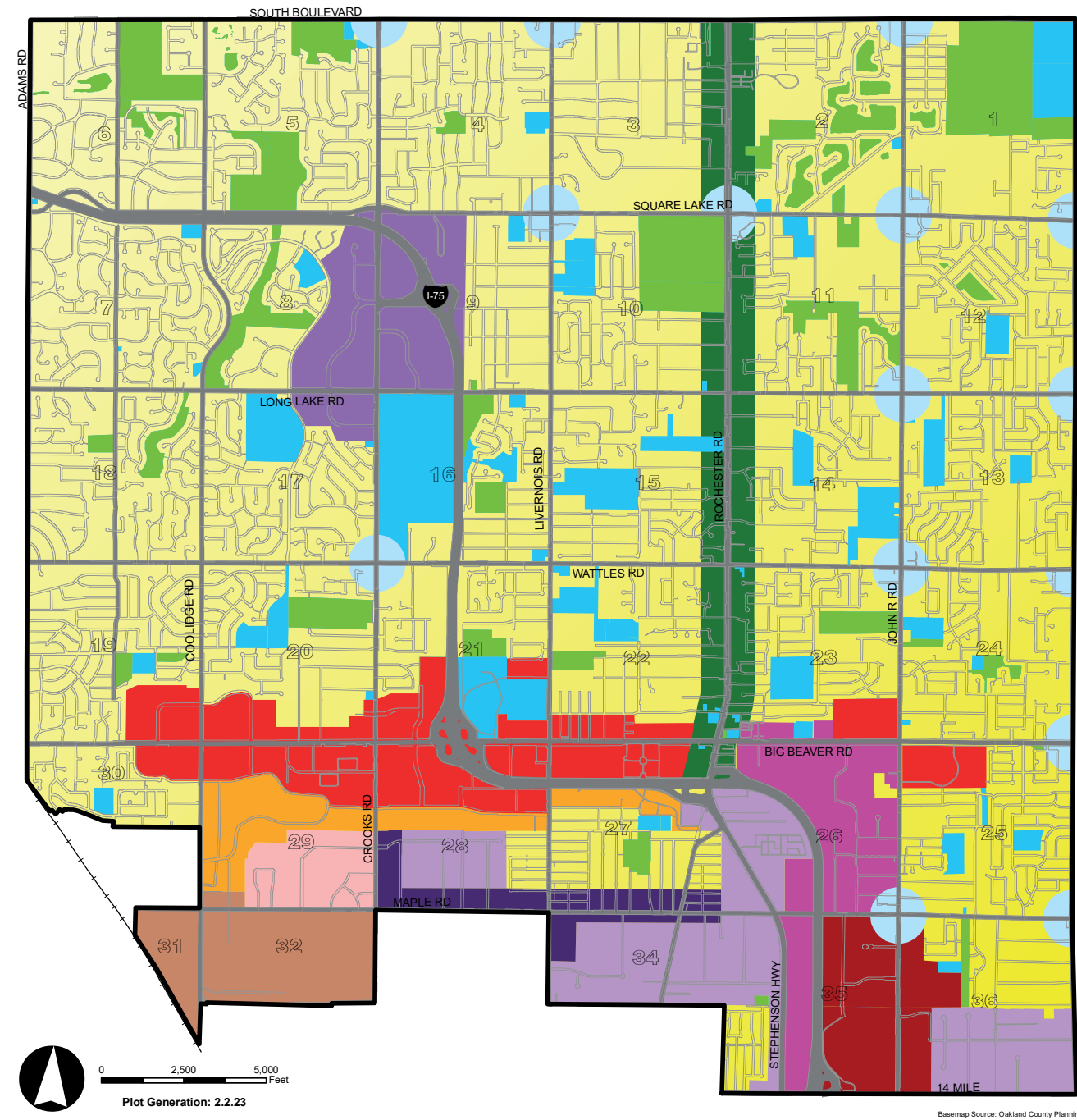
- Accommodate many users with various modes of transportation.
- Connect smoothly with the rest of the street network.
- Encourage social interaction.
- Allow for safe and pleasant pedestrian activity.
- Have a unique sense of public space created through physical elements.
- Consider the scale and architecture of surrounding building infrastructure.
- Benefits from community involvement.
- Reflect the culture or history of the community.
- Complement the visual qualities of the community.
- Utilize green and sustainable practices.

Great Neighborhoods:

- Consider the scale and architecture of the building infrastructure.
- Foster social interaction.
- Enable multiple modes of transportation safely and efficiently.
- Are safe.
- Are good stewards of the natural environment.
- Reflect the community’s character and have unique characteristics that provide a sense of place.
- Retain the community’s history.
- Promote and protect air quality and stewardship of natural resources.
- Protect or enhance the local environment and biodiversity.

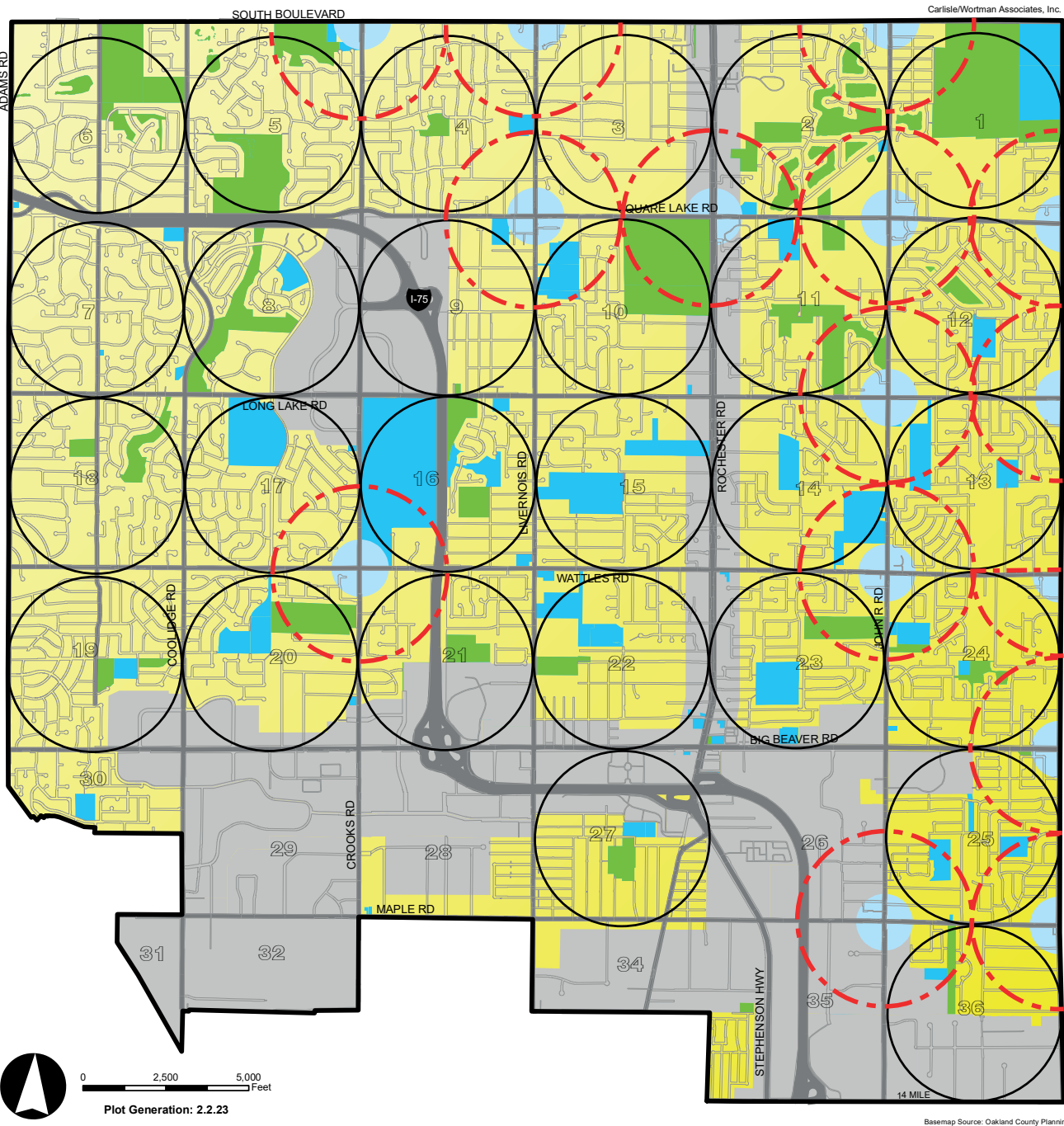
Great Streets and Neighborhoods:

- Implement LEED standards in construction and neighborhood design.
- Have planted street trees.
- Reuse materials when possible.
- Make recycling convenient.
- Facilitate non-motorized and/or public transportation.



Future Land Use

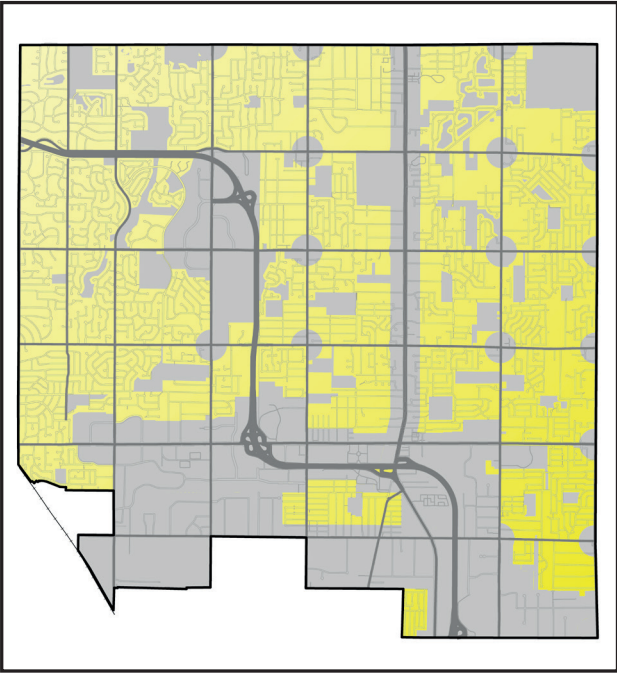
- Single Family Residential
- High Density Residential
- Neighborhood Nodes
- South John R. Road
- Big Beaver Road
- Rochester Road
- Maple Road
- Northfield
- The Smart Zone
- Automall
- The Transit Center
- 21st Century Industrial
- Public and Quasi-Public
- Recreation and Open Space
- Section Number



Neighborhoods

- Social Neighborhood
- Single Family Residential: The Social Neighborhood
- Economic Neighborhood
- Neighborhood Nodes: The Economic Neighborhood
- Recreation and Open Space: Extraordinary Amenities
- Public and Quasi-Public: The Foundation of Troy's Neighborhoods
- All Other Uses
- Section Number

Single-Family Residential:
The Social Neighborhood



- **Social units of the City.**
- **Walkable, safe places to live.**
- **Centered on schools or other community facilities.**
- **Linked with nearby services.**

The predominant land use in the City of Troy is single-family residential. This category is intended to preserve the existing quality residential neighborhoods of the City while recognizing the need for other uses that support the main function of residential areas. The single-family areas of the City are arranged around Social Neighborhoods. Social Neighborhoods are unique, self-contained areas bounded by Troy’s main thoroughfares. They are mostly single-family areas centered on community elements like schools or parks. Social Neighborhoods are described in more depth at the end of this Chapter and are illustrated by the solid circles shown on the Neighborhoods Map on page 87.

In the Single Family Residential areas of the City, non-residential uses will be considered only

when the use is clearly incidental to and ancillary to single-family residential, or when the use is a park, school, or other community-oriented public or quasi-public use.

The Social Neighborhoods of the City are bounded by the mile square grid pattern of Troy’s thoroughfares. These defined areas can provide the sense of place that Vision 2020 and this Master Plan are striving for. In most cases, they have a school as central focus. Schools continue to be a means of stimulating social interaction on many fronts; children establish their first friendships, parents meet other local parents, schools often host public events. Furthermore, the play areas at school provide readily accessible recreation opportunities. Many Social Neighborhoods in Troy have sidewalks promoting accessibility and exercise, and Troy schools have walking paths that are open to the public.

The ideal Social Neighborhood will exemplify the safer, more enjoyable walking environments envisioned by the “Safe Routes to School” program.

DESIGN CONCEPT

- Neighborhoods are approximately 15 minutes walking from end-to-end.
- A wide variety of residential architecture characterizes the various neighborhoods of the City. Non-residential architecture for schools and places of worship complement the residential setting.

BUILDING LOCATION

- Homes must be located in relation to the street in a manner that complements surrounding, established homes.

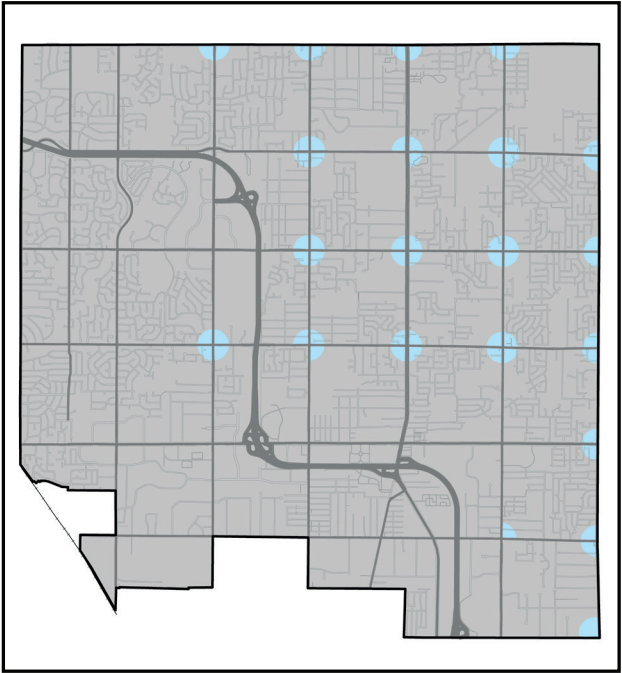
SITE DESIGN ATTRIBUTES

- Walks which link residences to destinations such as schools, libraries, abutting neighborhood commercial service areas, coffee shops, and other neighborhoods are critical.
- The neighborhoods must include improved perimeter walks that are functional and aesthetically pleasing. These exterior walks will directly connect to the activity nodes at major intersections and adjacent neighborhoods. Wide walks will be constructed which will incorporate landscaping and innovative stormwater detention

areas. These areas will be artistically developed, but functional landforms that carry visual interest. The perimeter walks have the ability to bring residents of adjacent neighborhoods together.

- Neighborhoods should be connected to one another to increase the area where residents can readily navigate on foot and expand the boundaries of social interaction. Crosswalks near the mid-mile areas of each grid will improve outside linkages.
- Lighting will not encroach on adjacent properties and will be used carefully to provide safety and security, and for accent illumination.

Neighborhood Nodes:
The Economic Neighborhood



- **Located at intersections of the City’s main roads.**
- **Work together with Social Neighborhoods to create a more livable community.**
- **Mixed use.**
- **Provide neighborhood gathering places.**
- **Accommodate the daily needs of residents.**

Neighborhood Nodes are intended to be commercial and mixed-use centers situated at major intersections of Troy thoroughfares that serve as the center of the City’s Economic Neighborhoods. The nodes are specifically identified on pages 91 and 92. Economic Neighborhoods are destinations created as “go to” places that take on a social role, serving both as a place to meet basic needs of the community and as 21st Century village centers. The attributes of Economic Neighborhoods are described in more detail in the final section of this Chapter, and the design characteristics of Neighborhood Nodes will be described in depth in Chapter 10. The nodes may permit a mix of commercial, office, mixed use with a residential component, open space and pocket parks. The predominant uses in any Neighborhood Node development must be in keeping with the node characteristics described on pages 91 and 92. Industrial uses will not be permitted in the Neighborhood Nodes.

The Economic Neighborhoods of Troy also center on the square mile grid system. Unlike the social neighborhood, the Economic Neighborhoods are centered on major road intersections where commercial, office, and mixed use development occurs. When destinations are created, these nodes become a “go to” place and take on a social role. Each of these nodes serves up to four quadrants of the overlapping social neighborhoods and has the ability to bring residents of all abutting neighborhoods together. These nodes are intended to serve the neighborhoods they abut. Non-motorized connections should be considered when appropriate from nodes into neighborhoods and be accessible by bicycle or pedestrians.

These Economic Neighborhood nodes are destinations that draw people, visually distinguished from the balance of corridor strips through greater density and scale. Variation in building height will often be used to separate the node from the surrounding area but will not be so extreme as to visually overpower abutting neighborhoods. The separation of building heights at intersections with the “between” segments of corridors stimulates the visual concept of “pulsing” development and sets up a system of visual anchors.

Moderately dense residential environments within

mixed use developments may be encouraged within some nodes to provide steady activity for longer periods of the day. Residences may be mixed with offices on upper floors or be developed immediately adjacent to the commercial areas. Residential uses should be an accessory use in a node. Development within nodes on the same or adjacent parcels shall be seamlessly integrated with a focus on pedestrian connections. During the course of multiple planning processes, the Planning Commission closely analyzed the role, function, and location of neighborhood nodes throughout the City.

DESIGN CONCEPT

- These nodes are within a fifteen minute walking distance of residential neighborhoods to encourage alternative modes of transportation such as bicycle and pedestrian.
- Development may be denser and taller than the surrounding area, encouraging visual prominence to signal a gathering space.
- Nodes should be generally confined to a 1,000 foot radius from a major intersection.
- The nodes provide uses and spaces that attract and welcome neighborhood residents.
- First floor is intended to be commercial in nature.

SITE DESIGN ATTRIBUTES

- Buildings should be separated from the street by a landscaped greenbelt and a pedestrian walk.
- Primary parking areas will be located within rear or interior side yards.
- Off-street parking should be screened from the public right-of-way preferably by a hedge or row of shrubs. If landscaping is not possible, parking should be screened by a knee wall or low decorative fence.
- Walks will connect adjacent developments and the public sidewalks.
- Well-defined crosswalks with timed signalization will permit safe crossings.
- Provide a flexible use of space allowing modest outdoor gathering spaces. This may include plazas with seating, landscape and open space features, water features, public art, or a similar feature.

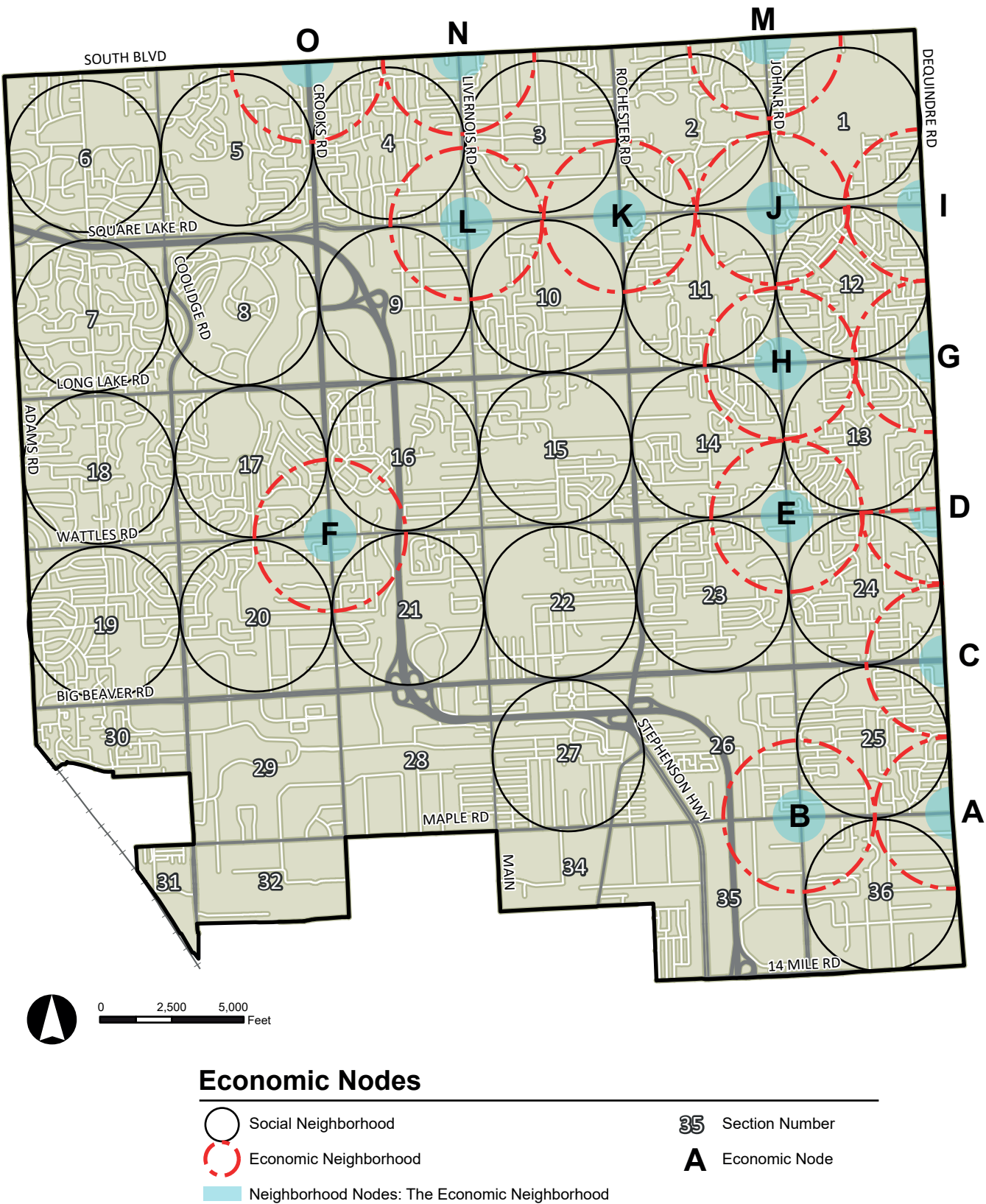
- Encourage a creative mix of open space and landscaping to provide an amenity to the residents, visual relief to passersbys, and a buffer to adjacent properties.

BUILDING DESIGN ATTRIBUTES

- One-story buildings should have a minimum exterior height of sixteen feet. In multiple story buildings, the ground level story should have a minimum height of twelve feet from finished floor to finished ceiling.
- Three stories may be permitted for mixed use development with the first floor being a commercial use and two upper stories of residential.
- Multiple story buildings should be placed along major thoroughfare and not adjacent to residential uses.
- Facades facing major thoroughfares will be treated as fronts and should have a minimum of half transparent glass and special architectural design treatments.
- Fenestration (the arrangement of windows and doors) should be highlighted through the use of awnings, overhangs, or trim detailing.
- Lighting will be carefully managed so as not to encroach on adjacent residential areas. One-story buildings should have a minimum exterior height of sixteen feet.
- A ground level story should have a minimum height of twelve feet from finished floor to finished ceiling.

	Node/Intersection	Primary Uses and Character
A	Maple Road and Dequindre Road	<p>The unique neighborhood node is home to a collection of uses serving the local Polish population. Uses complementary to the cultural center and bank which help this area serve as a gathering place and focus area for the neighborhood could include service uses, or specialty retail and dining. Infill commercial development within existing underutilized parking lots should be explored. However, infill or redevelopment of existing commercial properties should provide an appropriate buffer and transition to the adjacent residential uses.</p> <p>There may be opportunities for limited infill residential development in the northwest corner of the node. The residential should be of a scale and massing to complement the existing low-scale nature of the area.</p>
B	John R. Road and Maple Road	<p>The node should expand to all four corners. The City should be open to redevelopment of all parcels in the node to best serve the area with a predominantly commercial mix of uses catering to the immediate residential and employment areas.</p>
C	Big Beaver Road and Dequindre Road	<p>Any redevelopment in this area should be designed to create a very noticeable “gateway” into Troy. Redevelopment south of Big Beaver should focus on commercial uses that serve the adjacent neighborhoods but also provide an appropriate transition and buffer to the adjacent residential neighborhood. The City should encourage continued investment in the commercial property on the northwest corner</p>
D	Wattles Road and Dequindre Road	<p>The north side of the node should be removed and reclassified to residential use which may include single-family, cluster, low-scaled multiple family, or assisted living to provide creative housing options in the area. South side should continue to focus on office uses. However, limited commercial and service uses designed to complement the main focus of the area as an office node may also be permissible.</p>
E	John R Road and Wattles Road	<p>This node should focus on mixed-use, service, or commercial uses to serve the immediate neighborhoods. Any development or redevelopment shall be of a scale and massing to complement the existing low scale nature of the area. Low scale multiple family may be permissible if it models the scale and orientation of the multiple family neighborhood at the northeast corner of the node.</p>
F	Crooks Road and Wattles Road	<p>The southeast corner of this node satisfies the commercial, service and multi-family residential uses to serve the immediate neighborhoods. Any development or redevelopment of the northwest corner shall be of a scale and massing to complement the existing low-scale nature of the area and protect the existing natural resources including Lane Drain. Additional commercial development is not desirable for this corner. Low-scale single family attached residential is encouraged if it models the intensity scale and orientation of the single family attached neighborhood at the northeast corner of the Node E (Wattles and John R). Development in the northwest corner shall also ensure appropriate transition to adjacent properties via increased setbacks, reduced heights, and enhanced landscape buffers.</p> <p>Due to the existing traffic patterns along both Crooks and Wattles, incorporation of a park use, or low intensity and scale residential, including the expansion of the Stonehaven subdivision into the southwest corner of this node, utilizing the already existing entrances from Crooks and Wattles would be appropriate. If a continuation of Stonehaven is not possible, any future development of this corner shall limit access to Crooks and Wattles, to not increase existing traffic conflicts. The City may consider rezoning the southwest corner to a one-family attached or single-family zoned designation. The City also recognizes that expansion of the White Chapel Cemetery or the continuation of single-residential uses in the northeast corner of this node would be appropriate. The City may consider rezoning the northeast corner to a single-family zoned designation.</p>
G	Dequindre Road and Long Lake Road	<p>Predominantly commercial, catering to both local needs and regional traffic, new development and redevelopment should be mostly commercial, identifying opportunities for small office and mixed-use. Large undeveloped parcels to the north and south of Long Lake Road should be low scale multiple family, which provides an appropriate transition and buffer to adjacent residential neighborhoods.</p> <p>Inter-pedestrian connections and pedestrian access to the adjoining area and effective screening should be primary areas of focus during the site design process.</p>

	Node/Intersection	Primary Uses and Character
H	John R Road and Long Lake Road	<p>New development and redevelopments should either be compact, walkable mixed-use development with a combination of uses serving the immediate surroundings or low-scale multiple family, such as duplexes, triplexes, or senior housing which provide an appropriate transition and buffer to adjacent residential neighborhoods.</p> <p>Integrated compact development which would allow a user to park once and meet several daily needs would be a positive contribution to the node.</p> <p>Because the node has a significant amount of open space, preservation of green space shall be incorporated into any development or redevelopment within the node.</p>
I	Dequindre Road and Square Lake Road	<p>Redevelopment should include an integrated compact residential component, live/work units, or small office. Service oriented use development in combination with new residential development would provide a unique setting here. New residential can include low scale multiple family, such as duplexes or triplexes, which provides an appropriate transition and buffer to adjacent residential neighborhoods</p>
J	John R Road and Square Lake Road	<p>This node must be careful to respect this important natural resource. New development or redevelopment should complement the churches and limited commercial uses in the area and should incorporate robust landscaping, natural buffers, and conscientious site design to enhance the known natural features in the area.</p>
K	Rochester Road and Square Lake Road	<p>Existing commercial uses should continue to provide a foundation for this neighborhood node. As tenants change, new service uses, retail, and limited office uses should provide service to the immediate residential neighborhood</p>
L	Livernois Road and Square Lake Road	<p>Development in this area historically known as Troy Corners should be especially considerate of the historic past of the area. Any new development should integrate various types of community gathering spaces, such as parks, public art, historical elements, plazas, community centers, and recreational facilities into the design. Adaptive reuse of existing historic structures should be considered before demolition or relocation of these resources. This node will have low intensity uses of a non-automotive oriented nature that creates a central neighborhood village, that is walkable and accessible. Any automotive oriented use shall not be considered in this node. Low-scale single family attached residential may be permissible if it models the scale and orientation of the single family attached family neighborhood at the northeast corner of Node E (Wattles and John R).</p>
M	John R Road and South Boulevard	<p>Small local commercial uses and office uses should be the focus of this node to complement the large-scale office development across the City’s boundary to the north, within the City of Rochester Hills.</p> <p>The southwest corner provides a significant opportunity for a mixed-use development that provides a low-scale multiple family development with neighborhood-oriented retail on the first floor.</p> <p>Any new development should incorporate distinctive elements to create a “gateway” feeling into Troy. Distinctive elements include gateway signage, streetscape, and unique architecture.</p>
N	Livernois Road and South Boulevard	<p>Limited local commercial and housing for seniors should remain the primary focus of this neighborhood node. Any new development should incorporate distinctive elements to create a “gateway” feeling into Troy. Distinctive elements include gateway signage, streetscape, and unique architecture.</p>
O	Crooks Road and South Boulevard	<p>Area should remain predominantly commercial, catering to local needs of the surrounding neighborhoods. New development and redevelopment should be either be mixed use or commercial that serves to further enhance this successful commercial area. Any new development should incorporate distinctive elements to create a “gateway” feeling into Troy. Distinctive elements include gateway signage, streetscape, and unique architecture.</p>



DESIGN ATTRIBUTES / GUIDELINES

1. Multiple-story mixed-use with first floor retail serving the adjacent neighborhood.

2. Low-scale multiple-family development serving as a transition from commercial uses along the corridor to adjacent residential uses.

3. Infill development replaces underutilized parking lots.

4. Parking is conveniently provided behind buildings and screened with landscaping. Pedestrian elements are also provided.

5. Multiple-row landscape buffer provides visual buffer between land uses.

6. Access and circulation is improved by creating shared-access points, properly spacing driveways, and creating delineations between pedestrian and vehicular zones.

7. Properly designed sidewalks and crosswalks of the appropriate width, with street trees, street furniture, and a defined semi-public edge.

8. A defined "street wall" is formed by buildings fronting on a street with consistent setbacks. Placement, scale, and design quality of the street wall determine the character of the streetscape.

Commercial uses that directly front on major mile road

Low-scale multiple-family developments serving as a transition between commercial and adjacent single-family residential


Single-family residential





RESIDENTIAL

Three levels of intensity as you move away from the main corridor:

- 
1. Commercial uses that directly front on major mile road
2. Low-scale multiple-family developments serve as a transition between commercial and adjacent single-family residential
3. Single-family residential

Design elements such as:

- A. Curvilinear streets
- B. Shared driveways
- C. Sideloaded and recessed garages increase visual appeal by reducing the impact of garage doors and softening the view from the road with greenscape

Node-wide design elements for residential:

- D. Direct pedestrian connections from residential to commercial uses and public sidewalks along the main corridor
- E. Multiple-row landscape edges provide buffer between land uses



JOHN R & E LONG LAKE ROADS

The redesigned intersection includes a variety of elements which blend in to the surrounding neighborhood, including:

- 1. Duplexes
- 2. Two- to three-story mixed-use commercial and residential

- 3. A 1.2-acre neighborhood park
- 4. Curvilinear entry drive connecting Orchard Crest and Wilmet Drives
- 5. Two- to three-story townhomes along John R with rear facing garages
- 6. Reconfigured retail including existing pharmacy and new small scale retail tenants.

Node-wide design elements for residential:

- Direct pedestrian connections from residential to commercial uses and public sidewalks along the main corridor
- Multiple-row landscape edges provide buffer between land uses

— FEMA Regulated Floodway (approximate)
— Proposed park boundary



JOHN R & E LONG LAKE ROADS

The redesigned intersection includes a variety of elements which blend in to the surrounding neighborhood, including:

- 1. Duplexes
- 2. Two- to three-story mixed-use commercial and residential

- 3. A 1.2-acre neighborhood park
- 4. Curvilinear entry drive connecting Orchard Crest and Wilmet Drives
- 5. Two- to three-story townhomes along John R with rear facing garages
- 6. Reconfigured retail including existing pharmacy and new small scale retail tenants.

Node-wide design elements for residential:

- Direct pedestrian connections from residential to commercial uses and public sidewalks along the main corridor
- Multiple-row landscape edges provide buffer between land uses

— — — FEMA Regulated Floodway (approximate)
— — — Proposed park boundary



JOHN R & E LONG LAKE ROADS

The redesigned intersection includes a variety of elements which blend in to the surrounding neighborhood, including:

- 1. Duplexes
- 2. Two- to three-story mixed-use commercial and residential

- 3. A 1.2-acre neighborhood park
- 4. Curvilinear entry drive connecting Orchard Crest and Wilmet Drives
- 5. Two- to three-story townhomes along John R with rear facing garages
- 6. Reconfigured retail including existing pharmacy and new small scale retail tenants

Node-wide design elements for residential:

- Direct pedestrian connections from residential to commercial uses and public sidewalks along the main corridor
- Multiple-row landscape edges provide buffer between land uses

— FEMA Regulated Floodway (approximate)
- - - Proposed park boundary



JOHN R & E LONG LAKE ROADS

The redesigned intersection includes a variety of elements which blend in to the surrounding neighborhood, including:

- 1. Duplexes
- 2. Two- to three-story mixed-use commercial and residential

- 3. A 1.2-acre neighborhood park
- 4. Curvilinear entry drive connecting Orchard Crest and Wilmet Drives
- 5. Two- to three-story townhomes along John R with rear facing garages
- 6. Reconfigured retail including existing pharmacy and new small scale retail tenants.

Node-wide design elements for residential:

- Direct pedestrian connections from residential to commercial uses and public sidewalks along the main corridor
- Multiple-row landscape edges provide buffer between land uses

— — — FEMA Regulated Floodway (approximate)
- - - Proposed park boundary

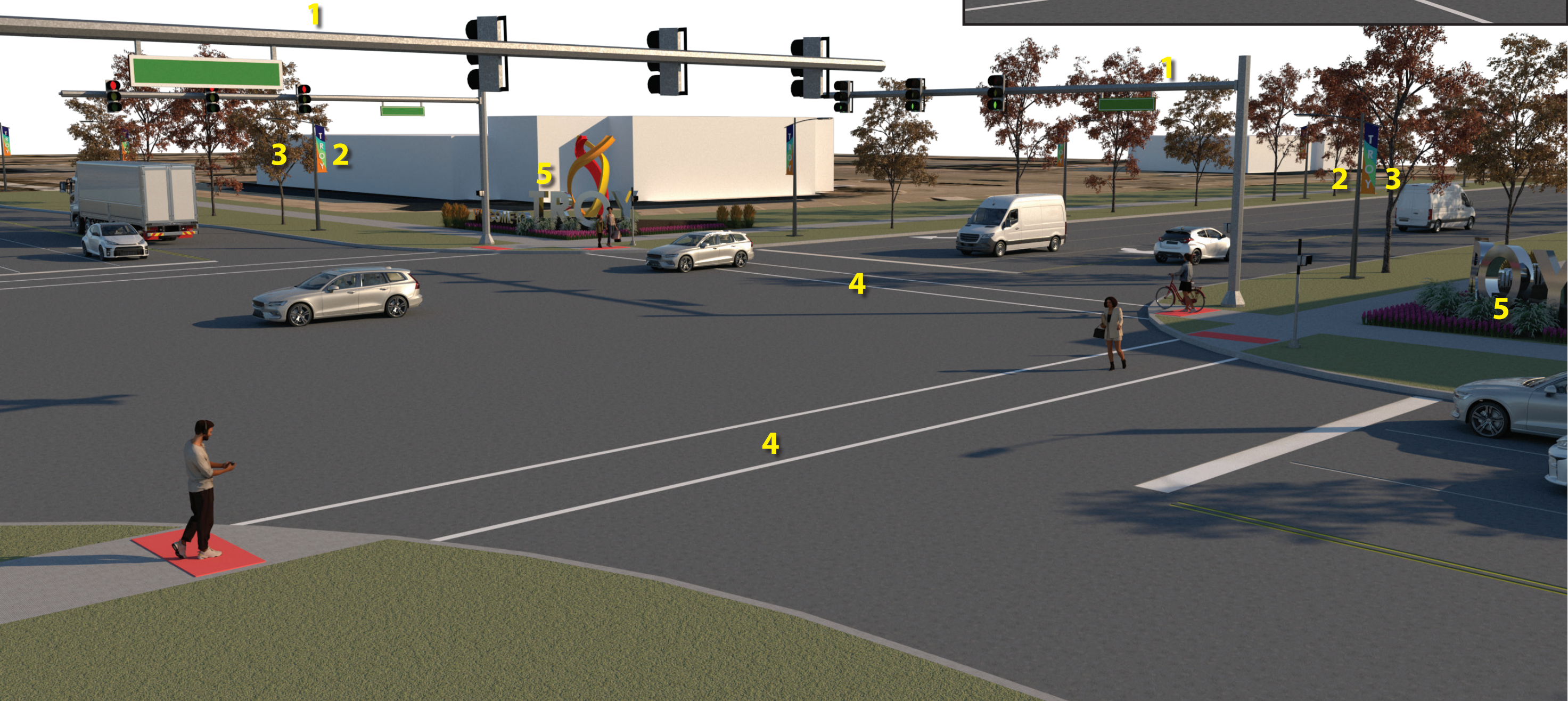
CITY GATEWAY DESIGN ATTRIBUTES / GUIDELINES

1. Upgraded traffic signal and street sign poles.

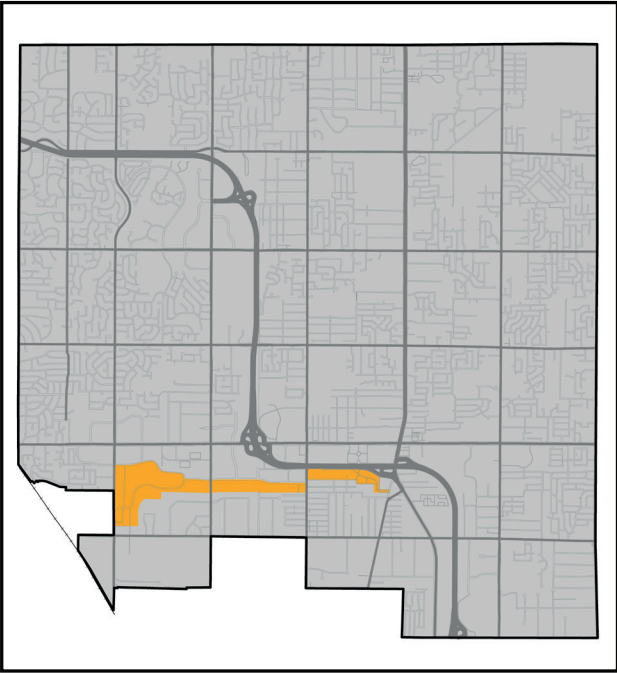
2. Street lights with pole banners.

3. Street trees.

4. Marked crosswalks with pedestrian activated signals, curb cuts, and textured warning strips to meet ADA guidelines.
5. “Welcome to Troy” signage with landscaping. Additional art or sculptural elements can be included at key intersections.



High Density Residential:
Housing Choice



- In close proximity to the most high-intensity nonresidential areas of the City.
- Diversify the City’s housing stock.
- Excellent regional access and multi-modal access.
- Complementary to Big Beaver Road.

The High Density Residential classification primarily includes multiple-family residential development made up of housing having three or more dwelling units per structure. This classification may have some limited mixed-use elements, especially those non-residential uses primarily geared towards day-to-day service needs of the resident population, although it is intended primarily to serve as the most dense residential development permitted by the City. The primary use in any development within this area must be residential.

The High-Density Residential classification is not the only area in the City in which high-density residential development may be appropriate. This category is, however, specifically identified for areas where high-density residential should be the primary, or exclusive land use. Other areas of the community, where mixed-use development is called for, may

also integrate high-density residential as part of a mixed-use development. High-density residential development may also be appropriate along Maple Road in redevelopment projects or new development projects with a focus on open-floorplan, loft-style housing in new or renovated buildings.

The High-Density Residential classification may also include some redevelopment areas which may be better used for uses that support high-density residential. On a limited basis, small scale commercial development designed to cater to the day-to-day needs of the residents may be appropriate. The City should continually monitor the status of this classification to ensure that it remains viable, given the growing trend of integrating high-density residential projects in mixed-use settings.



Urban townhouses in Ann Arbor, Michigan; Photo by CWA

DESIGN CONCEPT

- The high-density residential district is integrated with surrounding land uses and not simply considered a transitional use between traditionally intense and less-intense land uses.
- These areas will have a path system for access, exercise, and leisurely strolls, designed to link residential communities, provide more land use efficiency with open space, and offer access to neighborhood shopping and other services.
- Buildings frame the street network enclosing outdoor spaces.

SITE DESIGN ATTRIBUTES

- Front greenbelts with large street trees, decorative trees, and low landscaping soften the environment between the street and building.
- Creative storm water detention should be designed as a focal point, including the use of appropriate landscaping and sitting areas.
- A path system that connects the building entries, parks, public sidewalk system, and adjacent developments should be included in new development.
- Sites will be well-appointed with large trees and landscaping.

ARCHITECTURAL ATTRIBUTES

- Buildings will be between two and four stories.
- Front porches and tenant entries will be clearly defined through the use of canopies, overhangs, façade treatments, or landscaping.
- Fenestration will be accentuated with architectural trim work or decorative brick or stonework.



Urban townhouses in Ann Arbor, Michigan; Photo by CWA

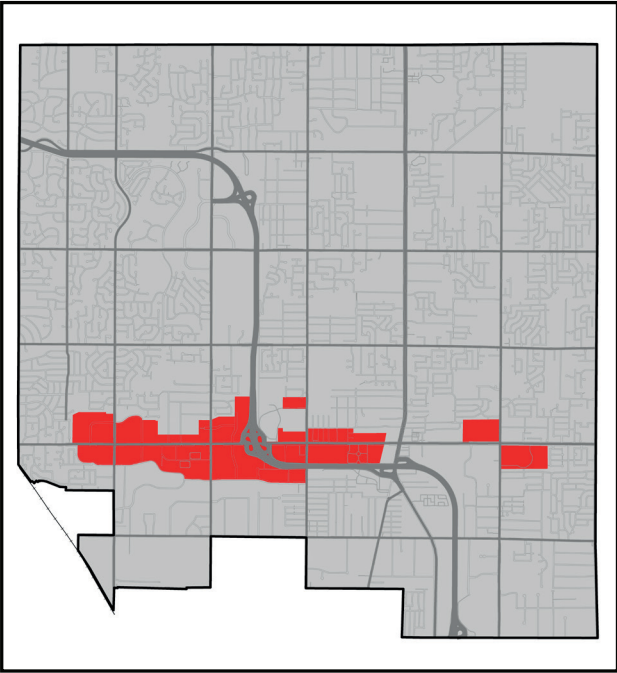


Internal public spaces in a high-density residential development



Innovative facade and architecture in a high-density setting

Big Beaver Road:
A World Class Boulevard



- Home to large, landmark projects and mixed-use regional destinations.
- Central gathering area of the community.
- A collection of international corporations, local companies, and establishments which complement these high-visibility uses.

The Big Beaver Road corridor is responsible for the first impression many people have throughout Michigan when they think of the City of Troy. The high-rise buildings, Somerset Collection, and its immediate proximity to I-75 are frequently the main elements visitors remember about the Corridor and the City. In order to remain competitive and continue to be a leader in economic development in Southeast Michigan, Troy must plan for this Corridor to evolve in light of a changing economy. In that spirit, the City adopted the key concepts of the Big Beaver Corridor Study in 2006:

- Gateways, Districts, and Transitions
- Trees and Landscape as Ceilings and Walls
- Walking Becomes Entertainment - Much to Observe & Engage In

- Mixing the Uses Turns on the Lights - Energetic Dynamic of Mixed Uses with a Focus on Residential
- The Automobile & Parking are No Longer #1
- Civic Art as the Wise Sage of the Boulevard

The uses and character of this future land use category are driven by the recommendations of the Big Beaver Corridor Study and subsequent efforts of the Planning Commission to create new zoning techniques to implement those recommendations.

This Study provided a comprehensive analysis of the existing and potential characteristics of this important area. The planned future land uses in the Big Beaver Corridor are in large part considered mixed-use to allow for a wave of new residential development and the redevelopment of individual sites to make a more meaningful contribution to the quality of life of the City. The main difference between the various mixed-use districts planned in the Study is building height. The intended characteristics of the various districts are also very different, and are the topic of in-depth analysis in the Study. Some important recommendations of that Study are listed below.

- Moving toward the creation of distinct physical districts by building from lot line to lot line along the right-of-way rather than continuing to be a collection of isolated towers.
- Becoming flexible with land use relationships. The use of vertically integrated mixed-use commercial, office, and residential towers should be promoted. The use of prominent ground floor retail, restaurants, and cafes allows visual interest and activity for visitors and residents.
- Contain parking in structures that are shared by surrounding developments. Do not allow off-street parking to be visible from major thoroughfares.
- Landscape Big Beaver and intersecting thoroughfares with rows of mature trees.

DESIGN CONCEPT

- This will be a vibrant high-rise business and residential district.



Concept Sketch from the Big Beaver Corridor Study; Birchler Arroyo Associates, Inc.

- Pedestrian use will be promoted through massive landscaping, wide sidewalks, outdoor cafes, and public art.
- The Big Beaver Corridor Study and Big Beaver Development Code provide for a specific land development pattern.
- Architectural design must create an interesting visual experience for both sidewalk users at close range and for those viewing the skyline from a distance.

SITE DESIGN ATTRIBUTES

- Parking should be located in rear yards.
- Development should include intense street tree planting along Big Beaver.
- Cafes, plazas, parks, and similar amenities to draw pedestrians will be encouraged.
- Buildings will frame the street network by building to the front and side property lines. Exceptions for cafes, plazas, and access roads may be permitted.
- Appropriate transition with abutting single family residential neighborhoods.

BUILDING DESIGN ATTRIBUTES

- Buildings should rise in height toward Crooks Road in the east-west direction.
- Buildings should rise in height toward Big Beaver in the north-south direction.
- Ground level stories should be a minimum of twelve feet in height with large expanses of transparent glass.



Big Beaver Corridor Study; Birchler Arroyo Associates, Inc.

- Fenestration at the ground level should be highlighted through the use of awnings, overhangs, or trim detailing, and building caps or roofs should provide a visually interesting skyline.

Rochester Road: Green Corridor



- Regional model for a green corridor
- A strong focus on access management
- Heightened emphasis on strong stormwater management techniques
- Retail catering to regional traffic
- Innovative site design techniques applied through PUD use to allow for redevelopment for shallow lots

Rochester Road carries high volumes of traffic causing backups at intersections. The abutting development pattern from Big Beaver Road north to Long Lake Road is a continuous row of highway-oriented commercial uses. North of Long Lake Road, the land use pattern evolves, becoming a mix of commercial and office near the intersections and older single-family homes and multiple-family complexes in between.

If Rochester Road is to have a defined role and pleasing character in the City, it must undergo a significant transformation over time. Ultimately, the Rochester Road Corridor will become a regional showcase for effective stormwater management and enhancement of the natural

environment, while encouraging a combination of high-quality land uses. Effective landscaping focused on native plantings and improved land use and access management along Rochester will create a green corridor that provides a high level of service for motorists and which provides an effective natural buffer between high traffic volumes and people visiting adjacent properties. The creation of this green corridor would occur primarily in the right-of-way along road frontages and in the median of a future boulevard.

While the emphasis on innovative stormwater management is specifically called on for the Rochester Road Corridor, new low-impact techniques are to be encouraged elsewhere throughout the City of Troy. As noted in Chapter 7, innovative stormwater management is a priority for the community. Rochester Road will play an important role in this City-wide initiative by proving a regional showcase for such techniques.

New construction along the corridor may include detention and retention basins that work together from site-to-site with other features to create a continuous, linear landscape feature. By connecting properties, the basins create visual relief from traffic. Low impact development methods will be used throughout the corridor to filter stormwater runoff. Rochester Road will also be characterized by effective new signage, high-quality lighting, and effective, complementary site and architectural design.

Uses along Rochester Road will include a variety of mixed uses, establishing a pattern where the most intense mixed-use or non-residential development will occur on the parcels that are adjacent to the main intersections. Lower-impact uses, such as small scale retail or residential, should be encouraged along the corridor between higher intense uses at the intersection and adjacent neighborhoods.

DESIGN CONCEPT

- Commercial strip development should be limited and gradually replaced with mixed-use.
- Commercial development should be encouraged to expand in the form of dense multi-story mixed-use concentrations at major

intersections. Concentrations are limited to within 1,000 feet of the intersection.

- The areas between nodes should develop as lower-rise office and multiple-family. The height differences encourage a visual “pulse.”

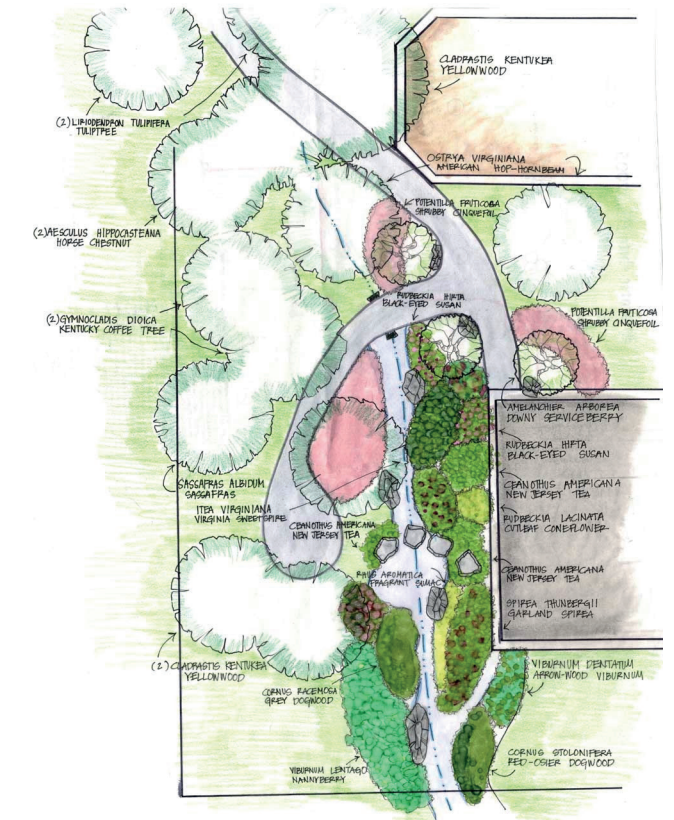
SITE DESIGN ATTRIBUTES

- Parking areas should be within rear yards or interior parts of the site. A single row of parking may be appropriate in front and exterior side yards in limited applications.
- Parking will connect to adjacent sites, eventually linking several developments with a rear access lane. The number of drives connecting to Rochester Road should be minimized.
- Defined internal walks will connect the businesses and buildings together.
- Internal walks will be connected to the public sidewalk system.
- Buildings will be separated from street traffic by a greenbelt or sculptural storm water detention basin.
- Height and size of signage will be reduced to contain visual clutter.
- Appropriate transition with abutting single family residential neighborhoods

BUILDING DESIGN ATTRIBUTES

- The height between nodes should not exceed two stories.
- Ground level stories should be, at a minimum, twelve feet in height, with large expanses of transparent glass at intersection nodes.
- Fenestration for the ground level of buildings in nodes will be accentuated through the use of awnings, overhangs, or trim detailing.

Additional goals, policies, and strategies for Rochester Road are set forth in the Rochester Road Special Area Plan on Page 113.

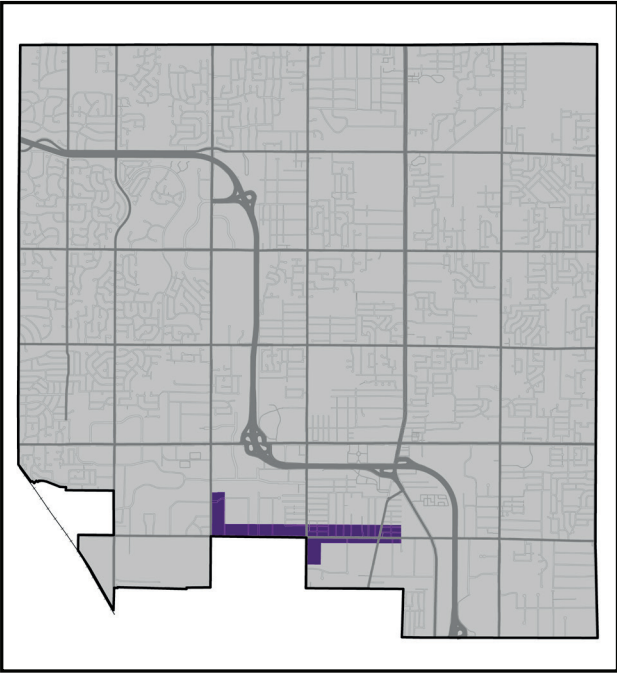


Design for a Rain Garden in Troy; City of Troy



**Lovell Pond in Troy; an example of an innovative, urban stormwater basin;
Photo by Jennifer Lawson**

Maple Road:
Mixed-Use



- **Predominantly industrial area but with limited opportunities for transitional or service-oriented uses that complement the primary adjacent industrial areas**
- **Potential for urban-style open floorplan housing in redeveloping areas**
- **Focus on the quality of access management throughout Maple Road**

The Maple Road Corridor provides an opportunity for new, emerging land use types in the City of Troy. Limited development of industrial-style three to four story buildings with open-floorplan housing, developed in a transit-oriented setting, for instance, may be appropriate in some places. This type of development would help diversify the City’s housing stock and provide a more effective

buffer between the Corridor and the industrial uses located in the immediate area. Uses designed to support the workforce in the area may also be appropriate. Local commercial or small, mixed-use developments having a combination of such uses could greatly improve the character and image of this area. Such amenities would also help smaller, local industrial uses to recruit the best workforce.

DESIGN CONCEPT

- This area will be a high-quality, eclectic mix of land uses and architectural types.
- Emphasis should be placed less on land use and more on building and site design. Design should not reflect traditional forms of “colonial” architecture.
- Development should be linked together visually and functionally throughout the corridor.

SITE DESIGN ATTRIBUTES

- Uniform “build-to” lines guiding a uniform containment of open space within the right-of-way should be established.
- Primary parking areas should be within rear or interior side yards.
- Landscape design creativity will be encouraged by setting general parameters relating to environmental sustainability such as limiting stormwater runoff.
- Larger sites with deep set buildings should redevelop with buildings near the Maple Road right-of-way line.
- Mass transit stops should be accommodated.

BUILDING DESIGN ATTRIBUTES

- Maximum height should not exceed four stories and limited to two stories for properties abutting single-family residential neighborhoods.
- Design creativity with regard to materials will be encouraged, although low quality materials or building designs that inhibit activity on the corridor will not be permitted.
- Primary parking areas within rear or interior side yards.
- Landscape design creativity should be encouraged by setting broad general parameters relating to environmental sustainability such as limiting stormwater runoff or reusing gray water for irrigation.

Additional goals, policies, and strategies for Maple Road are set forth in the Maple Road Special Area Plan.

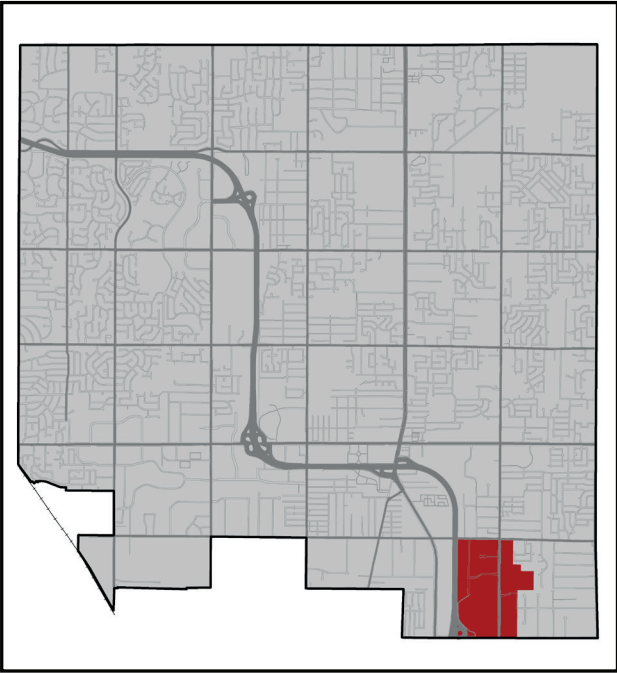


Maple Road may provide a unique venue to expand opportunities for public art placement and for area artists to work and live.



New loft style, open floorplan residential development in Nashville

South John R Road:
Connections



- Provides a significant entryway into the City
- Walkable, mixed-use development and redevelopment
- Provides a central focus for the southeast area of the City
- Enhanced focus on Transit Oriented Design

The South John R Road future land use designation is reserved for Oakland Mall and the immediate surrounding area along John R Road. This classification is intended to allow for the continued operation and long term improvement to the area, focused on the provision of “comparison” commercial products. This area serves a large region, beyond the City of Troy, and blends with the area to the south, outside the City’s boundaries.

However, the City recognizes that the nature of traditional retail is changing throughout the United States and that many conventional enclosed shopping centers are being

redeveloped into a variety of new uses. Mixed-use developments with office and residential, and walkable outdoor shopping centers are two examples of uses that have replaced former enclosed shopping centers. The current configuration of Oakland Mall and its surrounding area may no longer be competitive in the near future and may necessitate additional study for this area.

Redevelopment in this area should carefully consider the opportunity for restoration of natural features. Existing underground drains, for instance, should be analyzed for potential to be integrated within redevelopment projects, native landscaping and innovative stormwater management techniques should be considered in the area. The resurrection of urban waterways may provide an opportunity to introduce a valuable asset and differentiating feature for redevelopment projects in the South John R area.

Arcadia Creek Festival Place in Downtown Kalamazoo, Michigan, offers an excellent case study of the renovation of an historic urban stream to create a new, vibrant urban gathering place.

DESIGN CONCEPT

- This area will be a mix of retail, office, and higher-density uses in multi-story buildings in an urban village.
- Building height will increase toward the center of the site.
- Height should not compete with the Big Beaver area.
- This area of opportunity will transform to a district of linked developments accentuated by significant landscaping and open space to off-set the increased height and density.
- Workforce housing, a part of the City’s economic strategy, can be incorporated here.

SITE DESIGN ATTRIBUTES

- Buildings setback from the major road right-of-way should have a minimum distance that permits a greenbelt, single row of parking, and wide sidewalk.
- Primary parking areas should be within rear or interior side yards, separated into modest-sized components for better storm water management and landscaping
- Internal walk system connects businesses, adjacent developments, and the public sidewalks. Walks designed with trees, landscaping, water features, or similar features to enhance the experience.
- Stormwater detention should be captured in pedestrian friendly landscaped designs.
- Mass transit stops should be accommodated.

BUILDING DESIGN ATTRIBUTES

- A maximum of three stories or equivalent height in feet should be allowed at the perimeter of a site.
- A minimum of three stories and maximum of six stories or equivalent height in feet should be allowed near the center. One-story retail buildings should have a minimum height of twenty four feet.
- Ground level stories should have a minimum height of twelve feet from finished floor to finished ceiling.
- Facades should be over half transparent glass.
- Entries must be well-defined.
- Fenestration should be highlighted through the use of awnings, overhangs, or trim detailing.

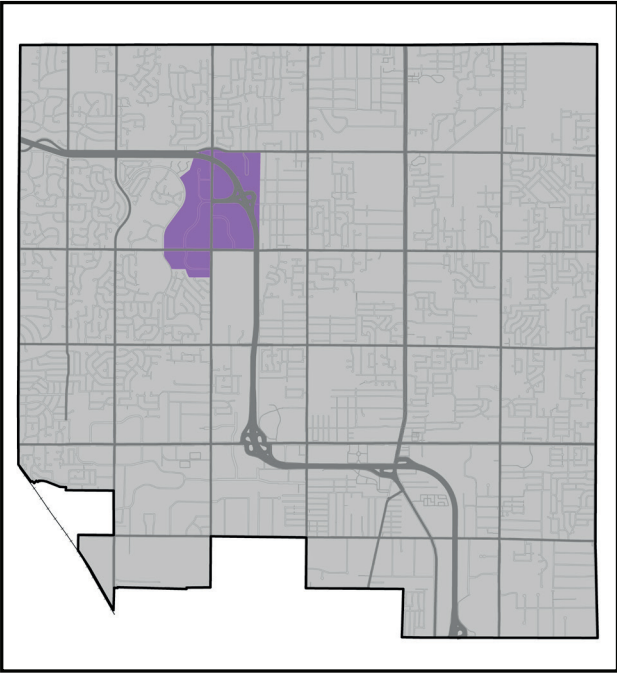


Walkable, mixed-use development with integrated parking



The San Antonio Riverwalk

Northfield:
A Focus On Innovation



- A complement to the Smart Zone but with an even broader mix of uses
- Outlot development to provide services to workers in the area
- Consistent site design throughout the District to create a unique identity

The Master Plan identifies two primary districts for the encouragement of 21st Century, Knowledge Economy business development. The Smart Zone is situated along Big Beaver Road and an area to the south, along Interstate 75. Northfield, the second office and research area, is similar to the Smart Zone in its makeup but will reflect its own unique style of development.

In terms of use, the emphasis in Northfield will be placed on office and planned research-office uses. Other uses primarily relating to the support of workers and activities in Northfield, such as supporting commercial uses, will also be considered on a limited basis. Residential uses, traditional industrial uses, and regional

commercial uses will be encouraged within mixed-use developments only when they are designed to support the primary function of the Northfield area.

Medical, professional, general, service-related office uses, and research - based uses, especially those planned in a campus or park-like setting, will be the primary focus in Northfield. These uses are intended to be enclosed within a building, and in the case of research and development uses, external effects are not to be experienced beyond their property boundaries.

DESIGN CONCEPT

- The contemporary architectural image should be continued.
- Infill construction will provide a physical link between semi-isolated towers.
- Demarcated crosswalks, an internal and external walk system, and plazas/pocket parks will support physical linkages.
- Higher-density housing of twenty units per acre will be encouraged at the immediate periphery.
- Streets will be framed and the public right-of-way space will be delineated.

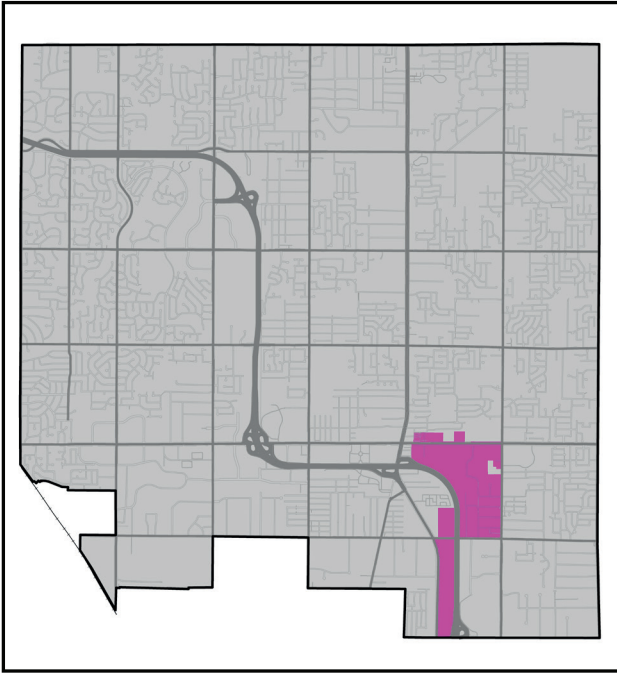
SITE DESIGN ATTRIBUTES

- Primary parking areas will be within rear or interior side yards and separated into modest-sized components by stormwater management and landscaping.
- Walks will connect businesses, adjacent developments, and public sidewalks.
- Stormwater detention should be captured in pedestrian friendly landscape designs.
- Outdoor cafes, plazas, pocket parks, and similar pedestrian amenities will be key features.
- Mass transit stops should be accommodated.

BUILDING DESIGN ATTRIBUTES

- Ground level story should have a minimum height of twelve feet from finished floor to finished ceiling.
- Facades should be half transparent glass.
- Entries should be well-defined.
- Fenestration on the ground level should be highlighted through the use of awnings, overhangs, or trim detailing.

The Smart Zone:
Big Beaver and Beyond



- A special focus on high-technology uses that complement one another
- Potential high-density housing in proximity to 21st Century knowledge economy employers
- Regionally prominent location for technologically advanced companies

The Smart Zone was strongly emphasized in the Big Beaver Corridor Study and is the only proposed district within the Study to be called out specifically as a Future Land Use category in the Master Plan. The Study envisions the Smart Zone as a unique area dominated by high-technology uses which are at the cutting edge of innovation. The Study calls this location a “paragon of innovation” and prescribes a combination of “signature” light industrial, research and development, and office uses.

The Master Plan uses this category in an area expanded beyond the boundaries shown in the Big Beaver Corridor Study. The area south of the main Smart Zone area, situated around Interstate 75 provides an opportunity to foster additional Smart Zone uses and development.

Furthermore, much of this area is occupied by vacant or underutilized office and industrial facilities that could be readily redeveloped into Knowledge Economy uses or into uses that work in direct support of those uses. This area is highly visible from Interstate 75. Business-to-business functions, such as materials suppliers or office support uses, also represent an ideal fit in this southern section of the Smart Zone.

DESIGN CONCEPT

- New construction and redeveloped properties should be set in an integrated campus environment.
- Paths, generous landscaping, water features, and similar features found in first-class business parks should be infused throughout the site.
- Mass-transit stops should be located along routes to accommodate the workforce.

SITE DESIGN ATTRIBUTES

- Primary parking areas will be within rear or interior side yards and separated into modest-sized components by stormwater management and landscaping.
- All parking should be screened from view by landscaping or walls.
- Walks should connect businesses, adjacent developments, and the public sidewalks.
- Stormwater detention should be captured in pedestrian friendly landscaped designs.
- Mass transit stops should be provided on the exterior and within the interior of the district.

ARCHITECTURAL ATTRIBUTES

- Height should be encouraged in cases where the development makes unique contributions to the area.
- Non-industrial portions of businesses should face the street system.
- Durable metal, glass, masonry, and other materials should be used to promote the scientific image of emerging technology.
- Entries should be well-defined.



Automation Alley Technology Park in Troy; Photo by Brent Savidant

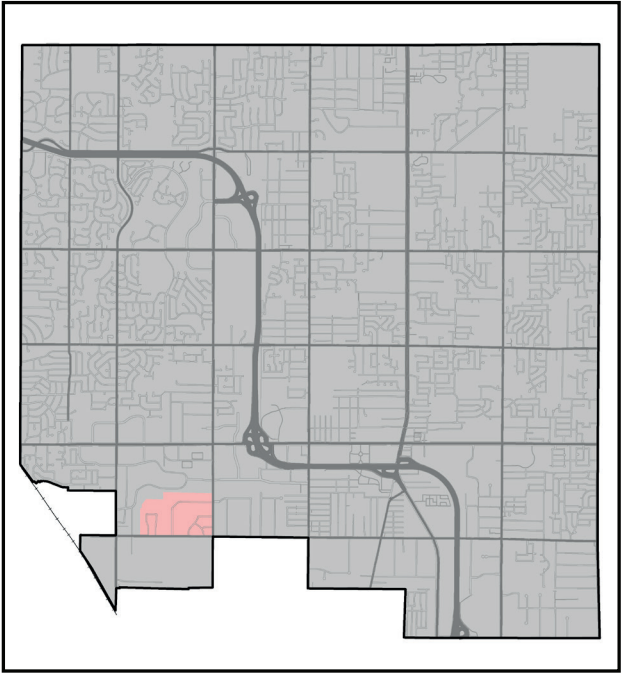


Ford Rouge LEED Rated Assembly Plant and Visitor Center



High-tech industry within the Smart Zone; Photos by Brent Savidant

Automall: A Unique Approach & Competitive Advantage



- **A coordinated collection of automobile sales lots that have a competitive advantage in that they provide a comparison shopping experience in one area**
- **New development should include walkable elements to allow for users to experience more than one dealership without moving their car**
- **Coordinated site design characteristics throughout the area**

The Automall is a category that is unique to Troy. This area is home to a comprehensive collection of retailers of nearly every automobile make in the country, and their grouping in one small, planned district provides a distinct advantage over similar automobile retailers around the region. In this location, potential buyers can see a variety of makes and models up close and make more informed buying decisions. The City continues to encourage the development of the Automall for this purpose. While the predominant use in this location is auto dealerships, other ancillary uses directly relating and in support of these dealerships will also be considered.

Auto dealerships in the Automall should be encouraged to develop outstanding automotive displays and engaging facades. The combination of these upscale automobile dealerships in a dense collection, offering unique permanent displays, will complement one another to create a showcase for automotive design as well as for automobile sales and service.

The Michigan Design Center, located at the northwest corner of the Automall area on Stutz Drive, provides a unique asset for Troy. This facility offers a unique collection of over 40 showrooms in a 215,000 square foot facility. These showrooms display the latest in home furnishings and interior design elements. Primarily geared toward design professionals, the facility also provides an exceptional resource for design students. Potential future opportunities for open floorplan, artist-loft residential development, or other land uses located to capitalize on and strengthen the relationship to the Michigan Design Center should be strongly encouraged in the western section of the Automall area.

DESIGN CONCEPT

- The unique atmosphere of the Automall will be enhanced. Vehicle displays will provide the enhancement.
- Showrooms will provide the setting for the people and products.
- Large expanses of transparent glass and uniquely designed outdoor lighting will define the experience.

SITE DESIGN ATTRIBUTES

- Install pervious surfaces for walks and low-use parking areas to limit surface stormwater runoff.
- Development should conform to a uniform “build-to” line corresponding to the line of existing buildings.
- Support businesses for the dealerships shall locate on Maple Road and not infill between dealerships.

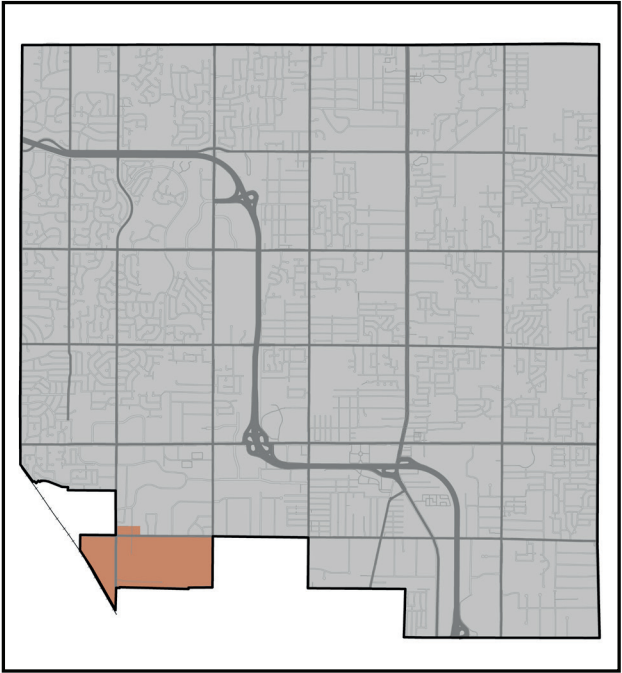
BUILDING DESIGN ATTRIBUTES

- Showrooms should have a minimum height of sixteen feet.
- A minimum of 75 percent of a showroom façade should be sheathed in transparent glass.
- Support businesses not conducting individual customer sales will locate the office portion of the business along the public street. Site and building maintenance will be the primary design emphasis.
- Dealerships should visually differentiate themselves from one another; the variety of architectural styles will enhance the diversity of the product offerings.



High quality display area within the Automall; Photo by Brent Savidant

The Transit Center: Air, Train, and Transit in a Unique Setting



- **Uses focused on providing pedestrian access**
- **New infill development designed to be compact and complement the Troy/ Birmingham Transit Center and airport**
- **Integration of new transit options as they become available will make this area a true hub for multi-modal transportation and a gateway for the community for those entering by rail, plane, or bus, or for those people seeking a rental car**

The Transit Center is a mixed use area made up of a complementary combination of residential, commercial, and service-oriented land uses. This mixed-use area is centered between the existing Oakland/Troy Airport and the planned Troy/ Birmingham Transit Center.

The combination of air, rail, bus, and non-motorized transportation in one compact area, supported by a high-density residential development and regional commercial uses, will work to create a vibrant gateway to the southwest corner of Troy.

The Transit Center provides a unique amenity to the area in that it will ultimately evolve into a fully walkable area where visitors to the City can experience a variety of activities and enjoy access to more than one transportation option to get around Troy or the Southeast Michigan Region. The continuation of the existing development pattern in this area is encouraged, as are the long-term infill of existing open areas and underutilized parking areas with uses complementary to the vision of a vibrant multimodal transit hub. Cooperation with the City of Birmingham provides a valuable opportunity for establishing a strong working relationship with adjacent communities. The Troy Oakland Airport is a critical part of the Transit Center.

DESIGN CONCEPT

- This will be a high-density, mid-rise area in close proximity to the proposed train station and business airport.
- The area will become a lively village for residents and business customers alike.
- The amount of surface parking will be limited.

SITE DESIGN ATTRIBUTES

- New construction will provide parking at the periphery of development sites.
- The internal street network is encouraged to use a grid pattern of access streets to divide the larger area into a network of development “blocks.”
- Stormwater detention will be captured in pedestrian friendly landscaped designs.
- Outdoor cafes, plazas, pocket parks and similar pedestrian amenities will be key features.
- Non-motorized transportation will be encouraged and enhanced by pathways and storage for bicycles, rollerblades, skateboards, and new emerging types of personal transportation.

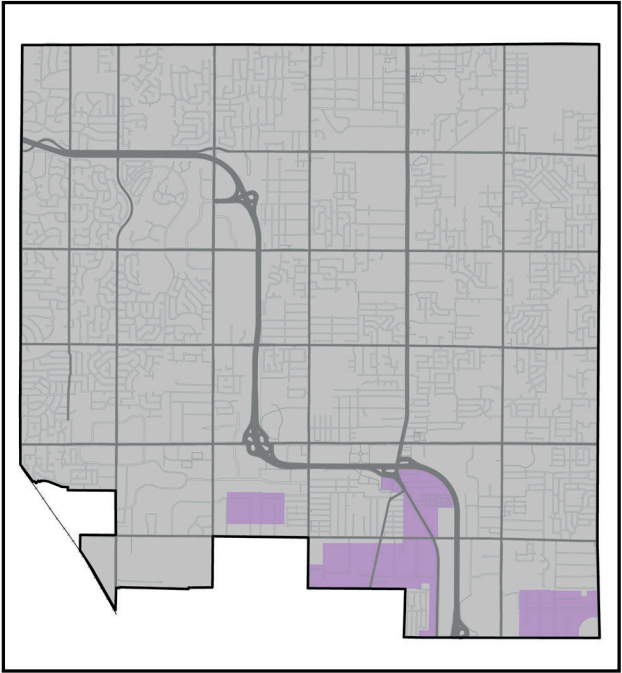
BUILDING DESIGN ATTRIBUTES

- Height should be between two and four stories or equivalent height in feet. Federal Aviation Administration requirements limiting building height take precedence.
- Building massing will frame external and internal streets.
- The ground level story should have a minimum height of twelve feet from finished floor to finished ceiling.
- Facades should be at least half transparent glass to promote connectivity between the interior private space and exterior public space.
- Entries will be well-defined.
- Fenestration should be highlighted through the use of awnings, overhangs, or trim detailing.
- Materials that instill a sense of permanence will be encouraged.



CALDOT Transit-Oriented Development in Oakland, CA City Center

**21st Century Industry:
A New Opportunity for Growth**



- Continued encouragement of a variety of industrial uses
- Light industrial uses with no outdoor storage or external nuisances are especially encouraged
- The emphasis for site design should be on screening, landscaping, buffering, and effective transitioning to allow this important category to succeed without negative impacts on residential or commercial areas of the City

The 21st Century Industry classification provides areas for conventional manufacturing and assembly uses but with a broader interpretation of what industrial areas can become. In addition to conventional industrial uses, shops, and warehousing, this category can be home to business-to-business uses that don't require a significant public presence but which work in tandem with the Knowledge Economy uses encouraged within the Smart Zone and Northfield. Suppliers, fabricators, printers, and many other supporting uses which strengthen the City's appeal as a home to 21st Century businesses are all encouraged in this category.

An alternative use that may be considered on a very limited basis in the 21st Century Industrial area is loft-style residential development in reclaimed industrial buildings. Opportunities for artist lofts and open-floorplan residential development may exist within new, innovative, mixed-use projects. Such projects would be an ideal fit within the 21st Century Industrial area. Such housing will only be considered when all potential environmental limitations have been identified and, if necessary, neutralized.

The majority of the industrial property in Troy surrounds the Maple Road and the southern portion of Troy. Existing land uses along Maple Road vary widely and do not have a clear, identifiable character. Maple Road is primarily experienced as a series of nodes that center on north-to-south traffic leading into and out of Troy from the Big Beaver Corridor. For this reason, Maple Road is planned as a series of areas designed to support the Big Beaver Corridor and the Smart Zone, such as the business-to-business uses noted above.

DESIGN CONCEPT

- This area will recognize that manufacturing and distribution will continue to provide valuable jobs and a tax base. Emphasis will be on maintaining a strong image by concentrating on site and building maintenance as well as redevelopment, rather than redevelopment alone.
- Code enforcement will be a critical tool to maintain the visual and physical health of the district.
- As land becomes available, green space should double and storm water management should improve.

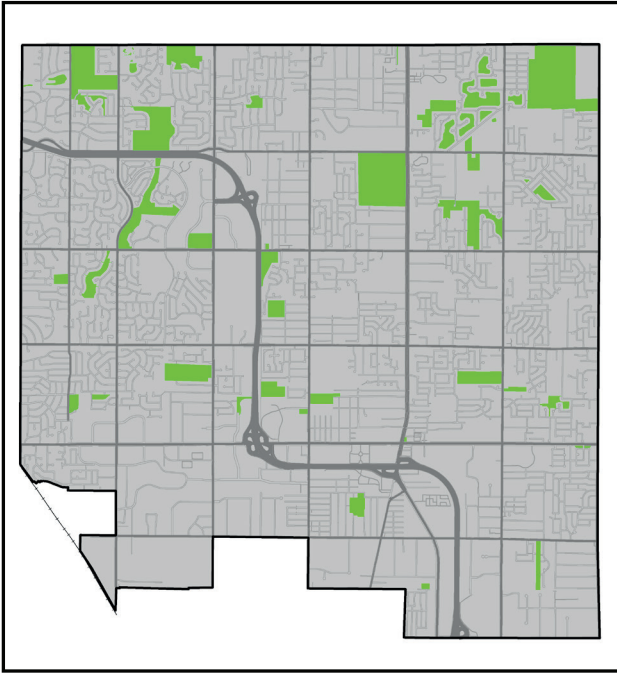
SITE DESIGN ATTRIBUTES

- Primary parking areas are located within rear or interior side yards.
- Front yards will be landscaped and well-maintained to contribute to an improving image.
- Green space will be placed along property perimeters to assist with controlling surface stormwater runoff.

BUILDING DESIGN ATTRIBUTES

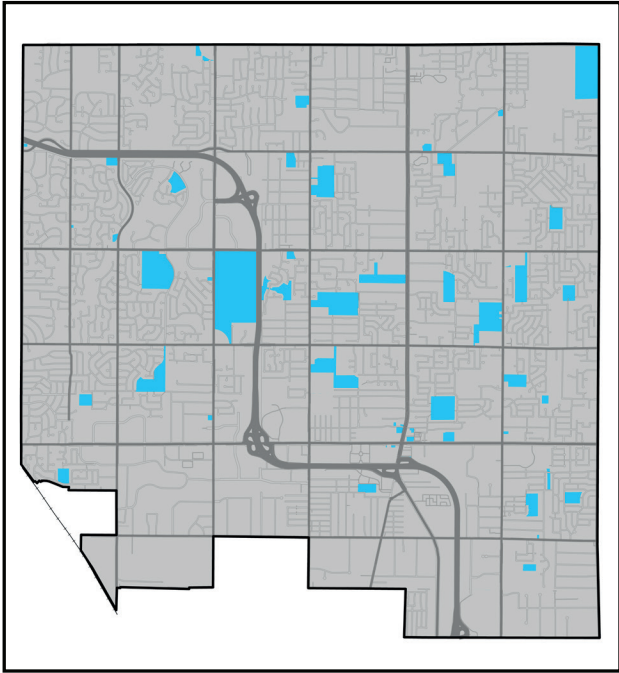
- The office portion of industrial developments will locate nearest to the public street.

Recreation and Open Space:
Extraordinary Amenities



The designation of Recreation and Open Space provides areas for both active recreation and conservation of natural resources. This land use can be either publicly or privately owned. Maintenance of these areas are essential to the preservation of fish and wildlife habitat, water quality, wetlands, scenic amenities, and outdoor recreation opportunities. Other significant areas are designated throughout the City and include private parks and common open areas associated with other private development.

Public and Quasi-Public: The
Foundation of Troy's Neighborhoods



The Future Land Use Plan designates existing areas set aside for institutional uses such as schools, cemeteries, and other public and quasi-public activities. These sites are scattered throughout the City and are often at the center of the social neighborhood. Schools, especially, play a large role in the creation of social neighborhoods and provide a community center function.

This category also includes the Civic Center site, which contains the main operations of the City of Troy. Since the acquisition of the former Troy High School site in 1993 and construction of the Troy Community Center, this location has empowered the City to greatly enhance its operations and plan for future growth, which provides the City with an outstanding opportunity to showcase innovative and responsible development practices in a visible location. It is expected that the current City, Court, and Library functions will continue at the present location.

This future land use category also includes the Beaumont Health Care Campus on Dequindre Road. The City supports the long term development of this site and encourages its growth and success.

Finally, the quality of utilities and service are inextricably tied to the quality of living, working and conducting business in the City. This category includes some areas reserved for meeting the basic needs and expectations of City residents through utility installations. Detention and retention basins are also included in this category.

10 – Special Area Plans

Special Area Plans

132 // Rochester Road
150 // Maple Road
182 // North Troy

As part of the 2015 Master Plan update, the City undertook a special area study of four areas of the city: Rochester Road, Maple Road, North Troy, and Big Beaver.

The Michigan Planning Enabling Act, PA 33 of 2008 requires that the Master Plan shall be reviewed by the Planning Commission at least every five (5) years. The purpose of such review is to determine if the Plan requires revision. The Planning Commission reviewed the Plan and made a determination that a complete revision of the Plan was not necessary, although there were several specific areas of the Plan which should be addressed.

While the Future Land Use Plan ensures compatible

and coordinated growth throughout Troy, there are identified areas of the City that are undergoing significant change. In those areas where substantial development and redevelopment activity is likely, special area plans provide an illustrative framework to guide development in a way that fosters a sense of place and establishes community identity in key locations. The plans are intended to act as a catalyst for future economic redevelopment within the boundaries established by each plan.

The plans provide schematic representations of potential development areas at a variety of scales and levels of detail and may include illustrative configurations for new streets, buildings, parking, open space, and circulation as may be appropriate to the area. They are accompanied by descriptive text that explains existing site characteristics, planning challenges, design considerations, and planning goals for each area.

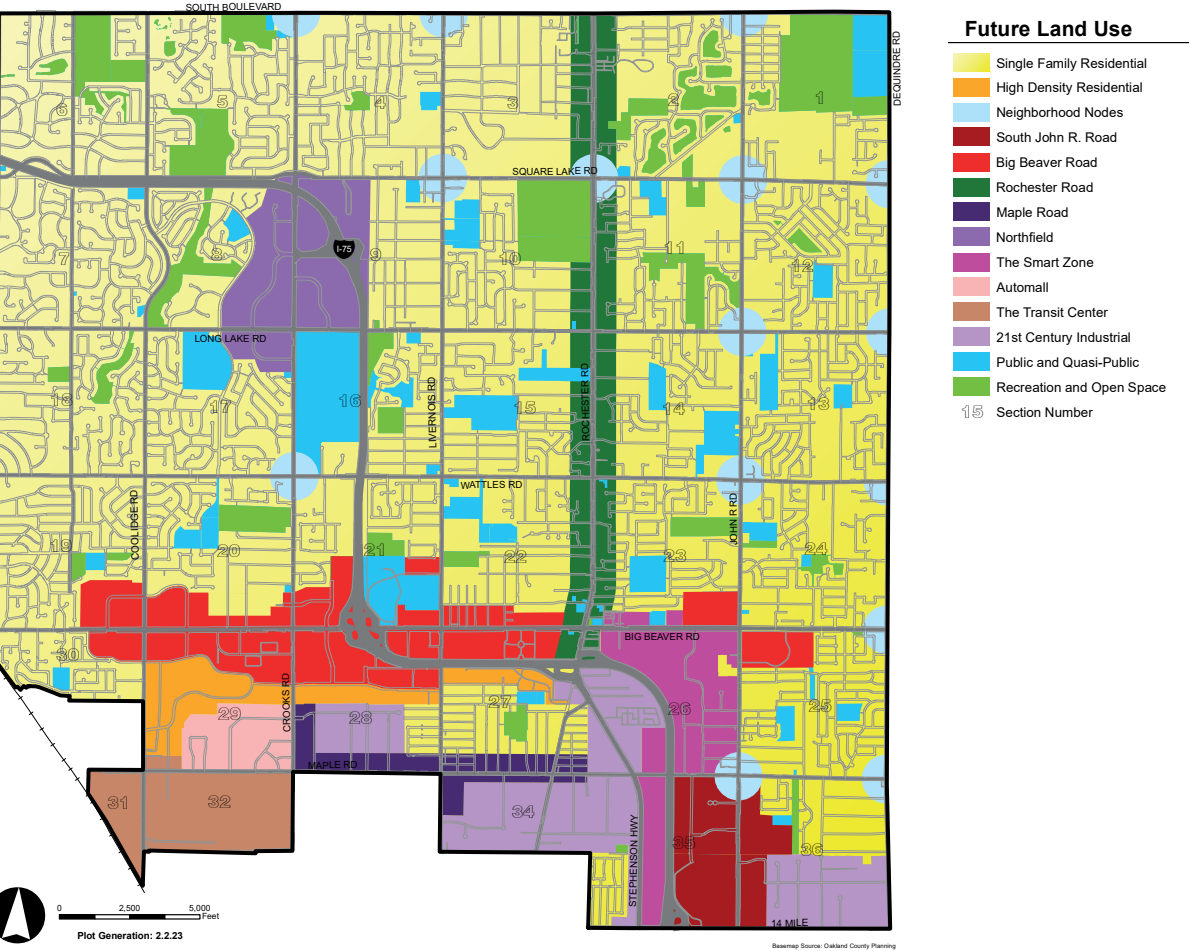
Public Engagement

The City pursued a unique approach in public engagement by holding a series of targeted forums focusing on specific issues. Feedback from the community guided the overall direction of the plan. The following summarizes the content of each forums:

Real Estate Forum

The City of Troy hosted a Real Estate Forum on Tuesday, April 29, 2014 at the Troy Community Center. Over 60 community leaders, business owners, real estate developers, and interested citizens participated in a productive dialogue regarding the future direction of key economic areas of the City, specifically Maple Road, Big Beaver, North Troy, and Rochester Road. Participants were presented with target area snapshots and were asked to identify and describe the assets and challenges of these four areas. Participants also offered strategies

Target Area	Geographic Area	Focus of Study
1. Maple Rd and IB Zoning Area	The Transit Center, Maple Road, 21st Century Industrial, and the Smart Zone as described in Master Plan that are located along Maple Road/ Stephenson Road and south to the city border	Market issues, pedestrian circulation, and minor zoning code amendments.
2. Rochester Rd	Big Beaver Road to Wattles Road	Address concerns of adjacent neighbors regarding height, and land use buffers and transitions. Will require amendments to zoning regulations for GB and CB.
3. North Troy	The Northfield area as described in Master Plan	Office vacancy and diversifying land uses



for reinforcing assets, re-envisioning challenges, and ultimately attracting new development that is right for the corridor and the community. Participants emphasized the need for collaboration between City departments and community stakeholders as well as a coordinated vision that is responsive to market demands and focused on quality of life. By building on the unique strengths of each area, activating established nodes, and reinforcing new development with pedestrian amenities, transit connections, and a desirable mix of uses, those sites that were once viewed as challenges will appear as opportunities for reinvestment.

Key takeaways from the Real Estate Forum:

- Density is key
- Plan should be market driven and forward thinking
- Transportation and pedestrian improvements are important
- Zoning should align with the Master Plan and offer flexibility to encourage the right development at the right time
- North/South corridors provide important connections between the target areas and adjacent communities
- Residential development should attract and accommodate different ages, lifestyles, and income levels
- New developments should be connected
- Strategic, tactical, and creative placemaking strategies can activate node

High School Forum

In order to gain input from the future leaders, a session way held with twenty high school students (ten each from Troy and Athens High Schools). The students were intended to serve as a cross-section of the high school population. The students were quite impressive and were motivated at their responses. Attendances were asked to use one word to describe Troy today and one word to describe Troy in 10 years: The students were then asked a series of questions about Troy including what they like best about living in Troy, what they like least, their desire to move back to Troy after school, and Troy’s most pressing needs. The full results are located in

the appendix. The students enjoy the quality of schools; however most students noted that they do not plan on moving back to Troy in the future. If they did move back to Troy it would be because of family and the quality of the schools. They note that Troy is missing entertainment options, and “cool” housing options, and does not provide walkable or bike-able places. Most students desire to live in a big city after college graduation.

Neighborhood Association Forum

City of Troy hosted a neighborhood forum with Presidents and representatives from the various neighborhood associations. All geographic residential portions of the city were represented. We started the discussion with asking those in attendance one word to describe Troy today and one word to describe Troy in 10 years: Participants were asked a series of 15 questions. The full results are located in the appendix. The questions focused on neighborhood issues affecting their neighborhoods including property upkeep and maintenance, transportation improvements, land use transitions and buffers, desired community amenities, and need for housing options. There were two big takeaways from the neighborhood forum discussion. The first takeaway was that residents like living in Troy and cited a number of reasons including high quality of the public schools, entertainment options, safety, and housing stability. Maintaining a quality school district was cited of critical importance, especially for neighborhood and property value stabilization. The second major takeaway was the biggest issue facing Troy is a lack services within walking distance and lack of non-automobile transportation options.

Boomer and Shaker Forum

The City of Troy hosted a “Boomer and Shaker” Forum on Monday, August 17, 2015 at the Troy Community Center. The purpose of the forum was to meet with Troy residents to identify issues and determine strategies to ensure Troy assists its aging population and creates an aging friendly place. The intent was to focus on issues facing Troy’s boomer and senior population but also

address issues that cross-generational lines:

- Housing
- Transportation
- Placemaking
- Walkability
- Safety and Security
- Health Services
- Recreation and Cultural Activities

Over 80 community residents participated in a productive input session to make Troy an aging friendly location.

Most of the participating residents are likely to remain living in Troy as they age. Many noted the high quality of life living in the City. For those that identified that they are likely to leave Troy, the most listed reason was a lack of housing option and a lack of transportation options. Underserved senior housing options and a need for increased public and dedicated senior transportation options was a common discussion point of the Forum.

The first major takeaway was there is an identified underserved housing type of senior-friendly housing such as smaller, single-family homes, condominiums, or apartments with first floor master bedrooms. Housing affordability was listed as a significant housing limitation. Many remarked that they are on a fixed income and cannot afford a \$400,000 house/condo. They noted that affordable, smaller housing options are difficult to find in Troy and the City should push development of those types. The second major takeaway was the need for improved transportation options, particularly serving seniors. Most attendees noted that because they are able to drive they are able to obtain their daily needs (health services, retail goods, social, recreational, and cultural). However, they are unsure if they will be able to once they are unable to drive.

To improve transportation options, the City should work with SMART to increase bus hours and locations. While Medi-go, a transportation service for Troy disabled residents and those age 60, provides a valuable service, the hours are limited and should be expanded. Medi-go should be complimented with a dedicated transportation system or on-call shuttle service for seniors

for daily needs in addition to just medical appointments, like grocery shopping, recreation activities, etc. Lastly, the City should focus on improving the sidewalk system and street crossing at major thoroughfares, and build trails.

Troy Today	Troy in 10 Years
Versatile	Fun
Peaceful	Advanced
Family-oriented	Utopia
Upscale	Safer
Quiet	Educated
Potential	Expanded
Diverse	More Diverse
Well-rounded	Innovative
Residential	Modern
Safe	Creative
Fun	Changing
Busy	Less-Congested
Close	Professional
Engaging	Busy
Boring	Beautiful
Suburbia	Affordable
Opportunity	Home-owner oriented

Troy Today	Troy in 10 Years
Suburban	Advanced
Future	Economic Leader
Random	Attractive
Evolving	Progressive
Bedroom-community	Education
Attractive	Birmingham; More Parking
Youth	Envied
Opportunity	Futuristic
Diverse	The standard
Accommodating	Smart
Modern	Advanced

Rochester Road: Special Area Plan

Introduction

The Rochester Road corridor is a major north-south thoroughfare traversing Oakland County, with convenient access to I-75, M-59, Big Beaver Road, Maple Road, and Stephenson Highway. Recent road improvements and the creation of a boulevard have improved traffic flow along the corridor, but the vision of a green corridor as envisioned in the 2008 Master Plan has not yet been realized. Development along the corridor has been inconsistent with variation in the size and location of buildings. Other challenges include the location of parking areas, outdated façades, and nondescript architecture, landscaping, lighting, and signage. The goal of this Plan is to provide a unifying framework built around public and private improvements that will change the function and character of the corridor over time. Rochester Road has the potential to become a hub for small businesses, independent restaurants, neighborhood services, and live-work development.

Evolving to Meet New Challenges

Rochester Road offers a convenient local commercial node close to the Big Beaver corridor. Adjacent to attractive neighborhoods of primarily single-family homes in a great

school district, it is principally service and retail use. The challenge for Rochester Road is to develop an active, aesthetically pleasing, commercial corridor that will attract customers, increase taxable value, and grow the Troy economy, while protecting the adjacent residential neighborhoods.

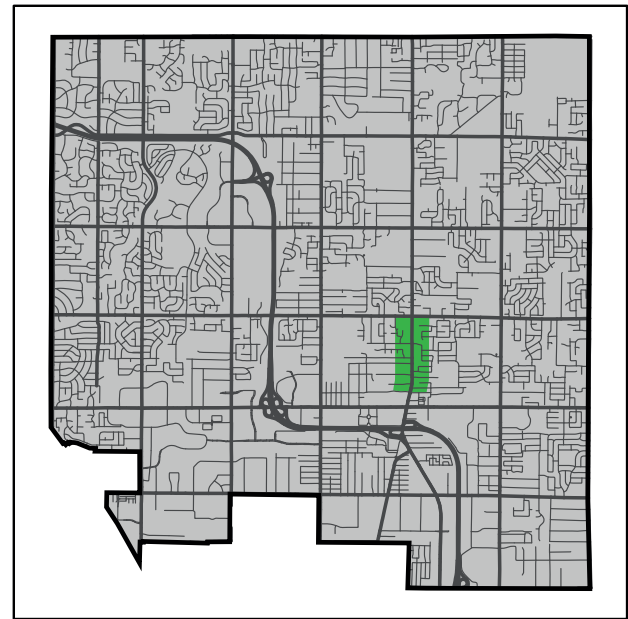
In general, the vision for the future of Rochester Road poses some contradictions. In terms of traffic, commuters are trying to get through the area as fast as possible, while residents and businesses are calling for a much slower pace that will provide a safe, pedestrian friendly environment. The new boulevard has improved traffic; however, it is only the first step to effectively addressing the pedestrian realm and access management. Continued public/private investment will be needed to transform the corridor. In terms of development, real estate professionals reiterate that “density is key” for corridor revitalization, while residents push to maintain height restrictions. The area is dominated by shallow, narrow lots with limited pedestrian access and inconsistent setbacks. Most users agree that excessive signage and inconsistent façade design result in the perception of visual clutter.

Development along the corridor has been uneven with tremendous variation in the size and scope, location of parking areas and roadway access, architecture, landscaping, lighting, and signage. The goal of this Plan is to provide a unifying framework built around public and private improvements that will change the function and character of the corridor over time. The Plan identifies three complementary concepts for dealing with these issues and creating a solution that all users will welcome. The first concept deals with restructuring the pattern of land use and development lining the corridor, the second involves incorporating the redesign of the public right-of-way, and finally, the third creates a cohesive image and stronger identity for the corridor.

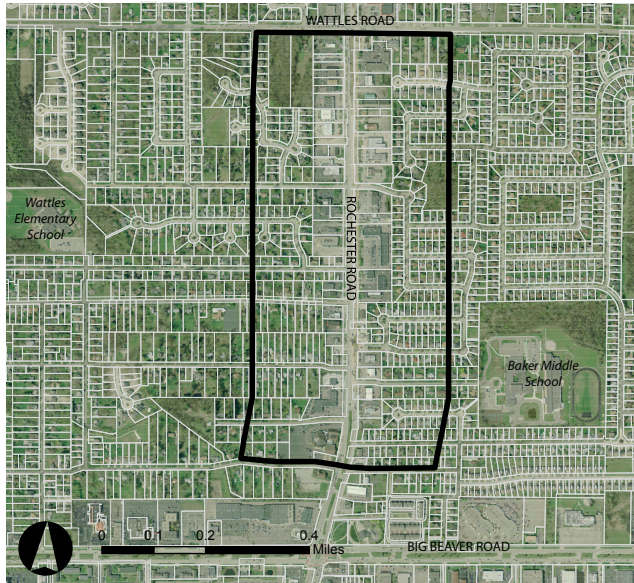
Vision Statement

Rochester Road will be a welcoming, pedestrian friendly neighborhood shopping destination known for its small business incubation and stormwater management best practices. Green infrastructure, landscaping, and streetscaping enhance the character of the corridor, while also providing a buffer between commercial areas and adjacent residential uses.

Existing Conditions



Locator map



Target Area map

2013 Target area statistics

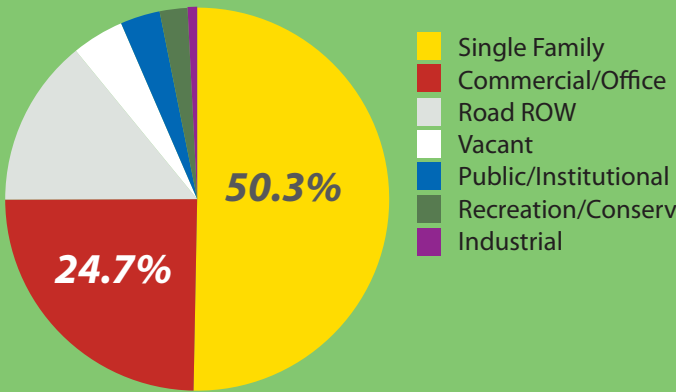
Total taxable value	\$43,612,770
Total area (acres)	164
Total businesses	131
Total employees	1,037

2010 Market area statistics¹

Population	9,651
Households	3,321
Percent owner occupied	81.4 %
Median household income	\$86,712
Per capita income	\$34,928

1: Esri 2013 Estimates Business Summary from Oakland County EDCA, Census 2010, City of Troy GIS data 2013 Note: 1. Market Area includes households within 1 mile of Target Area. 2. Employee and Business data use NAICS codes.

Land Use²



2. Land Use calculations include all parcels within the Target Area.

Property Data

	Target Area	Commercial	Industrial	Residential
Total Parcels	392	57	1	334
Total Structures	376	53	1	322
Total Acres	164	50	1	113
Median Year Structure Built		1982	NA	1976
Total Floor Area (SF)		379,321	NA	601,131
Median Floor Area (SF)		4,800	NA	1,709
Total Taxable Value	\$ 43,612,770	\$ 14,911,860	NA	\$ 28,700,910

Source: City of Troy GIS data 2013

Top Industries in Target Area by Employment³

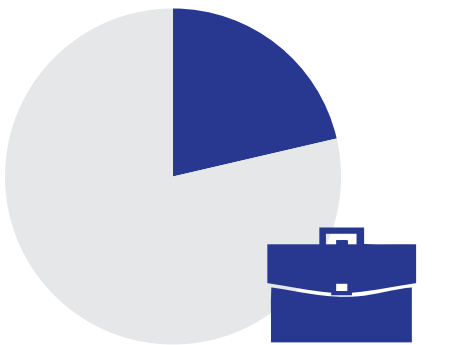


32.1% Finance & Insurance

	Employees	Percent (%)
Finance & Insurance	333	32.1
Administrative & Support & Waste Management	135	13.0
Accommodation & Food Services	124	12.0
Retail Trade	109	10.5
Professional, Scientific & Tech Services	83	8.0

3: Esri 2013 Estimates Business Summary from Oakland County EDCA

Top Industries in Target Area by Number of Businesses



21.4 % Professional, Scientific & Tech Services

	Businesses	Percent (%)
Professional, Scientific & Tech Services	28	21.4
Administrative & Support & Waste Management	22	16.8
Retail Trade	15	11.5
Other Services (except Public Administration)	11	8.4
Health Care & Social Assistance	10	7.6

Source: Esri 2013 Estimates Business Summary from Oakland County EDCA

Gateways

- Wattles Road
- Big Beaver Road

Assets

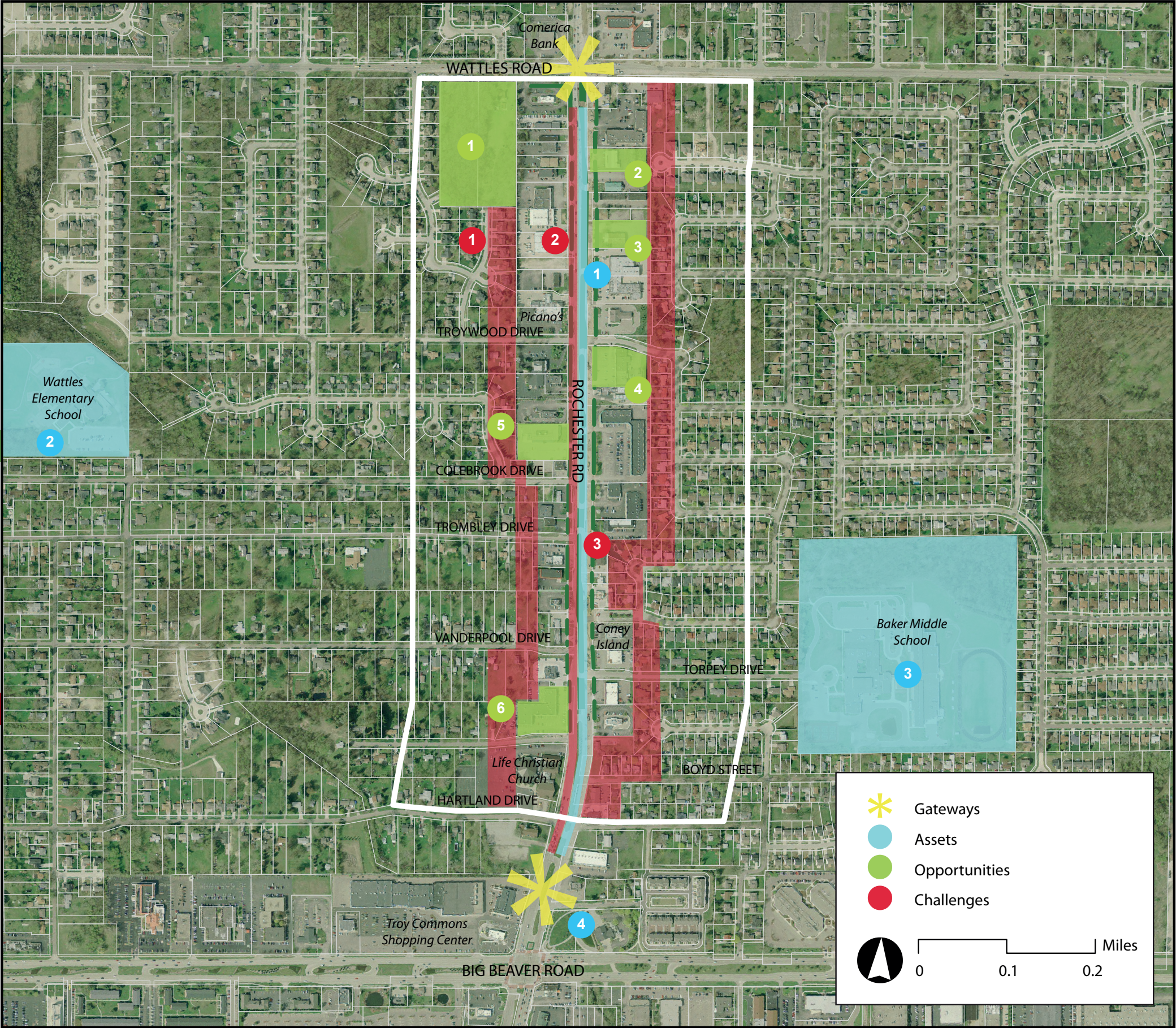
- 1: Rochester Road street improvements
- 2: Wattles Elementary School
- 3: Baker Middle School
- 4: Gateway Park on Big Beaver Road

Opportunities

- 1: Potential development site
- 2: Recent redevelopment
- 3: Potential development site
- 4: SE of Rochester Rd and Troywood Drive
- 5: NW of Rochester Rd and Colebrook Driv
- 6: Troy Pointe Plaza
- 7: Mom and Pop character

Challenges

- 1: Boundary/transition between single-family residential Boundary/transition between single-family residential
- 2: Inconsistent building setback
- 3: Shallow depth of commercial frontage



Rochester Road Public Engagement Findings

Rochester Road offers a convenient economic node close to residential neighborhoods. It is primarily service and retail use. The corridor could be marketed as the “Entrepreneurial Center” for the City as it provides an incubator for small start-up businesses. The area is dominated by shallow, narrow lots with limited pedestrian access and inconsistent setbacks. Excessive signage and inconsistent façade design result in the perception of visual clutter. New development may require the consolidation of parcels, but there are concerns from the community about increasing building heights where adjacent to residential properties.

There needs to be a conscious effort in branding Rochester Road and making it a notable place. Streetscape should not be underestimated. Sidewalk connections and pedestrian access must be accommodated in new developments. Infrastructure can be used to mask the visual clutter and give the corridor a unified image.

Considerations

- Keep integrity of residential as more commercial frontage is developed
- Reface retail and create more pedestrian friendly intersections
- Clean corridor and remove or revitalize obsolete buildings by finding incentives for redevelopment
- Reduce setbacks and parking associated with strip malls
- Develop retail and restaurants that reflect the needs of nearby residents
- Encourage senior housing and compatible uses

Priorities and Strategies

This Plan recommends three priorities for establishing Rochester Road as a vibrant and walkable corridor with ample pedestrian amenities, convenient neighborhood services, and great accessibility. These priorities and strategies include:

1. Enhance the image and identity through private investment and public/private partnerships

Strategies:

- Adopt Design Guidelines/Standards
- Establish building improvement programs
- Coordinate streetscape improvements
- Encourage innovative stormwater management

2. Improve access management

Strategies:

- Implement Rochester Road Access Management Plan between Big Beaver and Wattles Road
- Support lot consolidation
- Require consistent building and parking location placement

3. Preserve adjacent residential character and encourage compatible development

Strategies:

- Provide rear setback and landscape buffers between Rochester Road frontage parcel and adjacent residential properties

Priority and Strategy Interconnection:

These priorities and their strategies are not mutually exclusive; rather they reinforce each other and together they have the ability to attract users and spark investment and ultimately achieve these aims of vibrancy, identity, and walkability.

Priority 1: Enhance image and identity through private investment and public/private partnerships

Rochester Road offers a different kind of retail environment, one that is focused on neighborhood service and affordable to small businesses. Despite recent improvements to the right-of-way, Rochester Road lacks a unified identity and cohesion. Excessive signage and outdated strip malls result in the corridor feeling visually cluttered. Updating existing buildings, eliminating blight, and creating a cohesive streetscape will require financial incentives, comprehensive planning, and coordinated public and private investment. However, with targeted interventions and plan implementation, the corridor can elevate the aesthetic quality of the area and embrace its green corridor identity.

Renovating commercial storefronts and addressing code violations will enhance the corridor’s appearance and economic strength.



Rochester Road Image and Identity

Priority 1: Enhance image and identity through private investment and public/private partnerships

Strategy: Develop Design Guidelines

The City has made a significant investment in the public portion of Rochester Road, and private development should reflect that high quality investment. Design guidelines will facilitate the phased redevelopment of the corridor. These standards are a paradigm shift from customary single use zoning and automobile oriented development patterns to development decisions focused on building placement, integrated use, universal access, and pedestrian amenities. The fundamental element of the Design Guidelines is the relationship of the building to the street which includes building mass, site access, parking arrangement, and treatment of the pedestrian realm.

It is important that the Design Guidelines be crafted to encourage quality design while not reducing development incentives.

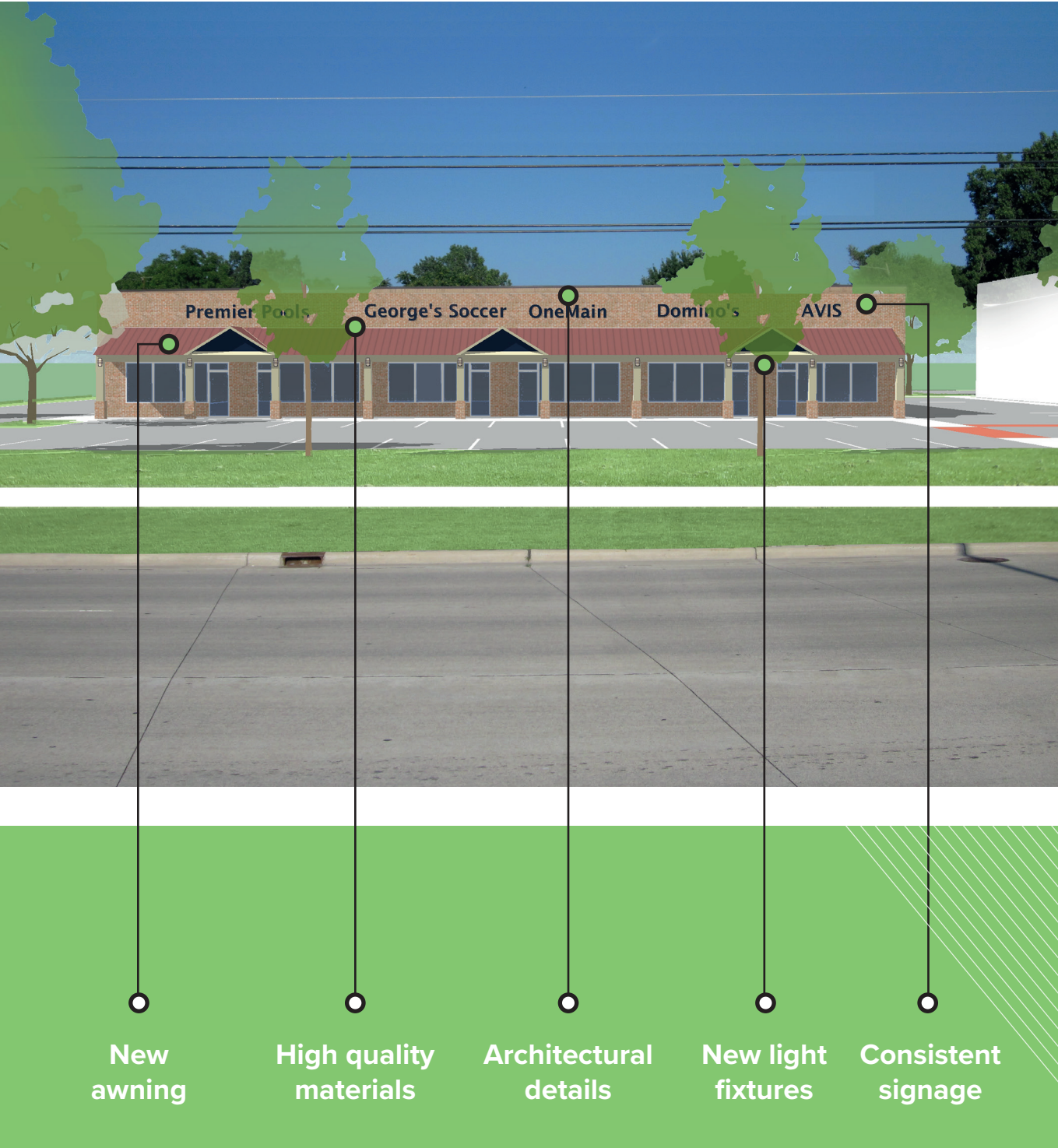
Strategy: Establish Building Improvement Programs

Many of the commercial buildings along Rochester Road are over 30 years old, including a few structures built in the 1950s and 60s. Establishing a façade improvement grant program will provide the necessary incentive and guidance to update and enhance tired exteriors. Increased focus on beautification and code enforcement is necessary and can be promoted through social media and neighborhood groups. Even the newer buildings constructed in the last 10 years will benefit from formal design guidelines.

Existing Conditions



Potential Building Improvements



Priority 1: Enhance image and identity through private investment and public/private partnerships

Strategy: Coordinate streetscape improvements

Streetscape elements can identify an area as a special and distinct place for residents, shoppers, visitors, and employees. The City should establish a conceptual Streetscape Plan that sets recommended standards for landscaping, signage, lighting, sidewalks, intersections and access. The Rochester Road streetscape should provide:

- A defined edge between the pedestrian and automobile areas
- A unified relationship between the public/pedestrian realm and private domain
- The use of street trees and landscaping, furniture, paving, lighting, and other streetscape elements
- Attractive street lighting that reinforces the corridor image and minimizes extraneous light

Streetscape may occur corridor wide or occur as redevelopment does.

Strategy: Encourage innovative stormwater management

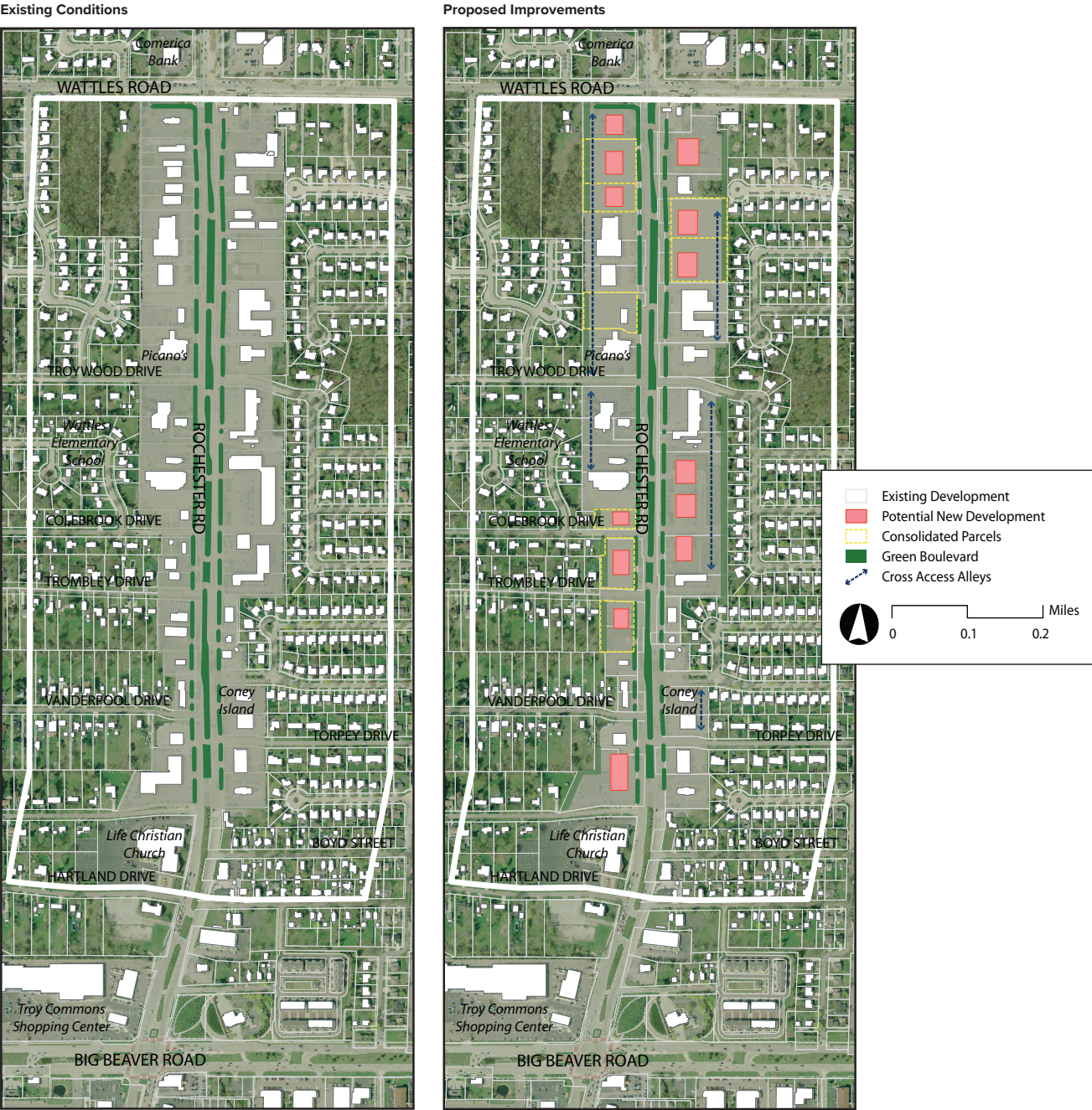
The 2008 Plan identified Rochester Road as a green corridor, as this section of the corridor is intersected by the Shanahan and Lane Drains. Use of green infrastructure in coordination with infrastructure and nonstructural stormwater best management practices (BMP) should be incorporated. New development should protect natural flow pathways and reduce impervious surfaces. The Plan encourages installing rain gardens, vegetated filter, pervious pavement, vegetated roof, and native plants. Project considerations should include land use, runoff quality, site factors, costs, construction coordination, and maintenance issues. Property owners should reference the Low Impact Development (LID) Manual for Michigan produced by SEMCOG.



Priority 2: Improve site access and building orientation

Drivers often experience difficulty entering and exiting sites along Rochester Road. Curb cuts and inconsistent setbacks also deter pedestrian and non-motorized traffic. Access management along Rochester Road is necessary to ensure roadway safety and efficient operations while providing reasonable access to the adjacent land uses. Eliminating driveway redundancy and establishing consistent building placement and parking locations actually increase business access and visibility and also create a safer, more inviting automobile and pedestrian environment.

This graphic represents the strategy to improve Rochester Road through infill development and access management.



Priority 2: Improve site access and building orientation

Strategy: Implement Rochester Road Access Management Plan between Big Beaver and Wattles Road

In 2011, the City of Troy participated in the creation of the Rochester Road Access Management Plan along with four other communities, Southeast Michigan Council of Governments (SEMCOG), Michigan Department of Transportation (MDOT), and Road Commission of Oakland County (RCOC). Based on MDOT’s Access Management Guidebook, the Plan recommends improved road design, modified access, increased walking and biking, and coordinated low impact development along the entire corridor. In addition to these overarching principles, the following corridor segment specific recommendations should be implemented for the portion of Rochester Road between Big Beaver and Wattles Road:

- Reduce driveway density by removing 11 of the 38 total existing access points
- Increase visibility of the un-marked bike route crossing at Bishop/Troywood
- Connect properties at the rear with parking lot connections, access easements, or an alley

The City has recently made significant roadway improvements, introducing a boulevard. Recommendations from the Access Management Plan should be implemented as development occurs. The City should also coordinate implementation with other local initiatives, capital improvements, and road construction projects.



Building oriented to Rochester Road

Access management is a set of techniques that state and local governments can use to control access to highways, major arterials, and other roadways, increase the capacity of these roads, manage congestion, and reduce crashes.

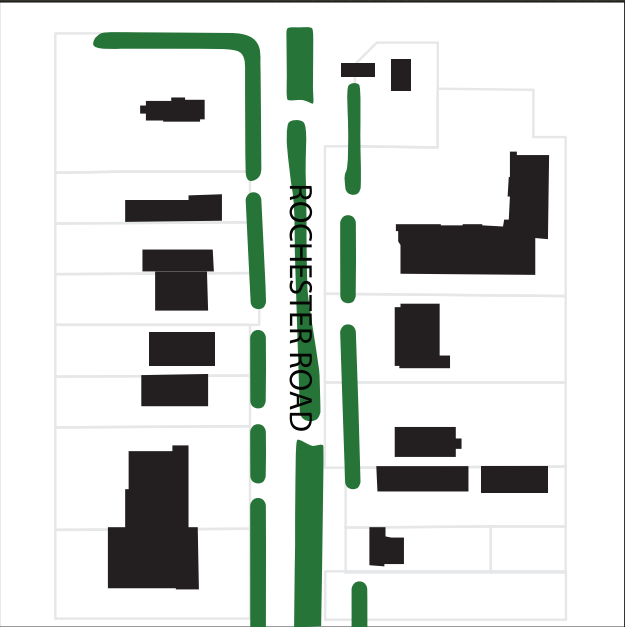
Source: Federal Highway Administration

Benefits of Access Management:

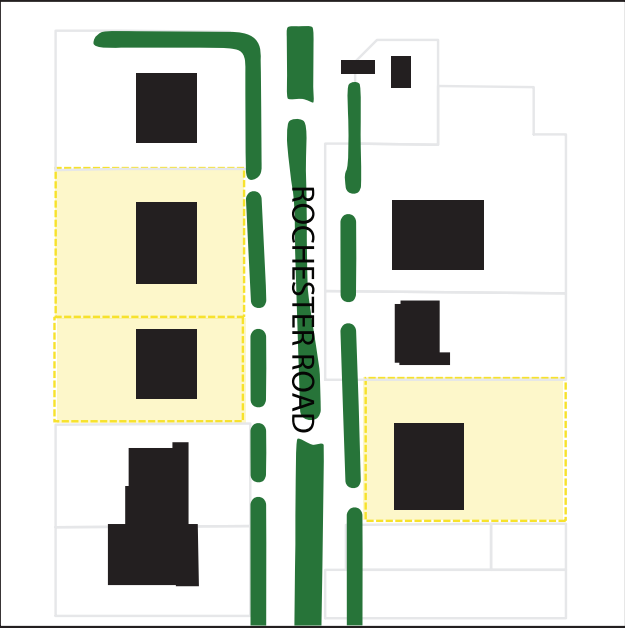
- **Safety** – reduces crashes
- **Capacity** – improves traffic flow
- **Walkability/Transit** - reduces conflicts
- **Aesthetics**– increases landscaped areas
- **Business Vitality** – improves customer ingress/egress
- **Preserve Investment** – very cost effective

Source: Rochester Road Access Management Plan, 2011

Existing Conditions



After Lot Consolidation



A street wall is formed when buildings front onto a street with consistent setbacks. The placement, scale and design quality of the building's street wall determine the character of the streetscape and reinforce pedestrian objectives.

Strategy: Support lot consolidation

Lot consolidation provides two significant benefits. First, lot consolidation permits the elimination of curb cuts. Reducing curb cuts increases safety for motorists, cyclists, and pedestrians reducing points of vehicular conflict. Secondly, lot consolidation creates larger lots, which permit greater design flexibility and are easier to develop. Contiguous parcels on Rochester Road create challenges for coordinated development and design continuity. Land assembly can work to the advantage of both a developer and property owners. Property owners benefit from increased property values, and developers get a large enough parcel to build on for today's markets.

Strategy: Require a consistent building placement and parking location

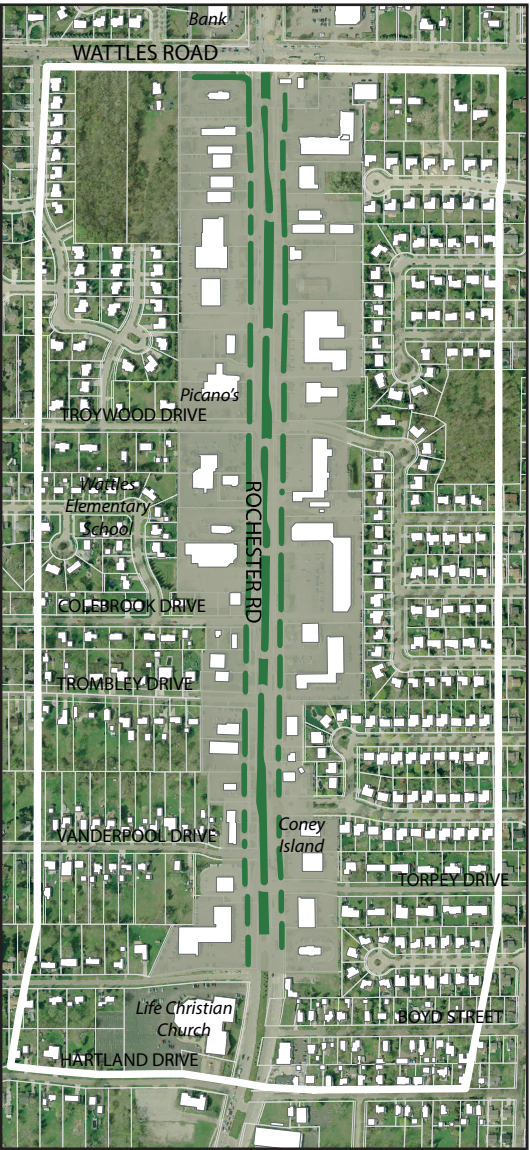
A consistent building placement and parking location will help improve access management and establish a defined street wall. As noted in the Rochester Road Access Management Plan, some of the buildings are set too close to the right-of-way to allow cross access between properties. On the other hand, the strip retail centers are set back to accommodate parking, providing limited pedestrian connections and little to no landscaping in the parking area. Orientation should avoid overcrowding and allow for functional use of the space between buildings and in the front and rear yards. Parking should not be the dominant visual element on the site; instead, the building should provide a welcoming entrance – preferably covered – that provides convenient access to all users.

Priority 3: Preserve adjacent residential character and encourage compatible development

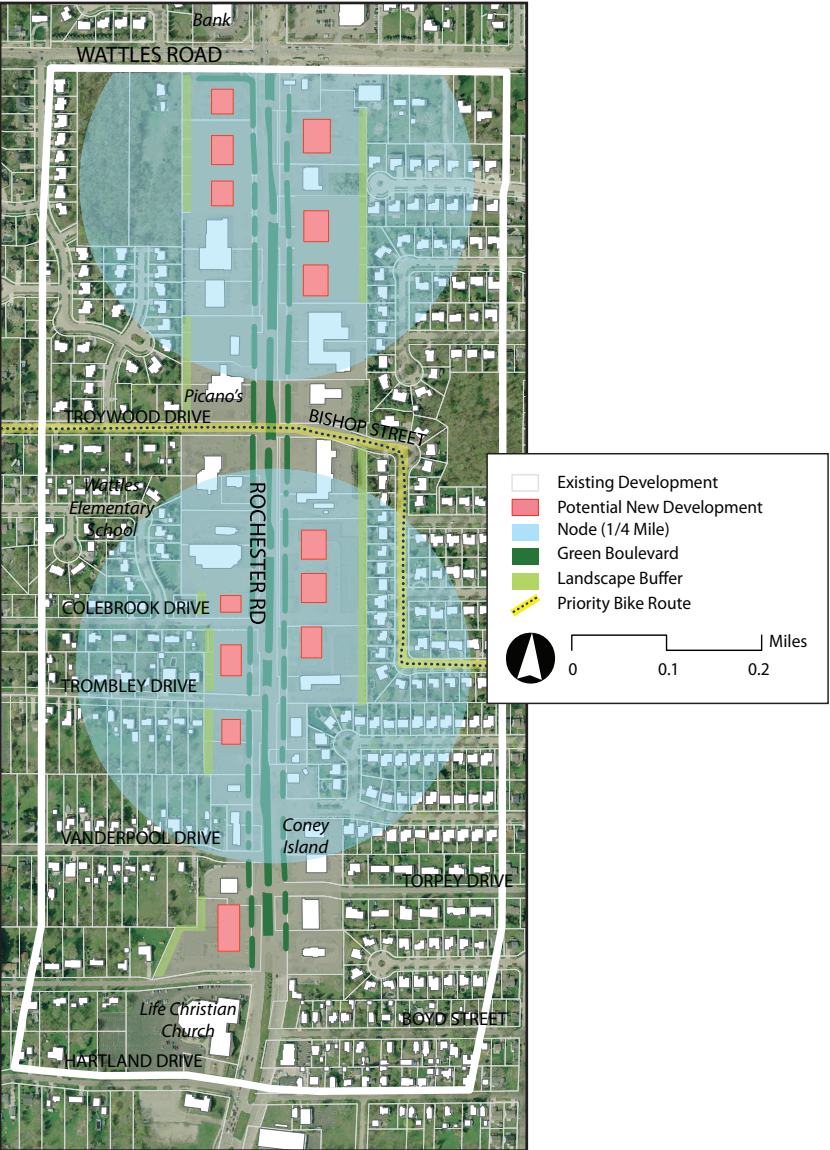
Rochester Road functions as a link, connecting the single family neighborhoods to the larger commercial corridors and regional highways. This function presents both an opportunity and a challenge for the corridor. Redevelopment along Rochester Road must respond to a range of land use patterns and existing conditions.

A tenet of both the Master Plan and Zoning Ordinance is the protection of residential properties. Balancing development priorities and surrounding neighborhood character will be vital to the success and health of the corridor. Senior housing, casual dining, professional office, and neighborhood services are some of the desirable uses for this community. Mixing uses, horizontally and vertically, will also provide for a more walkable and vibrant area. Too much flexibility can appear inconsistent at times, so establishing clear regulations on building form and use is essential. Many of the commercial properties are outdated, particularly the strip retail stores. Through lot consolidation, the larger properties near the Wattles intersection offer great potential for redevelopment.

Existing Conditions



Proposed Improvements



Priority 3: Preserve adjacent residential character and encourage compatible development

Strategy: Provide buffer and landscape between Rochester Road frontage parcel and adjacent residential properties

Shallow parcel depth along Rochester Road is a constraint on site design. Parcels range in size from 90 to 300 feet deep, with frontages ranging from 60 to 460 feet. In order to protect residential properties, additional buffers and transitions should be applied for commercial and industrial developments adjacent to residential uses. The buffers can be in the form of setbacks, greenbelts, and increased landscape requirements.



Transition between Commercial Uses and Residential Uses

Action Plan and Implementation

The Rochester Road Plan is organized into multiple projects so the vision can be refined and implemented in phases over time in a flexible manner. Priority transformative projects like the streetscape projects and facade improvement programs entail multiple phases given their scale and ambition and serve as economic catalysts enhancing the image of the corridor. The timeframe to implement the Plan will depend on many factors, including market conditions, financing, approvals, and other City initiatives.

Priority 1 Enhance the image and identity through private investment and public/private partnerships	Strategy	Actions	Phasing	Responsibility
	Design Guidelines	Develop and adopt Design Guidelines	Near	City
		Incorporate Design Guidelines into Zoning Ordinance	Near	City
		Implement Design Guidelines as development occurs	Near/Mid	City, Private entities
	Establish building improvement program	Research building improvement programs and best practices	Mid	City
		Determine managing body and identify program resources and funding	Mid	City
		Adopt criteria from Design Guidelines/Standards	Mid	City
		Develop and implement Building Improvement Program	Mid	City
	Coordinate streetscape improvements	Develop Rochester Road Streetscape Plan	Near	City
		Implement Streetscape Plan comprehensively or as development occurs	Near/Mid	City, Private entities
Priority 2 Improve access management	Implement Rochester Road Access Management Plan between Big Beaver and Wattles Road	Eliminate identified access points as development occurs	Near	City, Private entities
		Create parking connections as development occurs	Near	City
		Improve crossing safety for bicycles at Troywood/Bishop	Near	City
	Support lot consolidation	Create Rochester Road Overlay or amend Community Business (CB) and General Business (GB) District zoning regulations	Near	City
		Encourage/require lot consolidation as development occurs	Near	City
	Require a consistent building placement and parking location	Create Rochester Road Overlay or amend CB and GB zoning regulations	Near	City
Priority 3 Protect adjacent residential	Strategy	Actions	Phasing	Responsibility
	Provide buffer and landscape between Rochester Road frontage parcel and adjacent residential properties	Create Rochester Road Overlay or amend CB and GB zoning regulations	Near	City



Maple Road: Special Area Plan

Introduction

The six (6) mile stretch of Maple Road serves as a primary regional east-west roadway connecting Troy with the surrounding communities of Birmingham and Bloomfield to the west and Sterling Heights to the east. Historically, the Maple Road and Stephenson Highway corridors have been home to Troy's industrial and technology development base. The Maple Road area also includes the Troy Smart Zone Campus and is home to the Automation Alley headquarters. Industries along the corridor provide essential services, including business-to-business (B2B) and business-to-consumer (B2C) transactions, and help diversify Troy's economy. It is vital to Troy's long-term economic standing to maintain a viable industrial base. Over the past 30 years of growth and development, Maple Road has evolved incrementally. It is now comprised of an eclectic mix of uses including industrial, research and development, automobile dealerships, big box retail, smaller neighborhood retail, office, and both single-family and multiple-family residential. Due to a diversification of land uses, mixed parcel sizes, and abutting municipal boundaries, the pattern

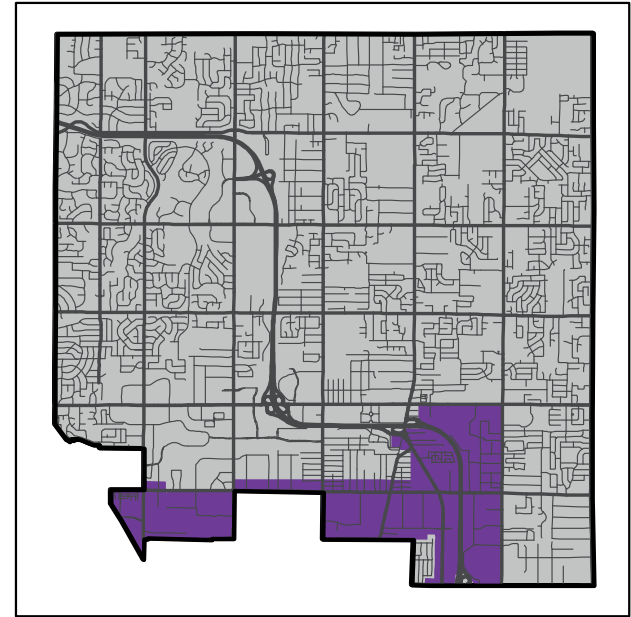
and character of Maple Road is difficult to classify. To ensure that future development is intentional and of high quality, Troy recognizes that a new focus for Maple Road needs to be considered.

Evolving to Meet New Challenges

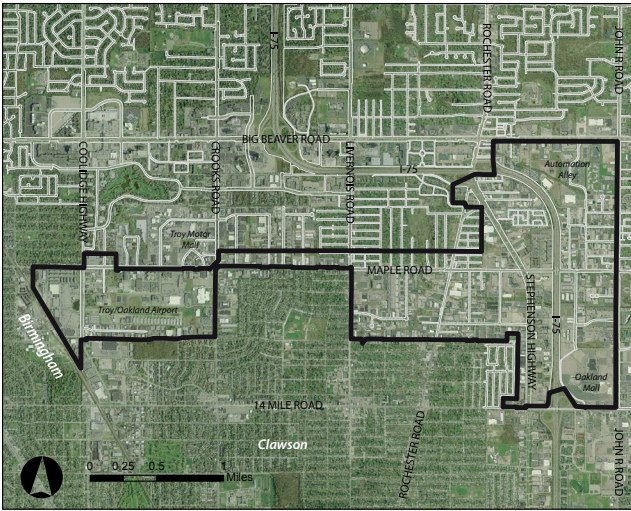
Maple Road exemplifies the car-dominated environment that is typical of the modern American landscape. Recent redevelopment interest along Maple Road and the success of the Big Beaver corridor to the north provides an opportunity to change the rules for new development so that the corridor will be more economically viable and people-oriented. Maple Road is a corridor of contrast in terms of land use, building placement, and investment. Comprehensive corridor redevelopment requires careful attention to both sides of the corridor's right-of-way line. While Maple Road has experienced recent reinvestment, there are pockets of disinvestment, resulting in vacant, abandoned, and underused properties. Nevertheless, Maple Road presents an opportunity to build on the existing diversity of land uses, transportation options, and proximity to residential. For properties lining the corridor, revitalization requires a restructuring of development patterns, with less emphasis on land use and more focus on quality, accessibility, and innovative redevelopment. For those parcels in the industrial areas located off the corridor, a focus on protection and reinvestment of the industrial and technology development base should be emphasized. The repurposing of Maple Road offers three key priorities based on the following land patterns: the development nodes at major mile intersections, the linear segments of the corridor between the major mile intersections, and the industrial and employment areas located off the corridor.

Vision Statement

There are moments in the development of a city where an opportunity presents itself and where entrepreneurs are rewarded. With less focus on land use, and more focus on quality development, businesses incubation, creation of anchors, and reinvestment through entrepreneurship, Maple Road can become a choice location.



Locator map



Target Area map

Existing Conditions

2013 Target area statistics

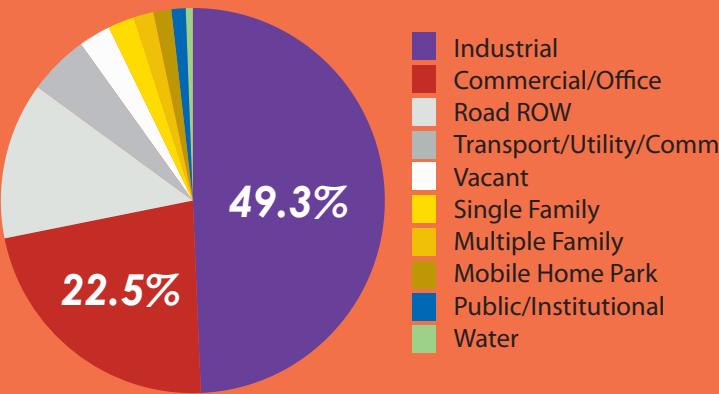
Total taxable value	\$341,823,442
Total area (acres)	1,828
Total businesses	1,625
Total employees	24,576

2010 Market area statistics¹

Population	10,677
Households	4,681
Percent owner occupied	58.5%
Median household income	\$52,475
Per capita income	\$28,402

Source: Esri 2013 Estimates Business Summary from Oakland County EDCA, Census 2010, City of Troy GIS data 2013
Note: 1. Market Area includes households within 1 mile of Target Area.
2. Employee and Business data use NAICS codes.

Land Use

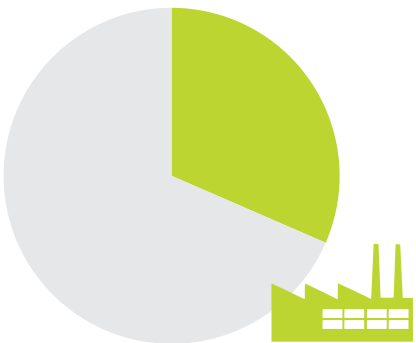


Property Data

	Target Area	Commercial	Industrial	Residential
Total Parcels	392	57	1	334
Total Structures	376	53	1	322
Total Acres	164	50	1	113
Median Year Structure Built		1982	NA	1976
Total Floor Area (SF)		379,321	NA	601,131
Median Floor Area (SF)		4,800	NA	1,709
Total Taxable Value	\$ 43,612,770	\$ 14,911,860	NA	\$ 28,700,910

Source: City of Troy GIS data 2013

Top Industries in Target Area by Employment³

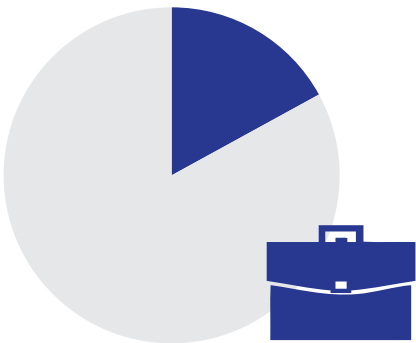


31.5% Manufacturing

	Employees	Percent (%)
Manufacturing	7,745	31.5
Professional, Scientific & Tech Services	3,723	15.1
Retail Trade	2,918	11.9
Wholesale Trade	2,199	8.9
Health Care & Social Assistance	1,675	6.8

3: Esri 2013 Estimates Business Summary from Oakland County EDCA

Top Industries in Target Area by Number of Businesses

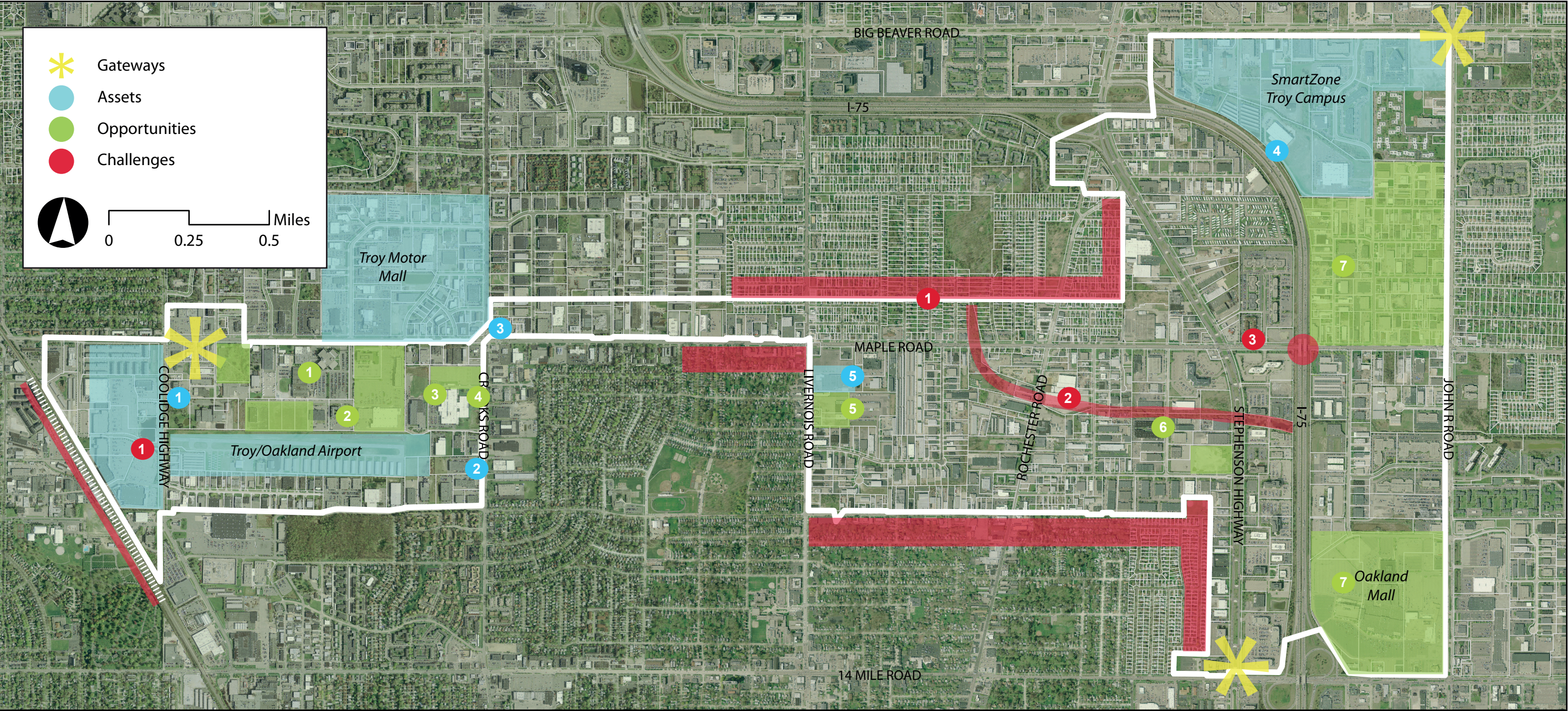


17.0% Professional, Scientific & Tech Services

	Businesses	Percent (%)
Professional, Scientific & Tech Services	277	17.0
Wholesale Trade	211	13.0
Manufacturing	205	12.6
Retail Trade	204	12.6
Administrative & Support & Waste Management & Remediation	130	8.0

Source: Esri 2013 Estimates Business Summary from Oakland County EDCA

Gateways	Assets	Opportunities	Challenges
<ul style="list-style-type: none">• Wattles Road• Big Beaver Road	<ul style="list-style-type: none">1: Rochester Road street improvements2: Wattles Elementary School3: Baker Middle School4: Gateway Park on Big Beaver Road	<ul style="list-style-type: none">1: Potential development site2: Recent redevelopment3: Potential development site4: SE of Rochester Rd and Troywood Drive5: NW of Rochester Rd and Colebrook Drive6: Troy Pointe Plaza7: Mom and Pop character	<ul style="list-style-type: none">1: Boundary/transition between single-family residential Boundary/transition between single-family residential2: Inconsistent building setback3: Shallow depth of commercial frontage



Maple Road Public Engagement Findings

Maple Road provides a great central location with a well-established traffic flow and close proximity to residential areas. Midtown Square, Automation Alley, and the new MJR theater can serve as anchors for the corridor and should be reinforced by complementary uses including retail, dining, and multi family residential. Industrial and office spaces offer architecturally unique redevelopment opportunities and could foster a live/work culture if marketed to local startups, small tech companies, or creative design firms with a need for light manufacturing facilities or collaborative work spaces.

Access, connectivity, and convenient parking are major challenges for sites along Maple Road. Strip development and industrial uses are segregated and offer limited connection to the surrounding residential communities and current business sector. While the Zoning Ordinance provides site design flexibility through the Sustainable Development Project (SDP) option, the City staff may need to educate potential investors on how to take advantage of this development tool and communicate the overall vision for Maple Road.

Considerations

- Think creatively about attracting companies and investment
- Encourage circulation planning that integrates public transit stops and connects pedestrian nodes to greenway trails and residential sidewalks
- Cluster pedestrian activities through redevelopment of underutilized properties
- Support mixed-use development with strong ties to the Transit Center and transit-oriented development
- Expand SmartZone and establish an overall vision for Maple Road
- Consider transit impact study for I-75 access onto Maple Road

Priorities and Strategies

This Plan recommends three priorities for establishing Maple Road as a safe, active, and vibrant district with opportunities for investment, entrepreneurship, and innovation. These priorities and strategies include:

1. Generate investment at development nodes

Strategies:

- Encourage high-quality commercial /mixed-use development at major mile intersections
- Engage surrounding residential neighborhoods through linkages
- Incentivize development through zoning

2. Encourage entrepreneurship and redevelopment

Strategies:

- Preserve and enhance traditional-innovative-entrepreneurial industrial areas
- Promote creation of districts and encourage compatible industries

3. Enhance and strengthen segments between major mile intersections

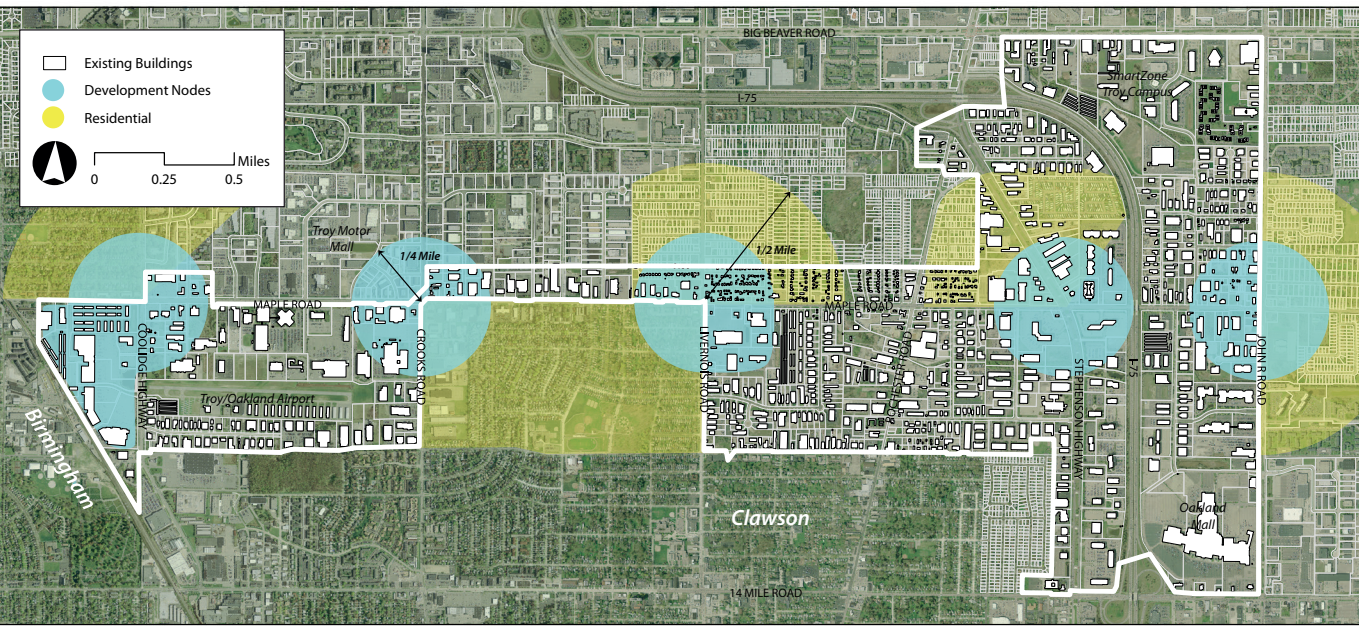
Strategies:

- Identify alternative value for challenging sites
- Implement zoning amendments to permit flexibility
- Improve pedestrian access
- Improve pedestrian crossing

Priority and Strategy Interconnection:

These priorities and their strategies are not mutually exclusive; rather, they reinforce each other and together they have the ability to attract users and spark investment and ultimately achieve these aims of vibrancy, identity, and economic resiliency.

Priority 1: Generate Investment at Development Nodes



Existing Conditions



Coolidge Highway



Coolidge Highway



Crooks Road



Livernois Road



Stephenson Highway



John R Road

Priority 1: Generate Investment at Development Nodes

The age, scale, and condition of structures along Maple Road vary considerably. This incremental and inconsistent development pattern has also resulted in incompatibilities between land uses. Mixing land uses can be effective and prosperous when implemented in conjunction with standards and policies. Maple Road is a major east-west thoroughfare bordered by residential neighborhoods that depend on services and convenience retail within walking distance. Maple Road serves many important functions as a commercial and industrial corridor, but its lack of identity, cohesion, and consistency are very apparent to residents, employees, and investors.

In response to increasing traffic and aging infrastructure conditions, changing patterns of retail development that favor newer sites in outlying areas, and the evolving needs of the industrial sector, many properties along Maple Road are suffering from ongoing disinvestment. Although Maple Road has pockets of investment, there are many underperforming areas with high vacancy rates, lower sales per square foot, and a lack of money to reinvest in aging structures.

In order to realign the Maple Road corridor to be consistent with the forces of market demand, portions of the corridor should be significantly and deliberately restructured into a form in which property owners, developers, and communities will once again invest. Since market-driven forces in the retail industry are cause for the change along commercial corridors, Maple Road planning should start with a reevaluation of commercial, particularly retail, development patterns along the corridor.

To compete, the Maple Road corridor will need to evolve beyond its aging commercial center reality to better appeal to prospective customers, residents, and businesses. The strategy for the corridor’s future should focus on improved aesthetics and creation of exciting new mixed-use clusters at major mile intersection nodes.

8 Principles of Good Urban Design

- 1. **Imageability:** Quality of a place that makes it distinct, recognizable, and memorable.
- 2. **Enclosure:** Degree to which streets and other public spaces are visually defined by buildings, walls, trees, and other vertical elements.
- 3. **Human Scale:** Size, texture, and articulation of physical elements that match the size and proportions of humans, and equally important, correspond to the speed at which humans walk.
- 4. **Transparency:** Degree to which people can see or perceive what lies beyond a building façade.
- 5. **Complexity:** Visual richness of a place including number and kinds of buildings, architectural diversity, landscape elements, street furniture, signage, and human activity.
- 6. **Coherence:** Sense of visual order including scale, character and arrangement of buildings, landscaping, street furniture, and other physical elements.
- 7. **Legibility:** Ease with which the spatial structure of a place can be understood and navigated as a whole.
- 8. **Linkage:** Physical and visual connections- from building-to-street, building-to-building, space-to-space, or one side of the street to the other that tend to unify disparate elements.

Source: Pedestrian & Transit-Oriented Design (2013)

Priority 1: Generate Investment at Development Nodes

Strategy: Encourage high-quality commercial/ mixed-use development at major mile intersections

Maple Road has a scattered mix of retail development along the corridor; however, many of the parcels along the corridor are not ideal for intense retail or mixed use development. Some of the parcels between nodes lack depth and size, which are essential elements for retail development. They also have limited access, limited visibility, lower traffic counts, and are adjacent to residential, which are hindrances to retail development. Alternatively, many of the parcels located at major mile intersections have significant size and depth and offer greater access options, visibility, and higher traffic counts.

The 6-mile study section of Maple Road includes six (6) major mile intersections including Coolidge, Crooks, Livernois, Rochester/Stephenson, John R, and Dequindre. The restructuring along Maple Road should encourage and accommodate the transformation from a linear strip retail corridor to one with clustered retail at the major mile intersections. These intersections can become successful economic nodes that concentrate activity by virtue of the intensity of development and the density of their mix of uses. The greater development intensity of nodes makes them easy to distinguish and areas of economic activity, distinguishing from other parts of the corridor.

These nodal intersections should be visibly taller, denser, and busier than other sections of the corridor. The key characteristics of successful economic nodes are activity, demand, and mix. Retail, food service, and entertainment venues are primary activity-generating uses, the key ingredients for street life and urban vitality.

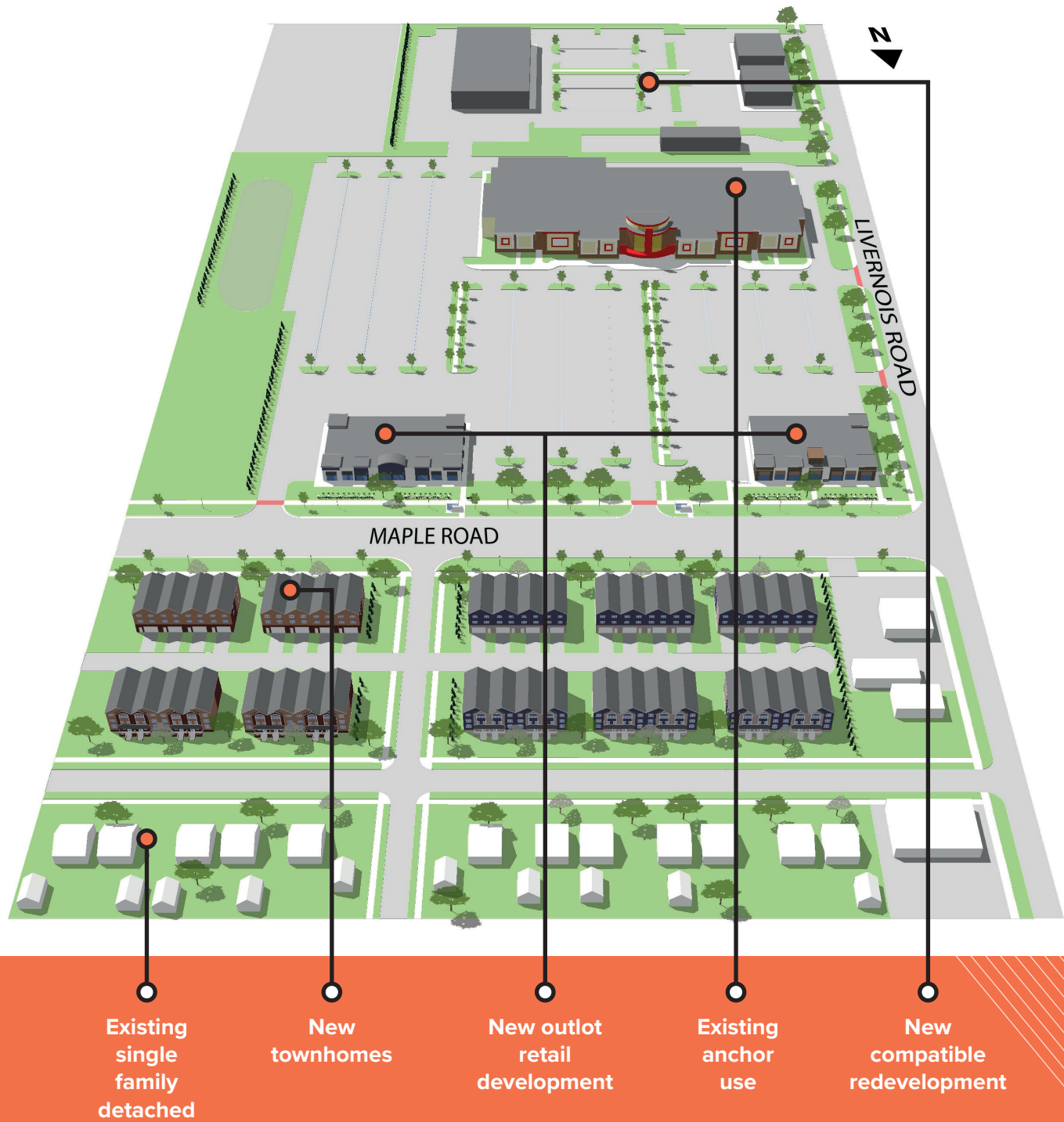
Key Principles:

- Encourage and incentivize lot consolidation
- Consider internal pedestrian connectivity to create walkable developments
- Require shared parking facilities and cross access easements
- Ensure every hard corner has a building rather than parking
- Ground-level retail should be a focus of buildings in activity zones
- Build off existing anchors such as the MJR theater at Livernois and Maple
- Encourage a variety in design yet overall consistency
- Ensure a balanced and compatible mix of uses to create more reasons for people to frequent the district over the course of a day
- Ensure that outlot development is compatible and connected with anchor development
- Require good design including consistent signage, pedestrian lighting, and increased landscaping along roadways and in parking lots

Priority 1: Generate Investment at Development Nodes

Strategy: Encourage high-quality commercial/mixed-use development at major mile intersections

Potential redevelopment strategy at Maple and Livernois



Priority 1: Generate Investment at Development Nodes

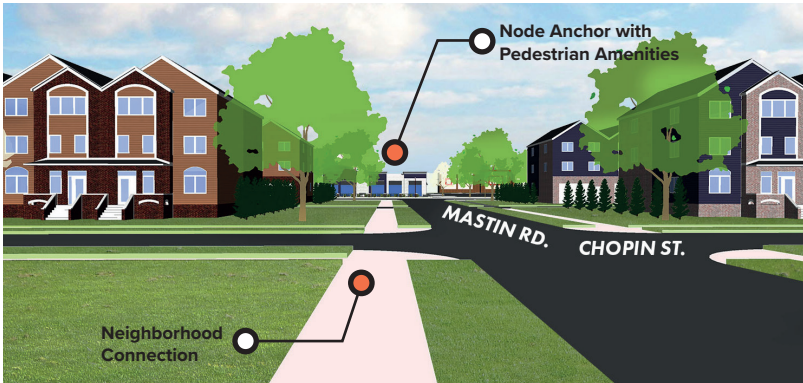
Strategy: Engage surrounding residential neighborhoods through linkages

As traffic congestion rises, there is increasing attention devoted to the role of infrastructure investments in affecting travel behavior. Bringing trip origins and destinations closer together is a necessary step to reduce overall travel distances and promote use of “active transportation” modes such as walking and bicycling.

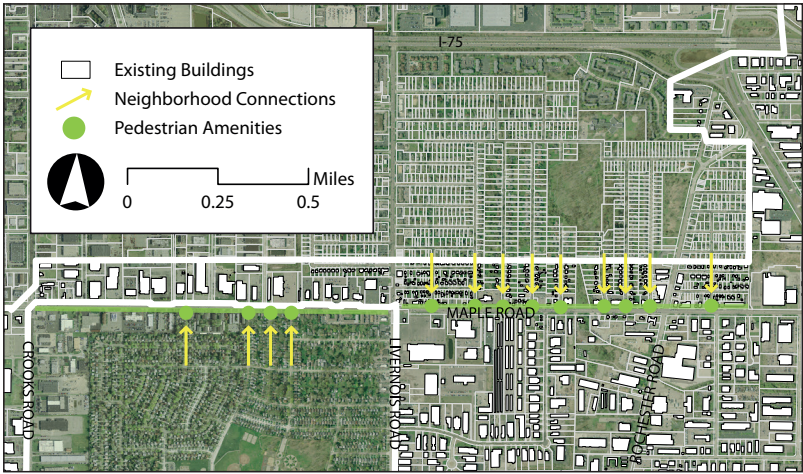
Within a half mile walking distance of the Maple Road major mile intersections, there are thousands of residents from the communities of Troy, Clawson, Sterling Heights, and Birmingham. One-half (½) mile is the typical maximum distance people without mobility limitations are willing to walk. These residents are a captive market who desire shopping areas and service uses that can serve their daily needs within walking distance.

Future development at the Maple Road nodes should provide a link between the Maple Road and adjacent neighborhoods. Linkages can be defined as features that promote the interconnections of different places and provide convenient access between them. Linkages may be in the form of physical or visual connections.

Additional improvements to engage the surrounding residential neighborhood include improved public transportation and an improved linkage to the new Troy Transit Center. The City should work with SMART to improve bus service along the corridor and upgrade the SMART bus stops to shelters.



Maple Road and Livernois Road Node



Neighborhood Connections

Key Recommendations:

- Focus on the half mile radius of the major mile nodes
- Uses should provide everyday services and evening/weekend amenities including restaurants, retail, service, open space, and entertainment appropriate for the market
- Provide convenient neighborhood access to sites
- Utilize the appropriate landscape buffering/screening
- Improve public transportation and linkages to the new Troy Transit Center

Priority 1: Generate Investment at Development Nodes

Strategy: Incentivize development through zoning

Current zoning permits the type of development envisioned: taller, denser, and busier; however, current Maple Road market realities may not be reflective of the development density and intensity permitted by zoning. While zoning cannot create a market, it can be used to incentivize the type of development desired.

To promote redevelopment and stimulate reinvestment along the corridor, the Maple Road form-based zoning can be amended to provide flexibility to create a system of development incentives that entice transformative development. The development flexibility must provide a benefit to the developer and the community.

Potential flexibility incentives may include:

- Drive-through use;
- Build-to-line flexibility;
- Increase in building height;
- Site reclassification;
- Increased signage; and/or
- Parking in front of the building.

As a trade-off for providing flexibility incentives, the applicant must provide a benefit. Potential benefits may include:

- Lot consolidation;
- Mixed-use development;
- Transit amenity;
- Sustainable design and development;
- Pedestrian facility and/or amenity; or
- Public art.

Providing greater site design flexibility will encourage investment in challenging sites. In return, the applicant can provide certain amenities or benefits to the community. The chart to the right shows the relationship between potential flexibility incentives and community benefits.

Mixed Use Development



Transit Amenity - Troy Transit Center

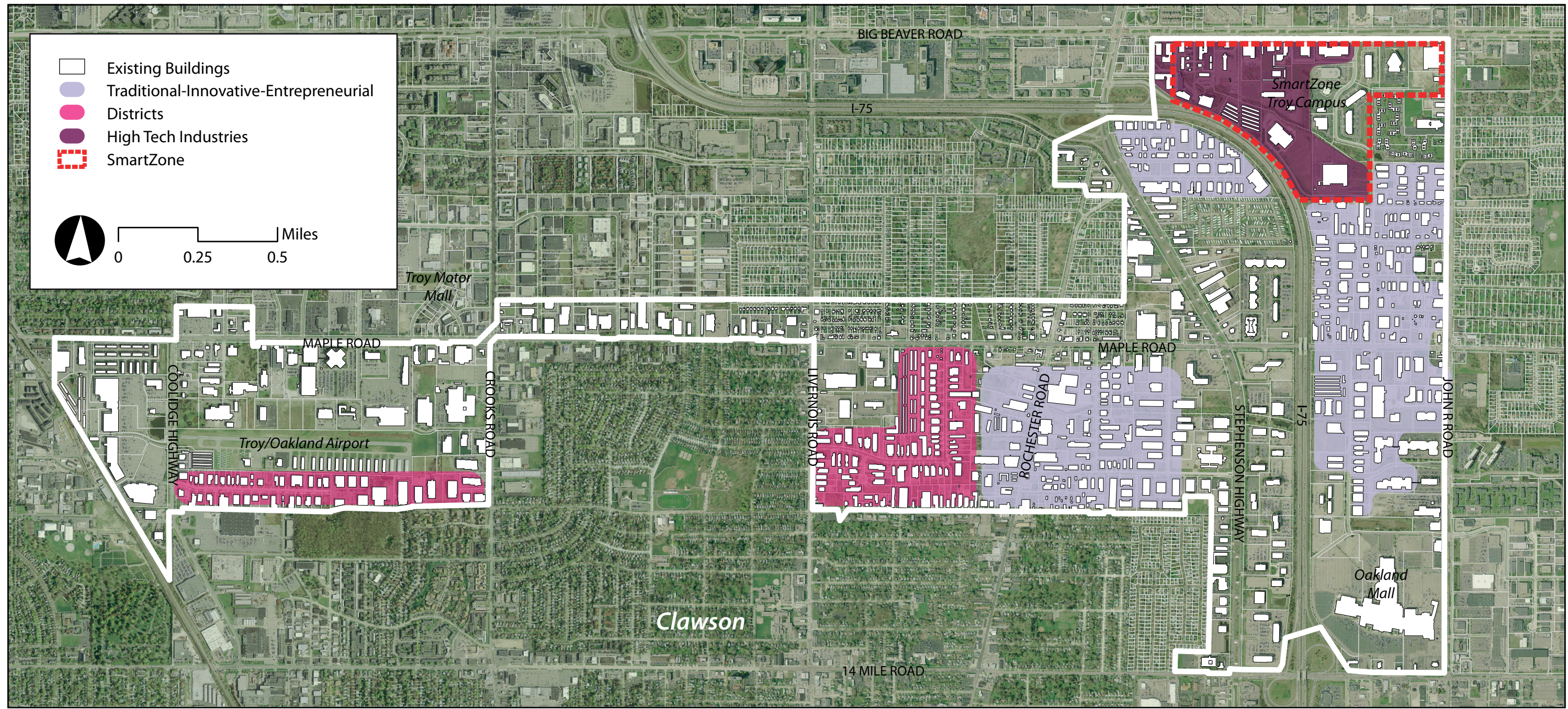


Pedestrian Amenity in Orland Park, IL



	Flexibility in Application of Zoning Standards				
Recognized Benefit	(1) Drive-thru	(2) Build-to-Line Flexibility	(3) Increased Building Height	(4) Site Reclassification	(5) Increased Signage
(a) Lot Consolidation				x	
(b) Mixed Use Development	x	x	x		x
(c) Inclusion of Transit Amenity		x	x		x
(d) Sustainable Design and Development	x	x	x		x
(e) Pedestrian Facilities and/or Amenity			x		x
(f) Public Art					x

Priority 2: Encourage entrepreneurship and redevelopment



Priority 2: Encourage entrepreneurship and redevelopment

The character and land use pattern of Maple Road, also known regionally as 15 Mile Road, changes dramatically between the City of Walled Lake to the west and Clinton Township to the east. For example, it has a distinctly residential character through West Bloomfield Township and Bloomfield Township to the west, while it is one of the main roads in Birmingham’s downtown. In Troy, the Maple Road corridor is known for its commercial and industrial uses. To many residents and visitors, this segment of Maple Road — between Eton Street and John R Road — presents an assortment of uses and building typologies. Revitalizing the properties along Maple Road and reinvesting at the major nodes is critical for the long-term success and sustainability of this corridor, but the Plan must also address the areas to the north and south of Maple Road.

These areas consist primarily of industrial buildings and warehouses. The structures range in age and square footage, although many share similar architectural qualities including few windows, large warehouse doors, and brick or masonry block construction. Generally, these areas lack walkability, curb appeal, and a vibrant pedestrian realm but they serve a very important function for the City of Troy.

These industrial areas are home to a variety of uses including manufacturing and equipment repair, construction trades and material suppliers, staff and business services, event rentals and beverage suppliers, marketing and communications, as well as professional design services. In short, these areas offer diversity within Troy’s economy.

The significance of a Special Area Plan is to recognize the intricacies of these target areas and to redefine that which was once considered a shortcoming when viewed out of context. The businesses located in the industrial areas north and south of Maple Road can be classified into three categories: traditional, innovative, and entrepreneurial.

If one were to view the City metaphorically as machine, one might consider that Maple Road keeps the community and its economy in motion. Improving public services and infrastructure and expanding business development and financial support are strategies to support existing and future businesses. Changing the perception of Maple Road’s industrial core is not just about the physical environment, it also requires marketing and rebranding. There are clusters of entrepreneurial energy and complementary industries within this industrial fabric that should be identified and reinforced.

Traditional:

The traditional businesses are characterized as long-standing companies and traditional industrial and manufacturing uses.

Innovative:

The innovative businesses have a good reputation and highly-rated services. Due to lower land costs, these companies have been able to focus on product innovation rather than overhead costs.

Entrepreneurial:

Finally, the entrepreneurial businesses are comprised of lifestyle businesses and startup companies, including cross fit gyms, pet daycare facilities, and several photography studios.

Existing Conditions



Rochester-Rankin



Chicago-Bellingham



Industrial Row



Park-Combermere



Bellingham



Automation Alley

Priority 2: Encourage entrepreneurship and redevelopment

Strategy: Preserve and enhance traditional-innovative-entrepreneurial industrial areas

There are three distinct industrial areas that fit into the traditional-innovative-entrepreneurial industry classification: Rochester and Rankin, Naughton-Wheaton-Piedmont, and Bellingham-Chicago. Home to a wide range of manufacturing and equipment repair facilities from automotive, marine, and aviation to HVAC and computer technology, these areas form the backbone of Troy’s industrial and technology base. They also provide for the health, safety, and welfare of the community and support important regional economic sectors.

These areas allow companies big and small to focus on product and service innovation rather than overhead costs and also afford opportunities for startup companies. Preservation of this industrial fabric is desirable for the overall sustainability of Troy’s economy. Public infrastructure improvements related to the construction of sidewalks, installation of street lights at intersections, and stormwater management improvements are essential to maintain these areas as viable Industrial areas. Again, this strategy is not just about physical improvement; traditional-innovative-entrepreneurial businesses may also benefit from local incentives and targeted use of state and federal funds.



Construction Business



Tree Service Business

Priority 2: Encourage entrepreneurship and redevelopment

Strategy: Promote creation of districts and encourage compatible industries

Similar to the original land use pattern of Birmingham’s Eton Road Corridor, Industrial Row and Parks-Combermere provide ideal locations for the creation of “districts.” Industrial Row and Parks-Combermere have notable concentrations of similar industries, including construction trades and material suppliers, creative and marketing services, landscaping, and professional design firms. These existing businesses provide the foundation for an industry specific rebranding. Districts are not limited to a certain use but they tend to have an overarching theme.

- Design-Creative: construction trades, design, interior furnishings, landscaping
- Technology: Engineering, software, research
- Entertainment: microbrewery, distillery, music hall, comedy club
- Health and Wellness: personal training, nutrition, indoor sports, gymnastics

Industrial Row and Parks-Combermere are located adjacent to the proposed development nodes at Coolidge Highway and Livernois Road respectively. The curation of a mixed-use environment with a dynamic edge focused on related enterprises can be an important component of placemaking.

These districts have the potential to become catalysts for collaboration and engagement between businesses, residents, and the community. This will be the place to encourage adaptive reuse and sustainable technology, social networking, and strategic placemaking through public/private partnerships. Bridging the space between development nodes and residential neighborhoods, the districts will ultimately foster a richer work-live environment.

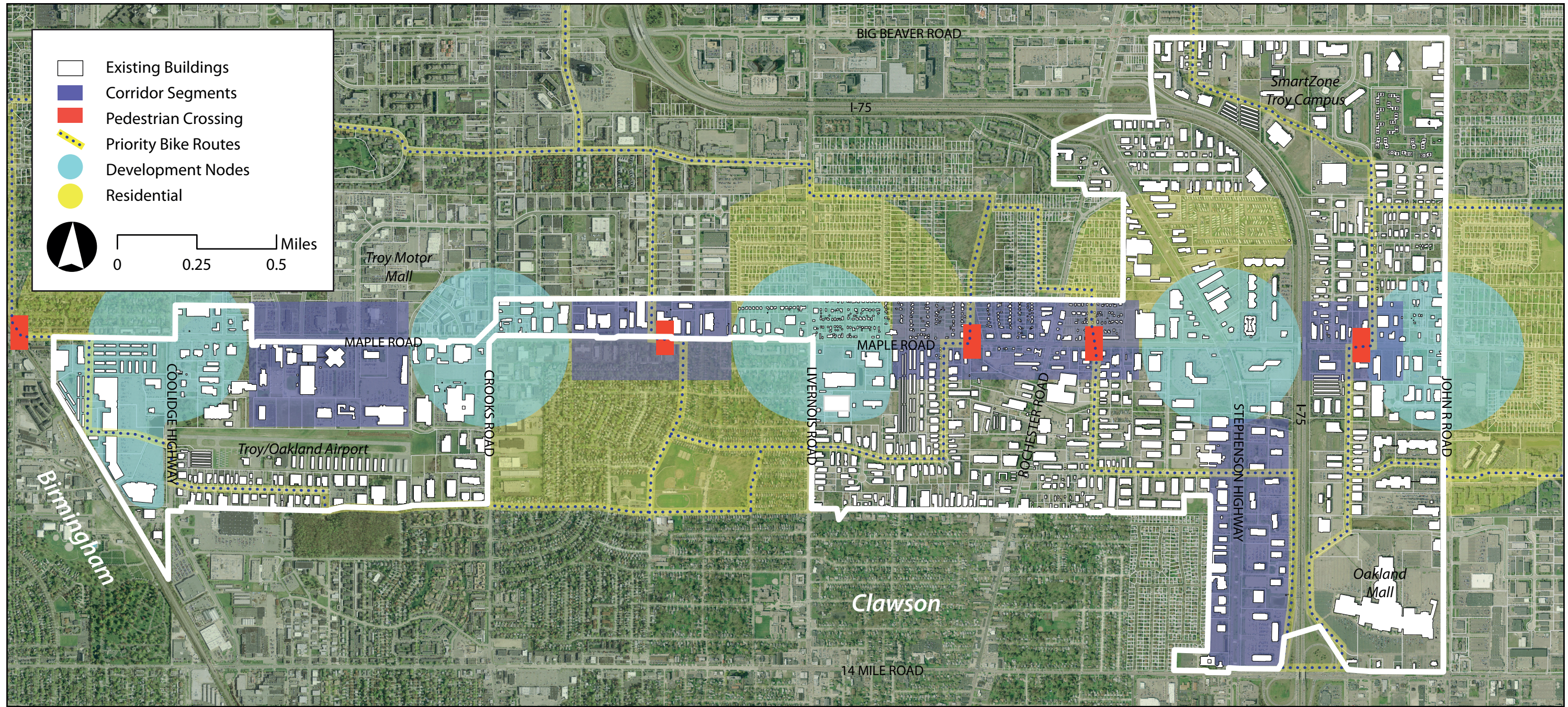


Eton Road Corridor in Birmingham, MI



Container Park in Las Vegas, NV

Priority 3: Enhance and strengthen segments between major mile intersections



Priority 3: Enhance and strengthen segments between major mile intersections

By focusing retail development into major mile intersections, the interior corridor segments—the long portions of corridor between centers—need consideration. These segments, one-half (1/2) mile long, include hundreds of separately owned parcels. While the character and uniqueness of these parcels vary, many of them currently lack the necessary size and depth for redevelopment for commercial purpose. The Plan must consider strategies to enhance and strengthen the interior corridor segments between major mile intersections.

Strategy: Identify Alternative Value

The extensive and effective retail trade competition offered by major mile road intersection development nodes, Big Beaver, and Oakland Mall reduce the potential for new retail development along the interior corridor segments of Maple Road. Development nodes, Big Beaver, and Oakland Mall sites offer either existing cluster shopping locations or the potential to combine parcels to create cluster shopping locations. The parcels in the segments between the major mile intersections are often too shallow or too narrow to support cluster retail uses. As such, the segments between major mile intersections should be planned for alternatives to strip retail and shopping centers.

The corridor’s future opportunities along these segments should be focused on entrepreneurial development and growth. This strategy focuses on eliminating barriers and creating a sense of entrepreneurship to identify and promote new uses and development types that can restore values. The Plan’s intent is to accommodate the widest possible spectrum of uses to ensure flexibility and provide for entrepreneurship.



Shopping Center



Family Business



Entrepreneurial Business

Priority 3: Enhance and strengthen segments between major mile intersections

Reinforce and build on value already in place

If a corridor segment is doing well, leave well enough alone. For example, the interior corridor segment between Coolidge and Crooks is an automobile dealership, supply, and service cluster. The Plan supports these stable assets and supports the extension of their market draw by promoting investment in similar or complementary uses on nearby property.

Permit alternative land uses including residential and usable open space

For segments without a strong existing market, alternative uses, including residential and usable open space, may be a market driven solution. Troy has started to experience a demand for alternative housing options. Segments along Maple Road supply vast areas of underused land that is available to meet the demand for alternative housing types. Because many sections of Maple Road are bordered by residential neighborhoods, it is much easier for these segments to attract reinvestment by integrating with the surrounding neighborhoods rather than compete with larger, developable parcels at major mile intersections. Furthermore, since many established residential neighborhoods are only one parcel off of Maple Road, converting some segments to residential replaces the conflicting land use with a compatible land use that completes the neighborhood along the Maple Road boundary. Re-making sections of the corridor by putting some residential on the frontage is an opportunity to complete the residential neighborhood and provide an appropriate transition.

The usable open space of parks and squares are the civic glue that binds an area. These are the places that create community culture and pride; are the gathering areas for planned and chance meetings; serve as the front door to development; and make both the motorized and non-motorized experience more enjoyable. A network of usable open space comprises both the distinct parks and plazas but also the linkages – streets and trails – that connect them.

Additional housing, particularly the missing middle, and usable open space along the corridor would enhance the retail development nodes at the intersections.



Residential-Missing Middle Housing



Residential

Priority 3: Enhance and strengthen segments between major mile intersections

Strategy: Implement zoning amendments to permit flexibility

While it is recognized that zoning cannot create a market, it can surely stifle one. Acknowledging that the interior corridor segments have less of a market demand and that some parcels along the corridor do not have the necessary parcel size, the Plan recommends that targeted zoning amendments be considered.

Build-to-line Flexibility

Redevelopment in the interior corridor segments should focus less on building placement and rather emphasize quality architecture and design. By relaxing the build-to-line requirements, zoning in these segments becomes less of a hindrance to site redevelopment. The recommendation of build-to-line flexibility is intended for the interior segments of Maple Road but not at the nodes (intersections of major mile roads).

Extend Maple Road Form Base District North to Chopin Road

The north side of Maple Road between Livernois and Rochester has very limited depth, as little as 100 feet. A 100-foot parcel depth is not sufficient to accommodate any reasonable commercial or office development without significantly encroaching on the single family residential it abuts. Alternatively, extending the Maple Road Form Based District north to Chopin Road would permit greater land assemblage which would allow for the redevelopment of those parcels. The target land use for this section would be multiple-family residential, which would provide an alternative housing option. The change in zoning would permit these single-family homes to remain in perpetuity but increase their property values with increased redevelopment opportunities.

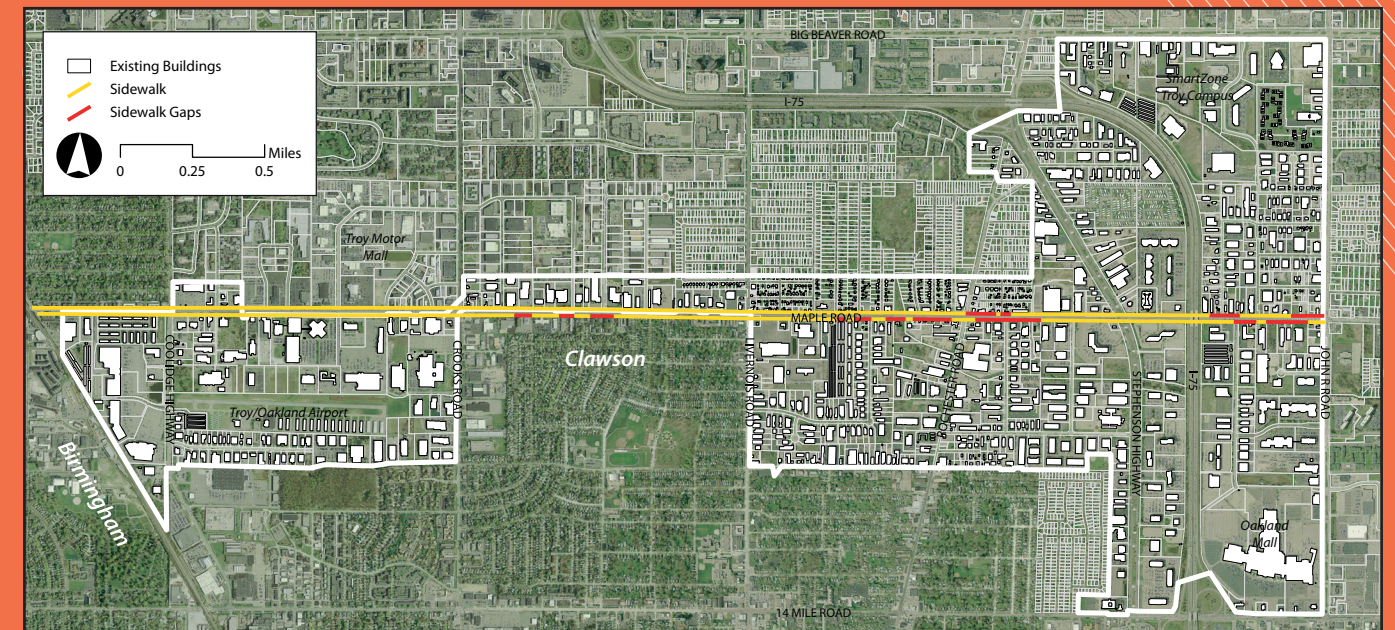
Strategy: Improve pedestrian access

The street is the largest public open space along the Maple Road and should be considered part of the public realm. The corridor segments between the nodes are a tremendous untapped resource that provides a link between the adjacent residential neighborhoods and the commercial nodes at the major mile intersections. In order to provide for a pedestrian friendly corridor, pedestrian amenities must be improved. Maple Road should be made more a comfortable place to walk by providing continuous, wide sidewalks and recognizing the importance of the public realm in “place” creation through the inclusion of elements such as trees, landscaping, lighting, public art, special pavement treatments, and bus shelters, etc.

Sidewalk connections and cross-access easements

Additional pedestrian amenities should be considered along the corridor. The City should consider coordinated streetscape improvements along Maple Road. Streetscape elements can identify an area as a special and distinct place for residents, shoppers, visitors, and employees. The City should establish a conceptual Streetscape Plan that sets recommended standards for landscaping, signage, lighting, sidewalks, intersections, and access.

In addition, there are existing gaps in the sidewalk along the Maple Road. Most of the gaps are along the south side, including some in the City of Clawson; however, there are some gaps on the north side. Even if redevelopment does not occur, the City of Troy should work with property owners to fill in these sidewalk gaps and should encourage the City of Clawson to do the same.



Existing Sidewalk Gaps



The Maple Road streetscape should provide:

Streetscape Improvements:

Priority 3: Enhance and strengthen segments between major mile intersections

Strategy: Improve pedestrian crossings

Due to the auto-centric nature of Maple Road, including multiple travel lanes and long blocks, employees and residents who venture out on foot to destinations have difficulty crossing. Providing safe crossings for pedestrians and cyclists is an integral strategy for walkability. Maple Road crossing improvements should take place both at major mile intersections and mid-block. Improvements at major mile intersections may include better marked crosswalks and improvements to pedestrian signals.

Mid-block crossings for Maple Road will further integrate and strengthen the connection with the adjacent residential neighborhood. Pedestrian refuge islands and signalized crossings are some of the techniques for providing mid-block crossing. Applicability should be determined based on site context and budget.

Priority pedestrian crossing improvements should be considered:

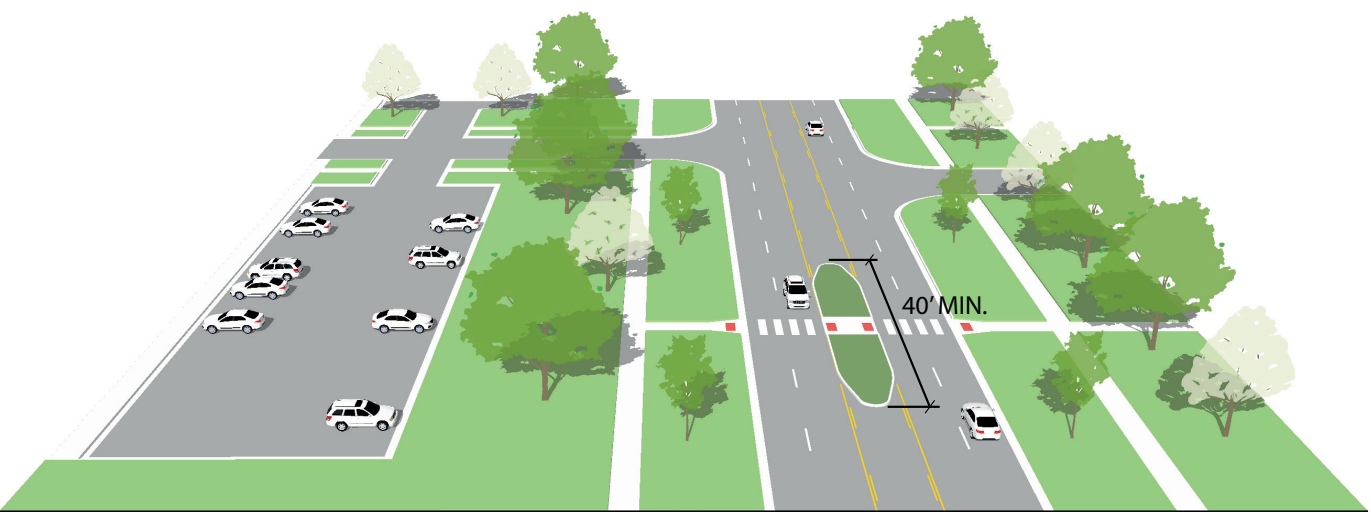
- At all major mile road intersections
- Improvements to existing crossing at Edenborough Road (Birmingham)/Doyle Drive
- Crosswalk at light at Mapelawn
- Mid-block crossing near Heide Drive/Bywood Avenue (Clawson)
- Improvements to existing crossing at Combermere Drive
- Mid-block crossing near Bellingham Drive/ Chicago Road



Provide Pedestrian Crossing near SMART Bus Stops



Improve Striping at Intersection Crosswalks

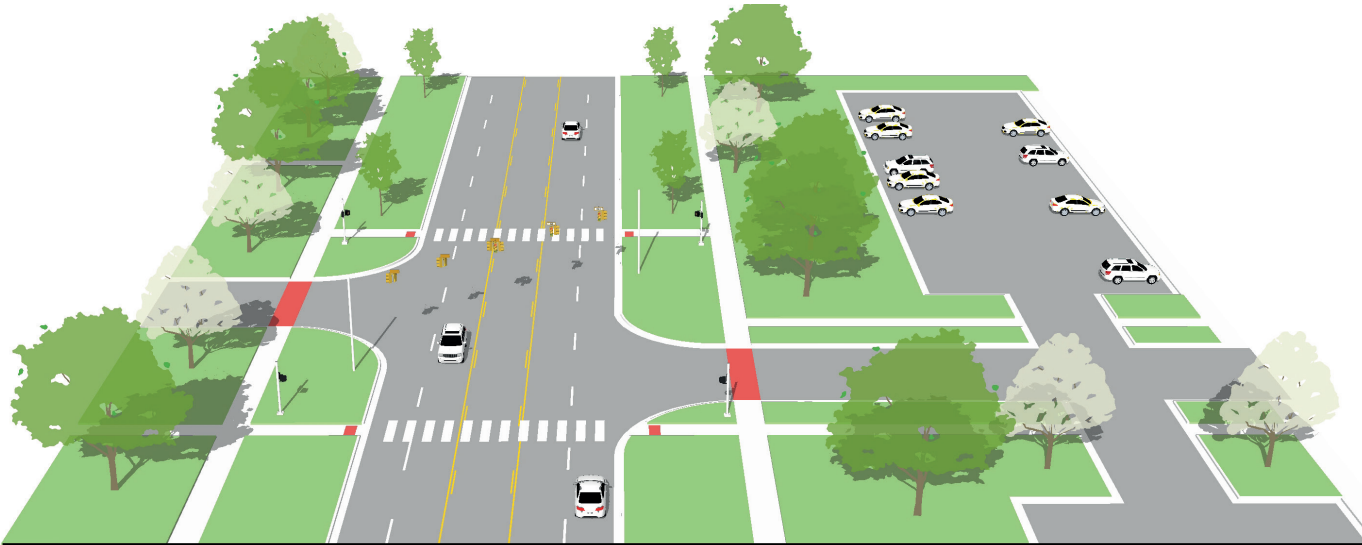


Unsignalized Pedestrian Mid-Block Crossing

SIDEWALK

PEDESTRIAN REFUGE ISLAND

SIDEWALK



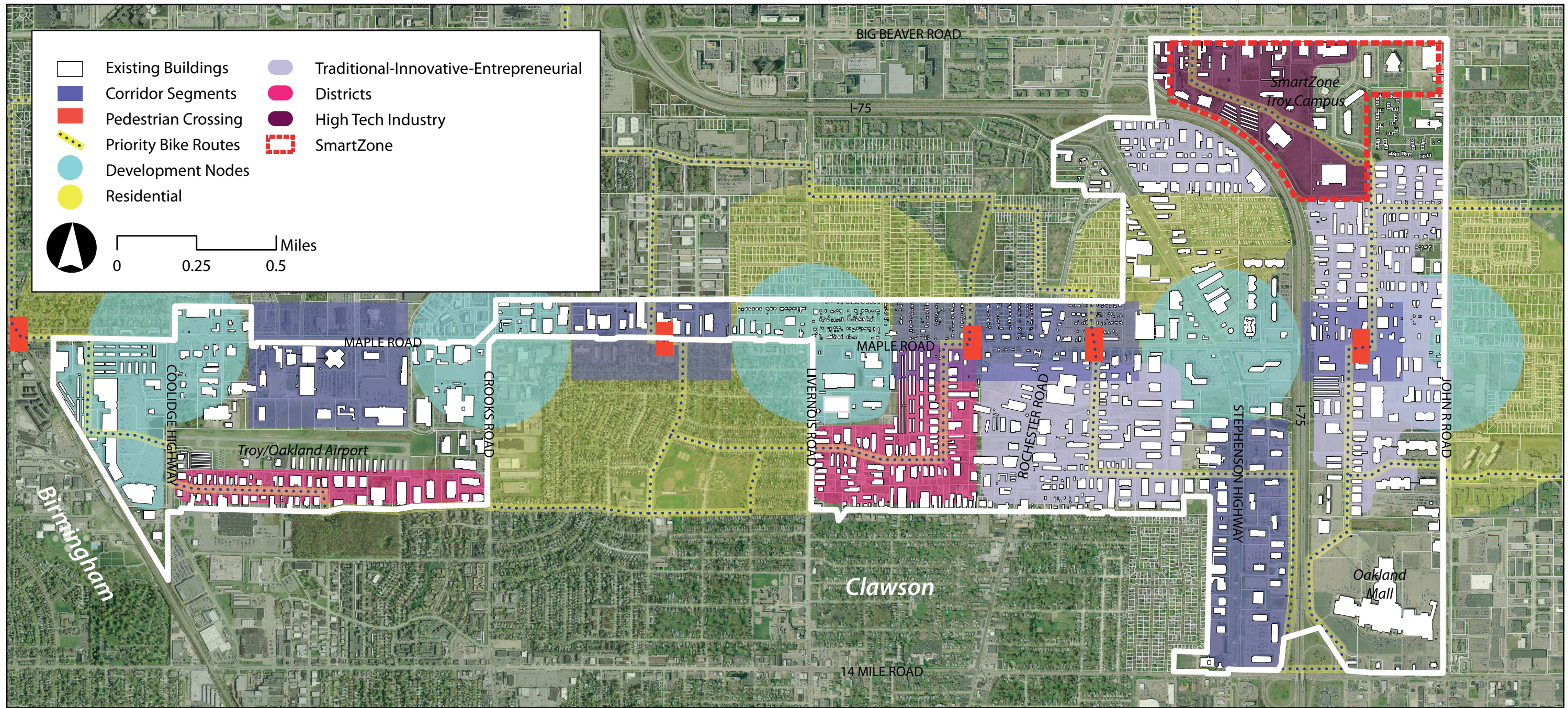
SIDEWALK

SIGNALIZED INTERSECTION WITH STRIPED CROSSWALK

SIDEWALK

Signalized Pedestrian Mid-Block Crossing

Maple Road Strategic Plan Map



Action Plan and Implementation

The Maple Road Plan is organized into multiple projects so the vision can be refined and implemented in phases over time in a flexible manner. Priority transformative projects like the streetscape projects and facade improvement programs entail multiple phases given their scale and ambition and serve as economic catalysts enhancing the image of the corridor. The timeframe to implement the Plan will depend on many factors, including market conditions, financing, approvals, and other city initiatives.

Priority 1 Generate investment at development nodes	Strategy	Actions	Phasing	Responsibility
	Encourage high-quality commercial /mixed-use development at major mile intersections	Evaluate all tools to encourage and incentivize lot consolidation	Near	City
		When evaluating new developments: •Review cross-access easements and pedestrian access to create walkable developments •Require shared parking facilities where appropriate •Ensure a balanced and compatible mix of uses to that provide everyday services and evening/ weekend amenities including restaurants, retail, service, open space, and entertainment appropriate for the market •Ensure that outlot development is compatible with anchor development •Require good design including consistent signage, pedestrian lighting, and increased landscaping along roadways and in parking lots	Near	
		Ensure redevelopment of corners of major mile intersections are redeveloped with buildings at the hard corner	Mid/Long	City, Private entities
	Engage surrounding residential neighborhoods through linkages	Evaluate pedestrian infrastructure improvements within ½ mile radius of the major mile nodes	Long	City
		Evaluate zoning to require appropriate landscape buffering / screening	Near	City
		Work with SMART to improve public transportation along the corridor and link to the new Troy Transit Center	Mid	City, SMART
	Incentivize development through zoning	Develop Rochester Road Streetscape Plan	Near	City, Private entities
		Implement Streetscape Plan comprehensively or as development occurs	Near	City
		Implement zoning flexibility and development benefits into zoning ordinance	Near	City

Priority 2 Encourage entrepreneurship and redevelopment	Strategy	Actions	Phasing	Responsibility
	Preserve and enhance tradition-innovation-entrepreneurship industrial areas	Evaluate public infrastructure needs in industrial areas	Mid	City
		Work with existing firms in industrial areas to provide city resources and assist in obtaining regional, state, and federal resources	Near	City
	Promote creation of districts and encourage compatible industries	Evaluate city codes and policies to remove any barriers to adaptive reuse	Near	City

Priority 3 Enhance and strengthen segments between major mile intersections	Strategy	Actions	Phasing	Responsibility
	Identify alternative value	Evaluate interior corridor segments for areas of stable assets and encourage entrepreneurial development and growth	Mid	City
		Permit alternative land uses including residential and useable open space	Mid	City
		Find opportunities along corridor to install public spaces	Mid	City, Private entities
	Implement zoning amendments to permit flexibility	Evaluate the existing zoning for interior corridor segments and amend zoning as necessary	Near	City
		Reach out to property owners regarding rezoning Chopin Road to Maple Road Form Base District	Mid	City
		Rezone Chopin Road area to Maple Road Form Base District	Mid	City, Private entities
	Improve pedestrian access	Develop Maple Road Streetscape Plan	Mid	City
		Infill sidewalk gaps and implement Streetscape Plan comprehensively or as development occurs	Mid	City
		Evaluate new developments for cross-access easements and pedestrian access	Mid	City, Private entities
	Improve pedestrian crossings	Evaluate and improve pedestrian crossings at all major mile road intersections	Near	City
		Improve existing pedestrian crossings at Edenborough Road (Birmingham) / Doyle Drive and Combermere Drive	Near	City
		Install crosswalk and crosswalk light at Maplawn Road	Mid	City
		Evaluate and install new midblock crossing near Heide Drive/Bywood Avenue (Clawson) and near Bellingham Drive/ Chicago Road	Long	City

North Troy: Special Area Plan

Introduction

North Troy serves as the business and employment hub for the north side of the City. The area is dominated by office use, specifically mid-rise buildings and towers with large footprints built primarily in the mid-1980s to early 1990s. These buildings provide Class A and B space with ample parking, convenient highway access, fiber optic connections, and well manicured grounds. They have been marketed as ideal for corporate headquarters facilities. However, in order to maintain this position as a business and employment hub for the future, the area must evolve to serve the future office worker. Providing a compatible mix of uses, increasing amenities, and creating unique identity will help attract new tenants and keep employees and residents in the area beyond the work hour.

Evolving to Meet New Challenges

In today's world, many of the qualities that made North Troy so successful in the 20th Century run counter to current market trends. Whereas earlier generations of American

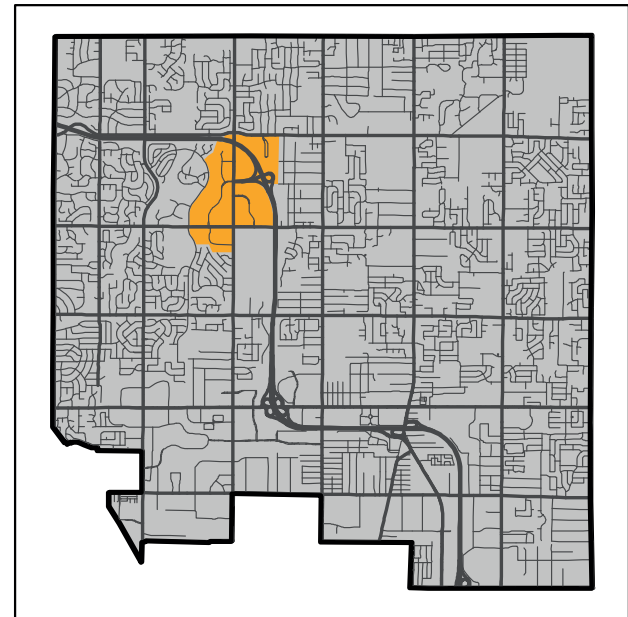
workers fled urban areas for newly constructed suburban campuses and car-accessible employment centers, today's innovation workers seek the greater connectivity, convenient amenities, and vitality that comes from a denser mix of uses, as well as a firmer commitment to sustainability.

North Troy faces a turning point. Its original development pattern should evolve to meet new challenges in the marketplace. Both employers and employees must be flexible and nimble to respond to demands in competition. As such, their facilities must adapt to fulfill evolving, diverse requirements in the workplace. Many of today's knowledge workers expect entertainment and service amenities nearby as well as opportunities and spaces to connect and share ideas. The isolated buildings in North Troy do not reflect this trend. There is no central, defining place that represents the heart and vision of North Troy. Creating this balanced mix of uses and a sense of place will create a symbiotic relationship with the adjacent neighborhoods, where employment, service, and residential uses are interconnected. Fortunately, North Troy has ample opportunities to evolve and create a modern, preferred employment hub. The challenge and opportunity is determining how and where the potential can be unlocked.

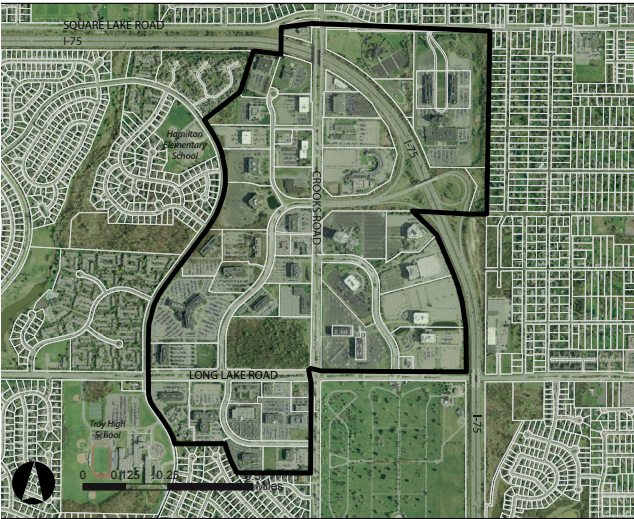
Vision Statement

North Troy will be a dynamic, high-amenity employment district with where the business and office core contributes to the health and welfare of the employees. The area will include a balanced mix of uses that supports the needs of the community and businesses by providing services and amenities for all individuals, from employer to employee to resident. The physical environment will promote an active lifestyle, while the new uses and creative programming encourage healthy choices and work together to build social capital.

Existing Conditions



Locator map



Target Area map

2013 Target area statistics

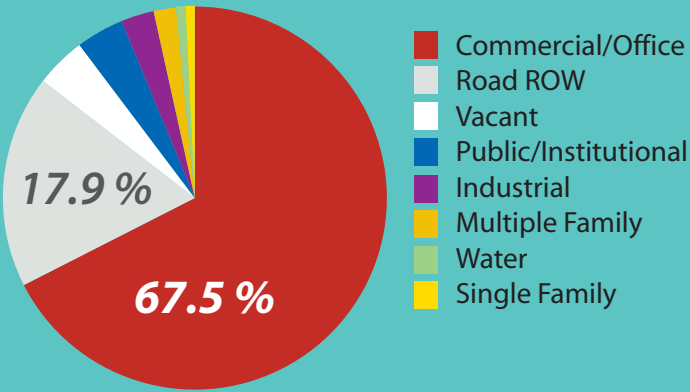
Total taxable value	\$119,423,759
Total area (acres)	461
Total businesses	282
Total employees	5,042

2010 Market area statistics¹

Population	5,908
Households	2,370
Percent owner occupied	86.6%
Median household income	\$86,217
Per capita income	\$44,887

Source: Esri 2013 Estimates Business Summary from Oakland County EDCA, Census 2010, City of Troy GIS data 2013
Note: 1. Market Area includes households within 1 mile of Target Area.
2. Employee and Business data use NAICS codes.

Land Use

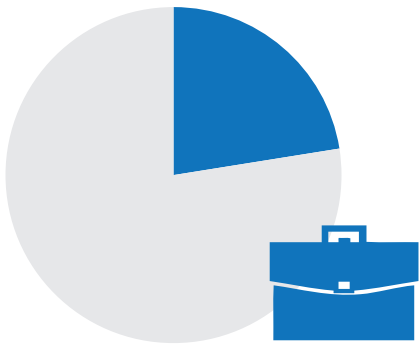


Property Data

	Target Area	Commercial	Industrial	Residential
Total Parcels	61	55	3	3
Total Structures	48	45	3	NA
Total Acres	461	415	17	29
Median Year Structure Built		1988	1998	NA
Total Floor Area (SF)		95,916	44,457	NA
Median Floor Area (SF)		5,232,280	143,213	NA
Total Taxable Value	\$119,423,759	\$114,897,329	\$4,370,860	NA

Source: City of Troy GIS data 2013

Top Industries in Target Area by Employment²

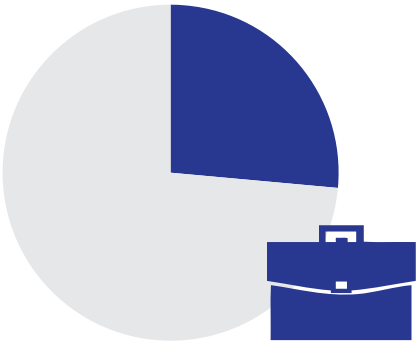


21.5 % Professional, Scientific & Tech Services

	Employees	Percent (%)
Manufacturing	1,035	20.5
Professional, Scientific & Tech Services	1,084	21.5
Finance & Insurance	683	13.5
Administrative & Support & Waste Management	521	10.3
Real Estate	408	8.1

Source: Esri 2013 Estimates Business Summary from Oakland County EDCA

Top Industries in Target Area by Number of Businesses



27.0 % Professional, Scientific & Tech Services

	Businesses	Percent (%)
Professional, Scientific & Tech Services	76	27.0
Finance & Insurance	37	13.1
Manufacturing	17	6.0
Real Estate	17	6.0
Administrative & Support & Waste Management	43	15.2
Other Services (except Public Administration)	17	6.0

Source: Esri 2013 Estimates Business Summary from Oakland County EDCA

Gateways

- Square Lake Road
- Corporate Drive
- Corporate Drive

Assets

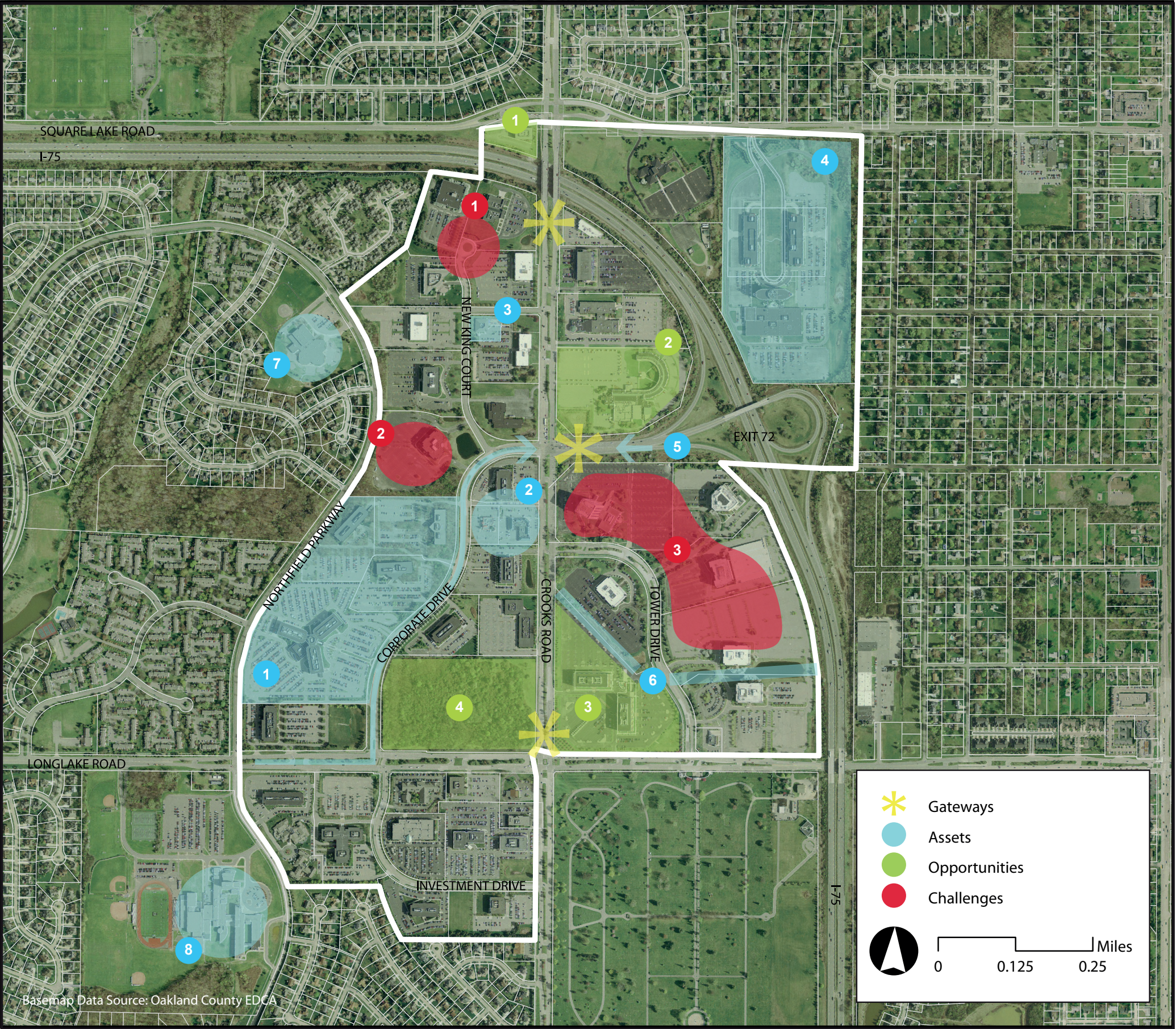
- 1: Flagstar Bank Headquarters
- 2: Northfield Point Marketplace
- 3: The Learning Experience childcare facility
- 4: Delphi Headquarters
- 5: Direct access to and from I-75
- 6: Quality stormwater management design
- 7: Hamilton Elementary School
- 8: Troy High School

Opportunities

- 1: SW corner Crooks Road and Square Lake Road
- 2: Infill at MET Hotel
- 3: NW corner Crooks Road and Long Lake Road
- 4: NE corner Crooks Road and Long Lake Road

Challenges

- 1: Access management along New King Court
- 2: Lack of pedestrian connection to New King Court and Corporate Drive development
- 3: Large surface parking lots surrounding Tower Drive properties



North Troy Public Engagement Findings

North Troy consists primarily of office use with excellent freeway access to I-75 and close proximity to a large employee base. Large setbacks and wooded areas provide a desirable campus setting for certain sites. Natural features provide amenities and may help attract mixed-use and multi-family development, if desired by the community. Existing corporate companies may look to build or expand in under-utilized areas. Looking at the area as a whole, North Troy lacks identity and character. Office space has been slow to fill resulting in high vacancy. Regional access is good, but internal connectivity and pedestrian access is not optimal. The area is dominated by cars with few alternative mobility options or usable green space. It also lacks entertainment for younger families. Road repair around the area needs to be addressed.

Downtown Detroit has been experimenting with pop-ups and initiating corporate programs to get employees out of the office. High quality food trucks provide indirect competition to brick and mortar establishments. Ultimately it’s about options and getting people exposed to business. Right now North Troy is just an employment center. It needs uses and amenities to complement the office uses and to keep people around after 5 pm.

Considerations

- Establish more convenience uses such as restaurants, retail, and daycare
- Experiment with tactical placemaking, such as food trucks and pedestrian improvements, to provide more amenities to workforce
- Increase flexibility of current zoning to widen development of potential uses
- Encourage more parking structures
- Encourage quality stormwater management for improved drainage and connected green space

Priorities and Strategies

This plan recommends three priorities for establishing North Troy as a safe, active, and walkable district with premiere office space and generous amenities for employees and residents. These priorities and strategies include:

1. Provide a Compatible and Vibrant Mix of Use

Strategies:

- Promote service infill through property repurposing
- Promote residential infill through property repurposing
- Develop and strengthen core
- Create a community gathering space

2. Improve Multi-modal Circulation and Safety

Strategies:

- Study and implement road diets
- Introduce pedestrian mid-block crossings
- Establish consistent landscape buffer and setbacks

3. Inspire Tactical Placemaking to Create a Lively Place

Strategies:

- Create an identity through gateways and wayfinding
- Facilitate health and wellness initiatives
- Encourage creative programming

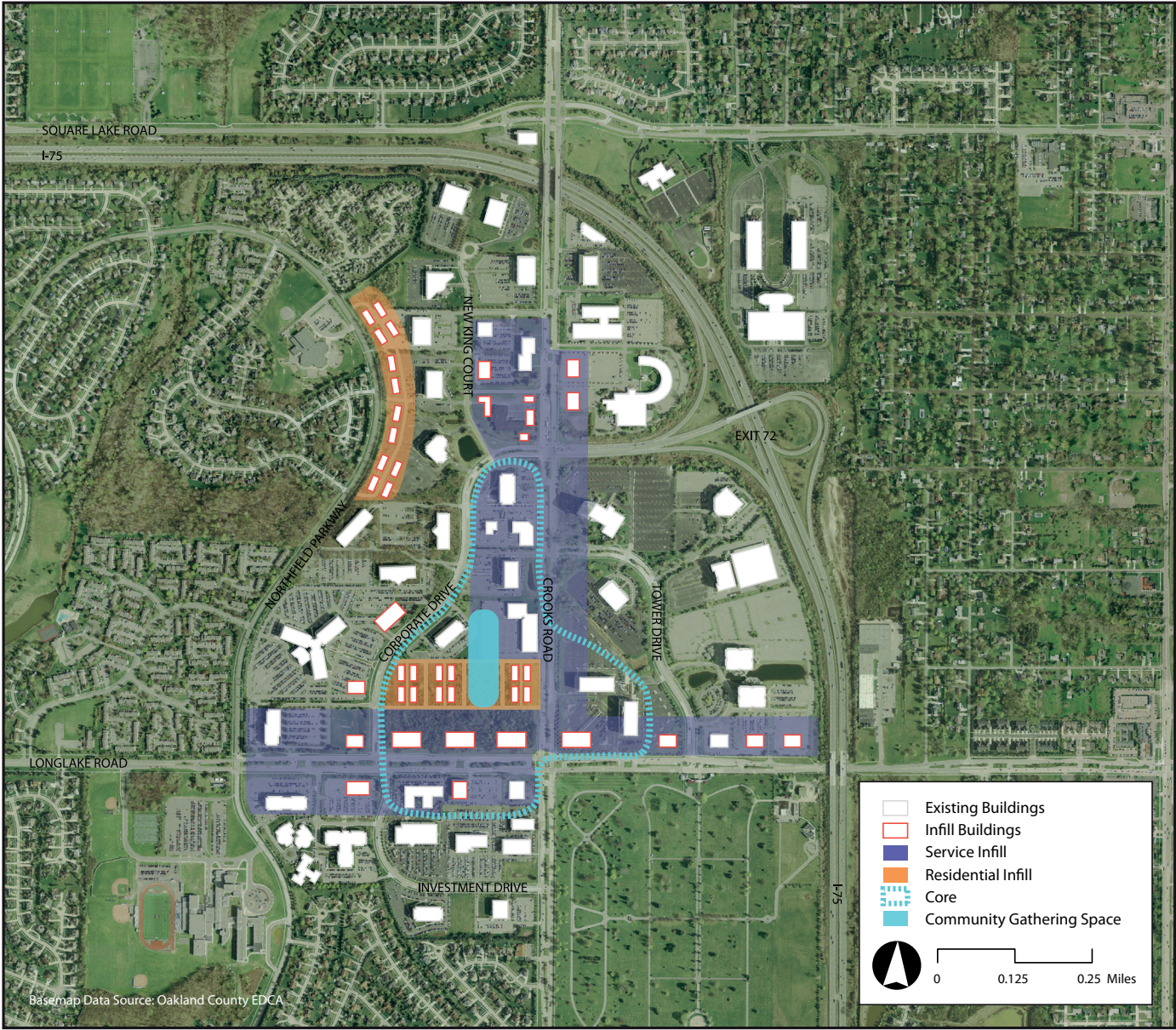
Priority and Strategy Interconnection:

These priorities and their strategies are not mutually exclusive; rather, they reinforce each other and together they have the ability to attract users and spark investment and ultimately achieve these aims of vibrancy, identity, and walkability.

Priority 1: Provide a Compatible and Vibrant Mix of Uses

Located at the intersection of two main arterial roads with a direct access ramp to I-75, North Troy is strategically located to serve as a major employment hub for Oakland County. North Troy currently is home to over 5,000 primarily daytime employees; in addition, there are over 2,000 households within one mile of the area. However, the area is dominated by single-use office buildings with limited interconnections and few amenities for these workers and nearby residents.

Preparing North Troy for the next generation of growth will require a broader and more creative real estate strategy that will tap into regional trends and market opportunities in order to create a more vibrant, attractive, and flexible work environment. A compatible and vibrant mix of uses will create a life and vibrancy, provide interconnections and a relationship with the adjacent neighborhoods, reduce automobile trips, and enhance walkability by providing destinations.



Priority 1: Provide a Compatible and Vibrant Mix of Uses

Strategy: Promote service infill through property repurposing

The land use pattern of North Troy is primarily single use office space. Given the existing market conditions, many of these buildings are over-served by parking. As a means to attract new business to North Troy, these under-utilized parking areas may be repurposed for service infill development. Infill development is increasingly recognized as an effective way to achieve a variety of goals, including making better use of existing infrastructure; locating community services, jobs, and shopping in close proximity to neighborhoods; and reducing auto trips by supporting walking, biking, and transit.

Location

Service infill should be focused on Crooks Road, Long Lake Road, and the area around Northfield Market Place.

Uses

Mixed use, casual and family dining, personal services, dry cleaning services, health and wellness, grocery, pharmacy, and childcare.

Characteristics

Mixed use buildings, placed closed to the street, use of high quality materials, naturalized stormwater treatment, and woodland protection. Specific design features can promote this interconnections including the layout and orientation of buildings, the network of sidewalks and pathways, the location of parking relative to structures and walkways, and the amount and placement of green space, landscaping, benches, and other amenities.



Big Beaver retail development in Troy, MI



Grocery store in Kansas City, MO

Strategy: Promote residential infill through property repurposing

North Troy has the opportunity to re-envision the underutilized land adjacent to Northfield Parkway. A variety of housing options will provide residents with convenient access to work, schools, and the new infill service amenities. It will also provide an appropriate transition between the more intense multiple story office use and the less intense single family neighborhoods.

Rezoning transitional areas between the service core and surrounding social neighborhoods as mixed use would also enable property owners to repurpose the upper stories of underutilized office buildings as residential use. Introducing housing to North Troy will provide attractive housing options for rising professionals as well as active seniors.

Location

East side of Northfield Parkway.

Uses

Single-family attached residential, live-work lofts

Characteristics

Two-to-three story urban style residential development set close to the street with appropriate landscaping buffer, use of high quality materials, and alleys or rear loading garages. Vehicular access should be limited off Northfield Parkway.



Rochester Commons PUD in Troy, MI



Townhomes in Victoria, BC

Priority 1: Provide a Compatible and Vibrant Mix of Uses

Strategy: Develop and strengthen the core

The Master Plan addresses the need for concentrated investment, activity, and services within the Target Areas.

Within each Target Area, the Plan identifies specific sites and nodes that can be utilized to build this physical fabric and social atmosphere, and support economic development. Building off the surrounding employment base and the highly trafficked Northfield Point Marketplace, the vacant parcel on the northwest corner of Long Lake and Crooks Road was approved for mixed use development. The development of this vital site will provide a compatible mix of uses and should be the starting place of other strategies in the Plan, including pedestrian circulation improvements, landscaping, wayfinding, and creative programming. At the heart of the core is the community gathering space.

Strategy: Create a community gathering space

The community gathering space will serve as the heart of North Troy, providing physical amenities and social programming for employees and residents. Given that the area is known primarily as an office campus, North Troy is fairly green. Many of the corporate sites offer attractive landscaping, mature trees, and even water features, but most of these facilities are designed for aesthetics not for use.

Creating a community gathering space in the vacant land and underutilized parking area will enhance North Troy’s sense of place. This area should combine landscaping and hardscape, and include amenities such as cafe seating, movable chairs, bike racks, water features, permanent and seasonal shaded areas, public art, and performance space. This combination of plaza and green space will provide a space for corporate programming and neighborhood recreation, supporting the adjacent office, service, and residential uses.



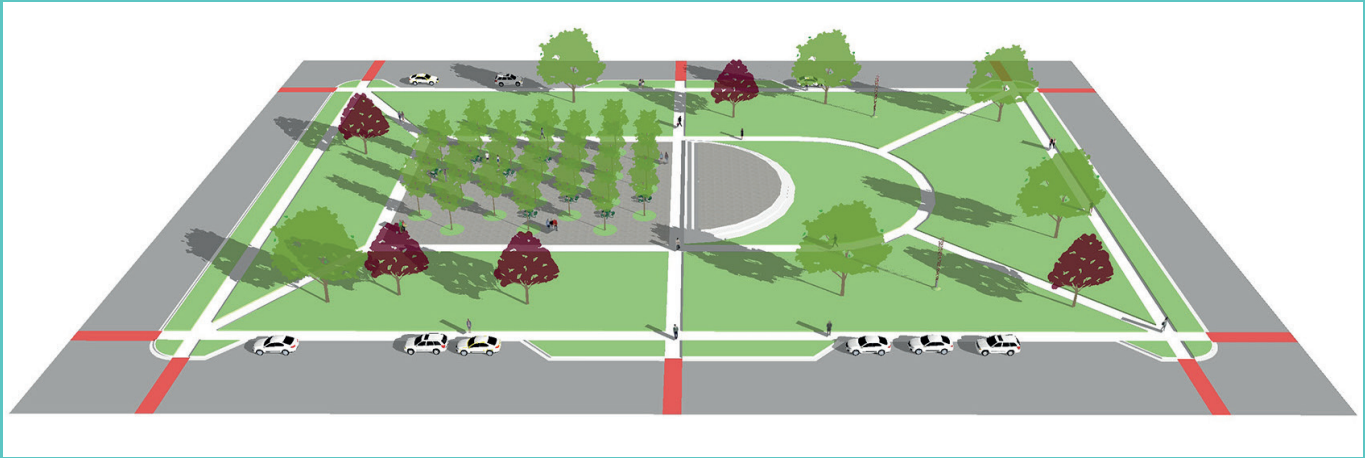
Town Center in Novi, MI



Shopping Center in Orland Park, IL



Conceptual design for North Troy community gathering space

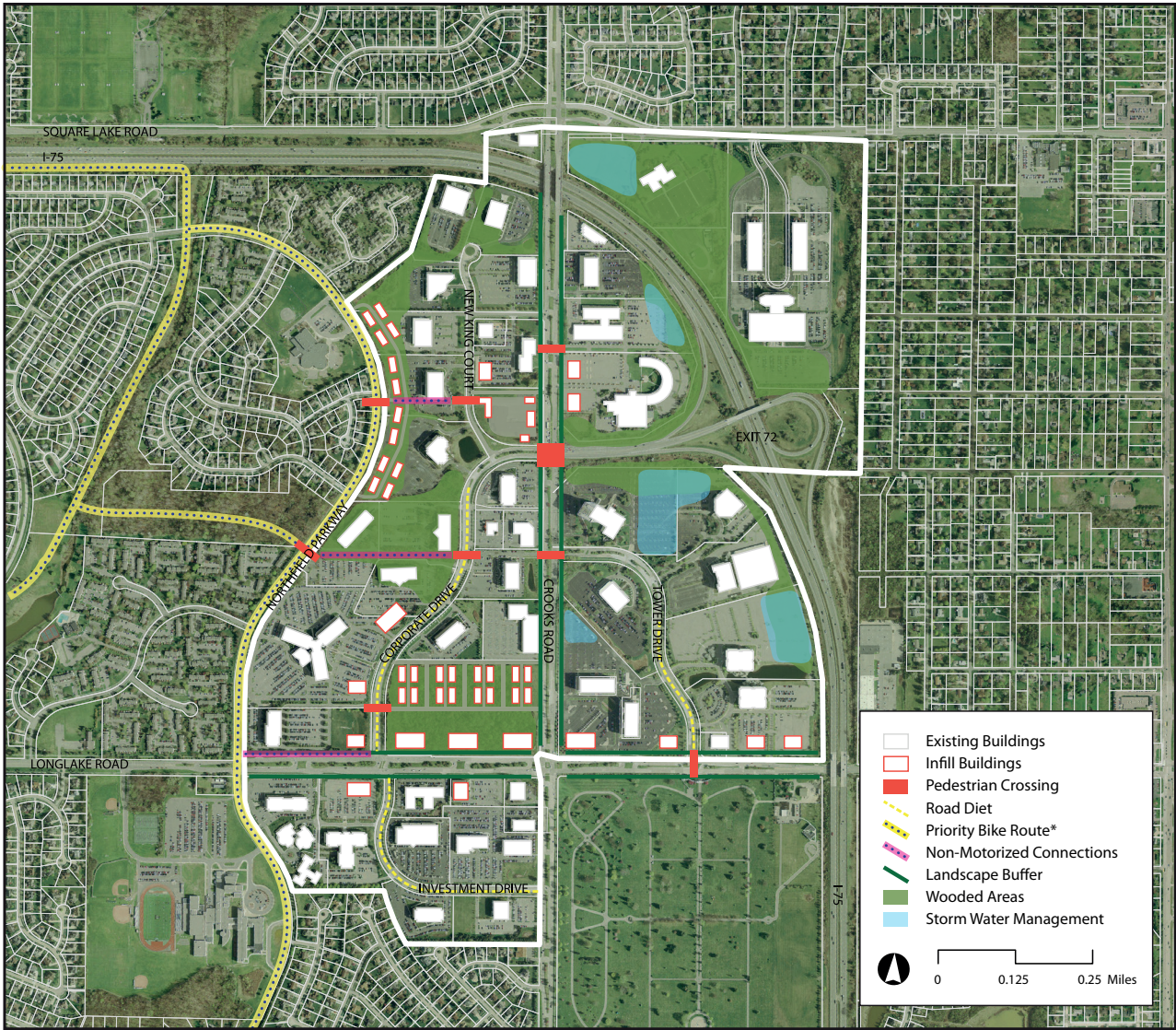


Conceptual design for North Troy community gathering space

Priority 2: Improve Multi-modal Circulation and Safety

At some point during our commute to work or school, everyone becomes a pedestrian. North Troy provides a beautiful campus setting with large lawns, water features, and woodland areas, but it is auto-oriented and lacks walkability. There are sidewalks, but they don't really function for pedestrians and cyclists, they don't lead to desired destinations, and they often follow indirect routes. Changes to landscaping and transportation infrastructure within the right-of-way, coupled with strategic infill, will improve safety and encourage walkability.

It will be important to link new circulation paths across North Troy to the non-motorized facilities along Northfield Parkway. Northfield Parkway is highlighted as a Priority Bike Route on the Priority Bike Routes Neighborhood Greenways Map* in the 2009 City of Troy Trails and Pathways Master Plan. In the short term, Long Lake Road will serve as the primary connection to the parkway, and, as development occurs, there will be more opportunities to create non-motorized connections using public easements. In addition to perimeter sidewalks, private developers should be encouraged to improve internal pedestrian circulation, creating convenient, logical, and attractive walkways.



Priority 2: Improve Multi-modal Circulation and Safety

Strategy: Study and implement road diets

North Troy was designed for the automobile in the mid-1980s, and cars remain the dominant transportation choice. In order to provide for multi-model transportation options, the City should look to integrate principles of complete streets and best management practices (BMP) into capital projects. Road diets offer a strategy for reconfiguring travel lanes to better accommodate non-motorized transportation such as walking, biking, and transit, while also incorporating landscaping and green infrastructure. As secondary connector streets with large right-of-way (ROW) widths and less than 1,000 vehicles per hour (vph) at peak times, Investment Drive (86 foot ROW), Corporate Drive (120 foot ROW), and Tower Drive (105-120 ROW) provide appropriate locations to implement 4-to-3 lane conversions with striped bike lanes or a protected multi-use pathway.

FIGURE A.1: Corporate Drive Existing Conditions (120 foot ROW)

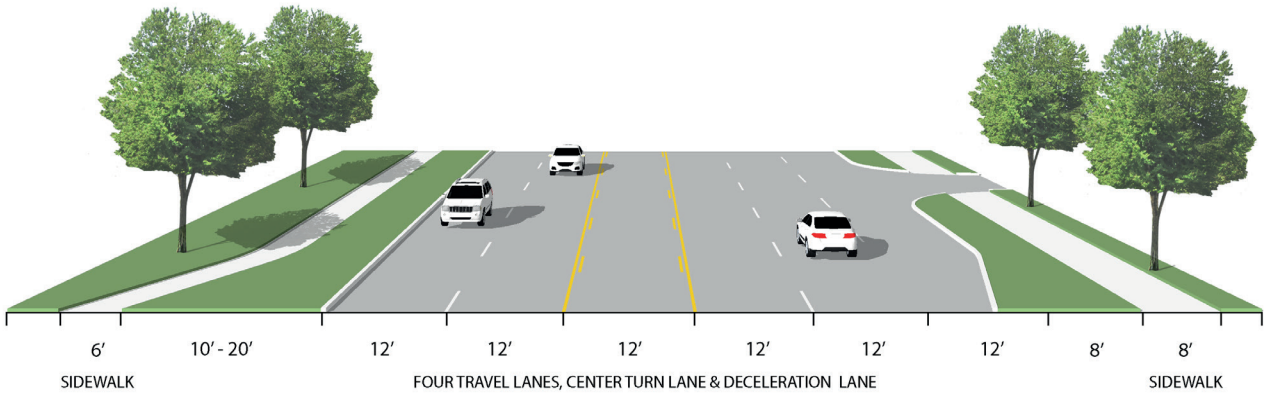
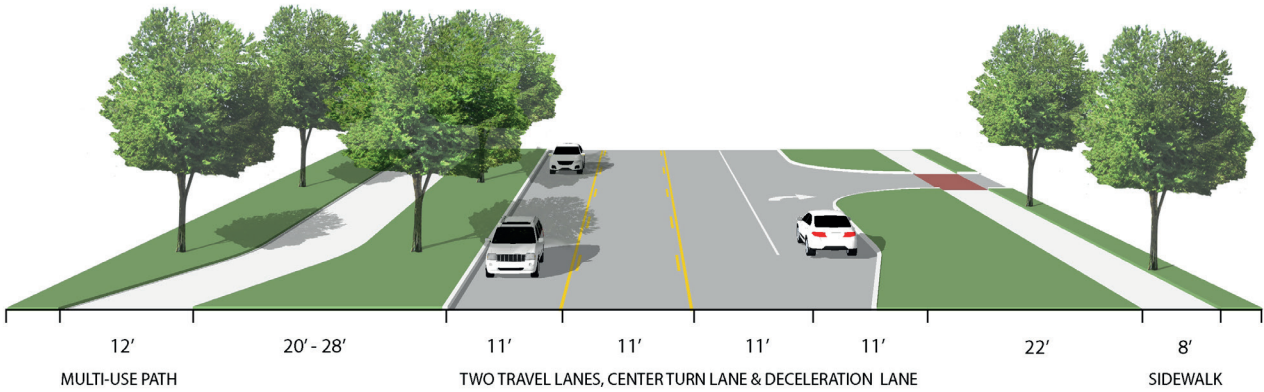


FIGURE A.2: Corporate Drive Proposed Conversion (120 foot ROW)



Complete Streets

"Complete streets means roadways planned, designed, and constructed to provide appropriate access to all legal users in a manner that promotes safe and efficient movement of people and goods whether by car, truck, transit, assistive device, foot, or bicycle."

Together Michigan Public Act 134 and Public Act 135 of 2010 form the Complete Streets legislation. These laws affect project planning and coordination between government and state transportation agencies and ensure that Complete Streets policies consider the local context, functional road classification, project costs, and most importantly, the mobility of all legal users.

FIGURE A.3: Investment Drive
Existing Conditions (86 foot ROW)

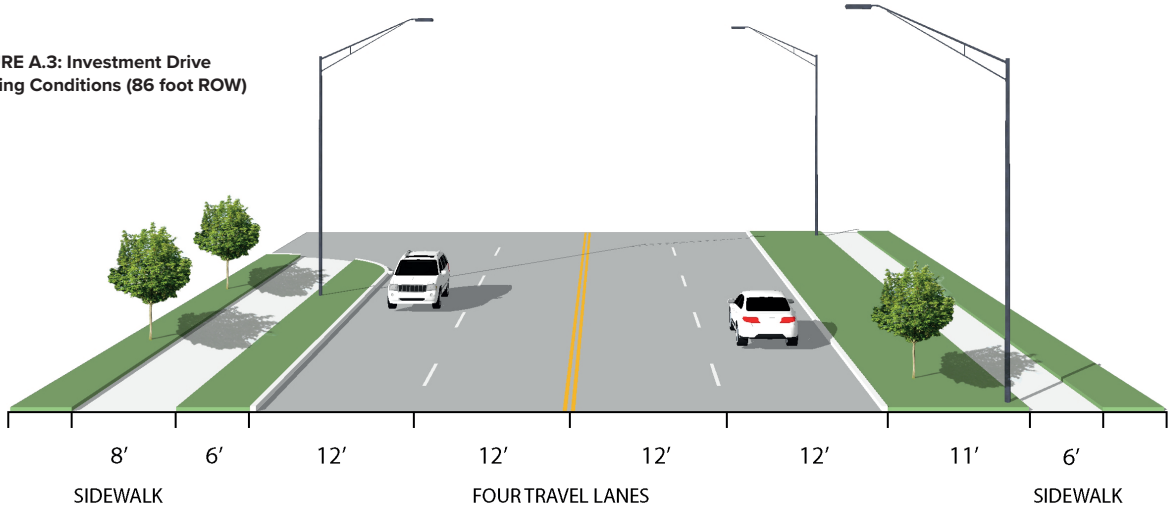


FIGURE A.4: Investment Drive
Proposed Conversion 1 (86 foot ROW)

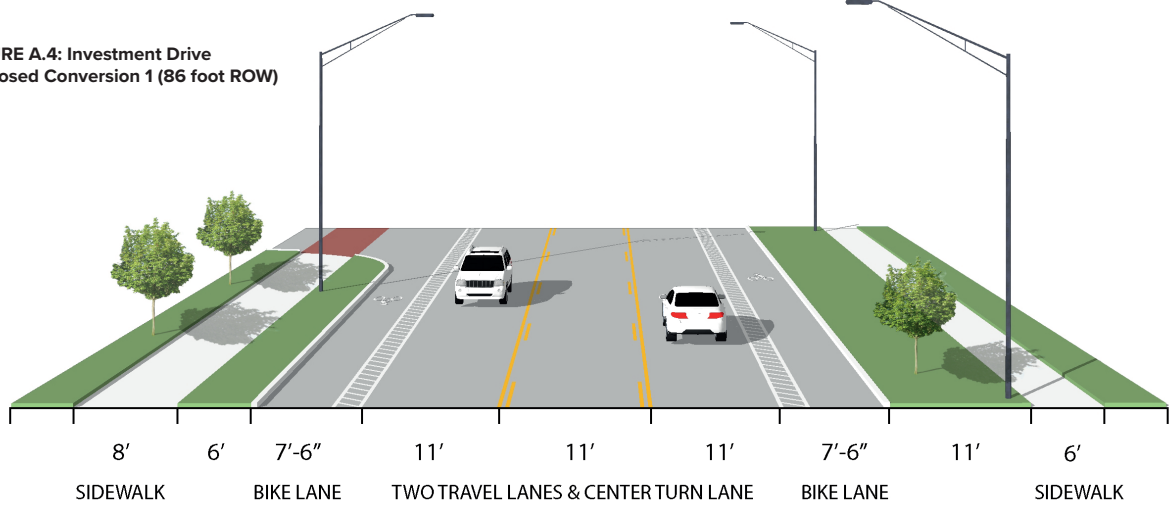
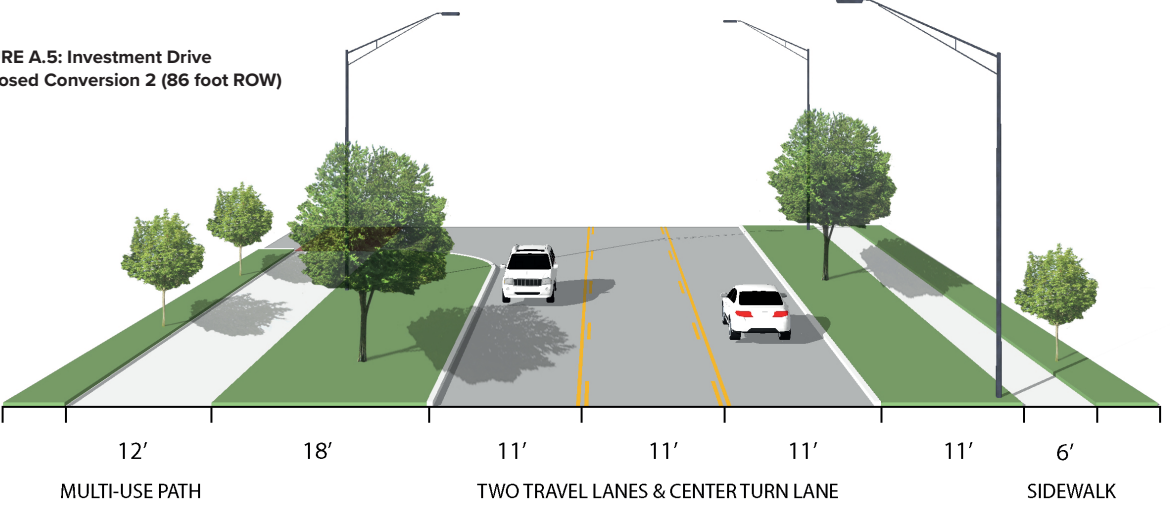


FIGURE A.5: Investment Drive
Proposed Conversion 2 (86 foot ROW)



Priority 2: Improve Multi-modal Circulation and Safety

Strategy: Introduce pedestrian mid-block crossing

Due to the auto-centric nature of North Troy, including multiple travel lanes, curving roads with reduced visibility, and long blocks, employees and residents who venture out on foot to destinations such as the Northfield Pointe Marketplace have difficulty crossing Corporate Drive and Crook Road. Providing safe mid-block crossings for pedestrians and cyclists is an integral strategy for walkability. Mid-block crossings for Northfield Parkway will further integrate and strengthen the connection with the adjacent residential neighborhood. Pedestrian refuge islands and signalized crossings are some techniques for providing mid-block crossing. Applicability should be determined based on site context and budget. Priority pedestrian routes will develop based on new infill development.

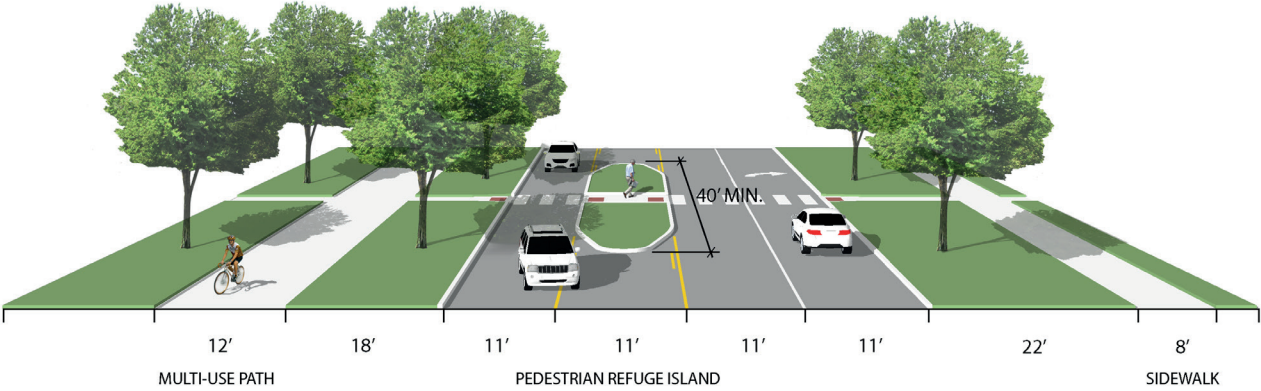


Cyclist at Corporate Drive and Crooks Road



Crosswalk in Chicago, IL

FIGURE A.7: Long Lake Road and Crooks Road Improved Landscape Buffer



Priority 2: Improve Multi-modal Circulation and Safety

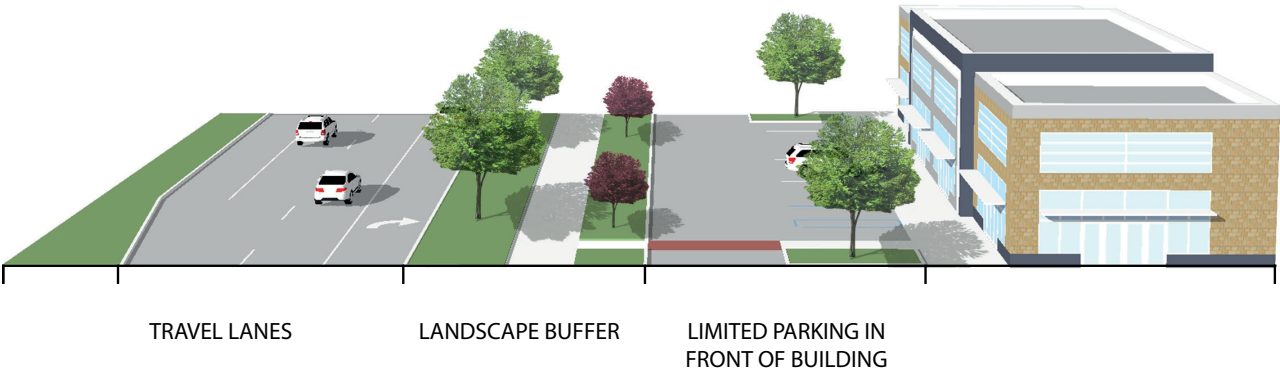
Strategy: Establish consistent landscape buffer and setbacks

The office uses in North Troy have large setbacks and landscaping designed to produce a dramatic approach via car. Pedestrians are walled off by vegetation, forced to walk through parking lots, or left on sidewalks that lead to nowhere. New residential and service development should front the street, creating a more consistent street wall. Sidewalks along Crooks Road and Long Lake Road should be pushed back away from the edge of pavement to accommodate vertical elements such as street lights and street trees in the landscape buffer. These elements provide real and perceived protection to pedestrians on the sidewalk. Low shrubs also offer a separation between the flow of traffic and the pedestrian realm.



New Development along Big Beaver in Troy, MI

FIGURE A.7: Long Lake Road and Crooks Road Improved Landscape Buffer



Priority 3: Tactical Placemaking

Tactical placemaking will allow the City and private partners to experiment with physical interventions and social programs using a lighter, quicker, cheaper approach to transforming the image and identity of North Troy. Placemaking is as much about the process of engagement as it is about improving the physical environment. Through community education and public-private partnerships, there are things the City can start work on today to get employees and residents interacting with the place and each other. Tactical placemaking feeds into the North Troy’s overall strategy of strategic placemaking, which has recently become Michigan’s statewide approach to economic development. The MI Place Initiative includes business and talent attraction and retention.

Strategy: Create an identity through gateways and wayfinding

North Troy currently lacks an identity. Public wayfinding and site identification and directional signs are important elements of a project. North Troy’s location offers a prime opportunity to capitalize upon the entrance into the City of Troy along I-75. In addition, several smaller gateways will provide project identification for the business park development. Directional and information signs, as well as street signs, will help users navigate the area.

Strategy: Facilitate health and wellness initiatives

Many North Troy employees already walk during the lunch hour. Establishing a walking and biking loop with wayfinding and mile markers will encourage this culture. These non-motorized pathways should be connected to the priority bike route along Northfield Parkway. Public-private programming, similar to Oakland County’s Count Your Steps Initiative or the University of Michigan’s BlueBike rental program, can encourage employees to utilize non-motorized facilities.

Strategy: Encourage creative programming

North Troy would benefit from the City’s “Lunch in Troy” program which brings in mobile food vendors, or food trucks, to sites with few brick and mortar dining options for workers. The City can expand this program by working with member vendors of the Michigan Mobile Food Vendors Association (MMFVA). Introducing movable chairs and tables will help create an atmosphere for socializing. Other corporate sponsored programming will expand vibrancy to the area.

Eleven Principles for Creating Great Community Places

- 1. Recognize the community as the expert
- 2. Create a place, not a design
- 3. Look for partners
- 4. Observe existing spaces
- 5. Establish a vision
- 6. Use Lighter, Quicker, Cheaper approach
- 7. Triangulate by linking streetscape elements, amenities, and activity
- 8. Build on small projects
- 9. Allow form to support function
- 10. Remember that money is not the issue
- 11. Embrace Placemaking as a process rather than a product



North Troy Corporate Park signage



Flagstar Bank Headquarters driveway



Wayfinding signage



Mark's Carts in Ann Arbor, MI



Clinton River Trail in Rochester, MI

Action Plan and Implementation

The North Troy Plan is organized into multiple projects so the vision can be refined and implemented in phases over time in a flexible manner. Priority transformative projects like the road diet projects entail multiple phases given their scale and ambition and serve as economic catalysts for tapping the development potential of the area for years to come. The timeframe to implement the Plan will depend on many factors, including market conditions, financing, approvals, and other City initiatives.

Priority 1 Provide a Compatible and Vibrant Mix of Uses	Strategy	Actions	Phasing	Responsibility
	Promote service infill through property repurposing	Identify sites for infill and meet with property owners	Near	City, Private entities
		Amend zoning if necessary	Near	City
	Promote residential infill through property repurposing	Identify sites for infill and meet with property owners	Mid/Long	City, Private entities
		Amend zoning if necessary	Mid/Long	City
	Develop and strengthen core	Implement infrastructure improvements	Mid/Long	City, Private entities
		Encourage development of the core	Mid/Long	City, Private entities
	Create a community gathering space	Design and construct public space	Mid/Long	City, Private entities

Priority 2 Improve Multi-modal Circulation and Safety	Strategy	Actions	Phasing	Responsibility
	Study and implement road diets	Implement Road Diet for Investment Drive	Mid	City, Private entities
		Implement Road Diet for Corporate Drive	Long	City, Private entities
		Implement Road Diet for Tower Drive	Long	City, Private entities
	Introduce pedestrian mid-block crossing	Identify location(s) for mid-block crossing	Near	City, Private entities
		Identify type of crossing based on location and funding source	Near	City, Private entities
		Implement crossing	Near	City
	Establish consistent landscape buffer and setbacks	Amend zoning if necessary and implement appropriately scaled landscape buffers and setbacks when new development occurs	Near	City, Private entities
		Implement new streetscape along Crooks and Long Lake Road	Long	City, Private entities

Priority 3 Inspire Tactical Placemaking to Create a Lively Place	Strategy	Actions	Phasing	Responsibility
	Create an identity through gateways and wayfinding	Create and install gateway and wayfinding program	Mid	City, private entities
		Work with existing corporations to establish common identification signage	Mid	Private entities
	Facilitate health and wellness initiatives	In cooperation with gateway and wayfinding program, identify North Troy walking and biking loop	Mid	Private entities
	Encourage creative programming	City to establish initial programming efforts such as City's "Lunch in Troy" program	Near	City
		Work with existing corporations to establish long-term programming	Mid	City, Private entities

11 – Appendix

To engage the civic entrepreneurs of Troy, on June 21, 2007, the City conducted a Master Plan workshop which involved a selected participant list of over 150 invitees.

Those invited to participate on the workshop process represented a wide cross section of Troy's population, and included residents, business owners, City officials, volunteers, and other participants.

In this workshop, the participants were engaged to employ the "Smart Growth Readiness Assessment Tool," (SGRAT) a new program designed by the Michigan Land Policy Institute at Michigan State University. The tool is designed to help communities learn how to incorporate "Smart Growth" principles into their land use management practices. "Smart Growth" is a term conceived in 1996, when the Environmental Protection Agency lead a group of organizations to form the Smart Growth Network. The Smart Growth Network is a group dedicated to creating new land development practices which "...boost the economy, protect the environment, and enhance community vitality," as stated by the Smart Growth Network.

The Tool is intended to assess how well a community is prepared to develop according to the Ten Tenets, to allow communities to measure progress over time, and to supply resources for communities interested in growing smart. The SGRAT is the most comprehensive such tool in the nation.

Though produced 8 years ago, the results of the SGRAT greatly influenced the creation of the 2008 Master Plan. Recognizing their importance, this appendix includes the detailed results of the SGRAT survey.

Survey Responses

A primary source from which many of the ideas in this Plan have been derived is the supplemental survey given to SGRAT Workshop participants, City department heads, and the Planning Commission. The following are a selection of questions and responses which helped inform this Chapter.

What can the City of Troy do to continue to attract world-class businesses?

- Streamline the start up process. Be proactive in soliciting business – domestic and worldwide. Help business to find locations and reasons to locate in Troy (incentives). Accelerate development of the transit center. Improve road conditions and traffic movement.

What steps would you take to make Troy a more vibrant and engaging place to live and work?

- Provide mass transit options to access entertainment in metro Detroit.

What is the most important improvement that Troy can make to ensure that all residents have access to safe and efficient transportation?

- Lobby and work towards a high density regional transit system with a City component connected to the system.
- Create regional public transportation that is efficient, safe and inexpensive.
- Make it affordable and convenient not just within the City.
- Keep the roads nice – for all transportation.
- Promote multi model transportation options in City.
- Transit – regional transportation initiative.

Should Troy play a role in the development of improved regional transportation?

- Yes, we should work on developing the proposed Transit Center and expand from there.
- Yes. We need a method for our residents to get to their place of employment without using single occupant vehicles. We need a method of transportation for youth and seniors. Lastly, we need a method to bring employees to the businesses located in Troy. Continue to develop walkability.
- Mass transit will be critical to future vitality of all communities. The leader regionally in mass transit will create financial stability for all. Troy should be the leader in Oakland County.

Should the City be a model for responsible care of the natural environment?

- Yes. The City needs to promote green growth in new developments and within its own buildings. City owned property does not need to be all developed into parks, it can be just left in its natural state. Encourage and educate about mass transit and walkability.
- Yes, we only have a natural environment once. The trees, parks and water resources must be protected. The City of Troy is the steward of the resources in the community.

Do you feel it is important for the City of Troy to promote the advancement of or mandate the practice of sustainable development, such as, but not limited to, the construction of certified “green buildings” and Low Impact Development techniques for stormwater management?

- I believe promotion is desired for construction of certified “green buildings”. Low impact Development techniques for stormwater management are a practice that should be mandated. Economics will determine the practical nature of these areas of development.
- Absolutely – we are doing that now with planning.

What does the Smart Growth Readiness Assessment Tell Us?

Throughout this Master Plan, each Chapter will contain a brief summary of those SGRAT results which most directly inform the topics covered by that Chapter. The SGRAT responses will also play a critical role in the development of implementation policies.

Tenets 3 and 5 contained a series of questions addressing cooperation and collaboration, public outreach, and the practices and procedures which regulate land development in the City. The following summaries provide a short description of the City’s score in these areas .

Tenet 3: Encourage community and stakeholder collaboration in development decisions.

Troy was awarded approximately 40 percent of the available points for Tenet 3. While the participants perceived the City of Troy to be very good about collaboration in formal settings, such as the development of new Zoning Ordinance amendments or Master Plan revisions, the perception of collaboration outside of those programs was poor. In other words, respondents felt that the City has room to improve when it comes to general encouragement of an open, collaborative environment with special interest groups, adjoining communities, and the general public, especially as it relates to smart growth principles.

Another area where the City could improve its score in this area is to develop stronger community outreach programs with regard to planning and growth issues. While collaboration with schools scored well, education and collaboration with the general public, especially when initiated by the City itself, was not perceived well.

Tenet 5: Make development decisions predictable, fair, and cost-effective.

The City scored very well with regard to Tenet 5. The City received nearly 75 percent of the available points in this area, thanks to a strong perception that the City diligently maintains its Zoning Ordinance, Master Plan, and other community planning documents, its consistency between its zoning and planning, and perception of fairness to the development community. Respondents felt that developers are given a fair chance to innovate in Troy and that most new development makes a strong contribution to the City as a whole.

The City could score even higher in this area were it to permit additional density for developers who propose more smart-growth oriented developments. Also, participants felt that more attention to long-range planning could be paid, although there was a positive recognition that current practices for ongoing development were strong and fair.

The City received extra points for supporting participation in elected and appointed official training programs, such as the Michigan State University Extension Citizen Planner Program, and continuing education in the area of planning.

Survey Responses

A primary source from which many of the ideas in this Plan have been derived is the supplemental survey given to SGRAT Workshop participants, City department heads, and the Planning Commission. The following are a selection of questions and responses which helped inform this Chapter.

What kind of image do you want people to think of when they are asked about Troy?

- Excellent schools, nice residential, strong City government and services, shopping.
- A well maintained City with excellent schools, neighborhoods, corporations, and good services.
- Home to Walsh College, branches for the University of Phoenix, Central Michigan University, Spring Arbor University, ITT Technical Institute and Michigan State University Management Center.

What can the City of Troy do to continue to attract world-class businesses?

- In cooperation with Troy School district (plus other educational facilities) continue to promote education, diversity of ethnic groups which constitute the vibrant Troy community.
- Offer reasonable incentives. Maintain quality infrastructure. Continue to offer quality City services & A ++ rated schools. Make it attractive for the business community to also want to live here in Troy.

What steps would you take to make Troy a more vibrant and engaging place to live and work?

- A need exists for the young teenagers to meet, and hang out in a secure environment. The young adults (18-22 years old) also need a place to meet and congregate. These activities need to be available to these groups year around.
- Add paths and trail system in City; increase property maintenance standards; increase art in public places; create synergy.

What is the most important improvement that Troy can make to ensure that all residents have access to safe and efficient transportation?

- Create a comprehensive pedestrian pathway system (walking, biking, rollerblading, etc.) that system would help to reduce short trip car drives that add to roadway congestion.

How can the City better accommodate non-motorized transportation?

- Emphasize bike paths. Develop specific requirements for safe walk & bike access.
- Increase the numbers of walkable/bikeable areas....more trails and information letting people know where the trails and sidewalks are.
- Plan the City in small village components that can service the daily needs of nearby residents by sufficient shopping areas central to each village.

What steps would you take to make Troy a more vibrant and engaging place to live and work?

- Build an arts center or better venues for music, stand-up comedy, performing arts, night life, etc..., utilize more mixed use development, and connect these elements with pedestrian pathways.
- Develop the Civic Center that becomes a focal point for residents to interact and learn.

Many land use issues result between single-family residential areas adjacent properties proposed for higher density. How can these conflicts be reduced?

- Include some “entertainment” areas or common areas for use of both groups.

What does the Smart Growth Readiness Assessment Tell Us?

The SGRAT did not include any questions directly related to the care and management of educational facilities, nor did it specifically address cultural facilities. As a tool primarily directed towards the examination of the Smart Growth Tenets, which are mostly related to physical development and infrastructure, the areas where the SGRAT may most readily apply for this Chapter are related to access to such facilities.

The City scored 33 percent of the available SGRAT points for Tenet 8, “Provide a variety of transportation options.” The assessment demonstrated that the City can improve its transportation score in a variety of areas, especially by providing stronger access to public transit, rail service, or a multi-modal method of access to a regional airport. Troy could also gain points by encouraging better infrastructure for cycling as a viable option, and the provision of park-and-ride areas for bus service. Further, the City does not make extensive use of traffic calming devices, which can restrict automobile traffic, but encourage safer non-motorized transportation in certain circumstances.

These results were drawn in part from the City’s response to these questions:

Does your community provide infrastructure to promote bicycling as a viable, healthy transportation option by any of the following? (Check all that apply, if any).

- A. Providing well-maintained bike lanes, five feet in width along or between local transportation corridors.
- B. Providing non-motorized paths that connect recreation facilities and other community destinations.
- C. Implementing access management strategies that improve safety and efficiency of both bicycle and vehicular travel.
- D. Providing appropriate signage and bike racks in common community destinations such as schools, public buildings, work places and shopping centers.

Best Answer: A, B, C, D

Troy’s Response: None

Does your community encourage bicycling through any of the following?

- A. Inventorying existing conditions and developing a strategy or plan to improve biking conditions.
- B. Programs that promote bicycling to work, school or for recreational purposes.
- C. Accommodating advanced or experienced riders, basic or less confident riders and children.

Best Answer: A, B, C

Troy’s Response: A

Survey Responses

A primary source from which many of the ideas in this Plan have been derived is the supplemental survey given to SGRAT Workshop participants, City department heads, and the Planning Commission. The following are a selection of questions and responses which helped inform this Chapter.

What kind of image do you want people to think of when they are asked about Troy?

- A commerce metropolis, clean and modern.
- A strong business presence; thriving neighborhoods, a balanced mix of residential and business tax base; the cutting edge of environmental sensitivity and walkability.
- A center of knowledge; an economy based on information technology.

What can the City of Troy do to continue to attract world-class businesses?

- Offer reasonable incentives. Maintain quality infrastructure. Continue to offer quality City services & A ++ rated schools. Make it attractive for the business community to also want to live here in Troy.
- Promote Troy as a high-tech corridor and streamline the process of establishing and maintaining a Troy business. Make guidelines for developers very clear, concise, fair and predicable.
- Start by realizing that Troy needs the business community. Not long ago, businesses paid more than 50 percent of the taxes, making Troy a very desirable place to live; it has shifted the other way. Work with the Chamber of Commerce and diversify the business base.

What is the role of the City of Troy in the region? What role should the region play in the future of Troy?

- Cooperative neighbor that shares ideas and challenges in open communication with neighboring communities, taking on a leadership role when it is in the best interest for all.
- Troy should provide an example of how a city can balance between successful business and a qualified residential base. Recent economic trouble for the state and region has tarnished that image. Troy can provide an example of leadership in how a community can excel as it matures.
- A leader and model of an environmentally friendly community.
- Troy is perceived as a strong entity and therefore we can be a leader in moving the region to think, govern, buy, and plan regional. The image of the entire region will affect the ability of Troy to attract and retain jobs and the creative class. We need to work together to solve issues of blight, economy, education and mass transit.
- Troy should be a role model city of how a community can balance commercial and residential needs so each complements each other. The City should lead in being flexible to accommodate future needs of the residents.

What is the future of traditional industrial land uses, such as manufacturing or fabrication, in the City of Troy?

- We need to be creative as these traditional uses become obsolete. Our PUDs are a positive start for the future of these areas.
- Manufacturing is not coming back. Those buildings need to be used for other things. Allow residential use.
- Allow some to be developed as described in the Maple Road study. Especially, the work/home development for entrepreneurs. It is important that these work/home developments are visually pleasing.
- Information about how industrial parcels could be converted to alternative uses should be made available. Selectively purchase vacant industrial properties that can be used as parking lots to other nearby buildings and allow those buildings to have alternative commercial uses.

What does the Smart Growth Readiness Assessment Tell Us?

Many of the questions asked in the SGRAT have some bearing on the local economy, either directly or indirectly. Those questions which asked about the current trends in the City with regard to redevelopment of existing properties and the ability to develop mixed-use properties relate to the City’s strategy for transitioning to the 21st Century marketplace. Questions which relate to live-work units and brownfield redevelopment show how the City can improve its ability to accept new development types and encourage manufacturing era properties to redevelop as knowledge economy facilities.

Are developers actively redeveloping vacant, under-utilized, and/or brownfield properties?

- A. Yes
- B. No

Best Answer: A

Troy’s Response: A

Does your Zoning Ordinance and Master Plan provide strategies and incentives for redeveloping existing urban areas?

- A. Yes
- B. No

Best Answer: A

Troy’s Response: B

In which of the following zoning districts is mixed-use permitted? (Check all that apply, if any).

- A. Central business district
- B. Neighborhood commercial districts
- C. Special mixed-use overlay district
- D. Planned Unit Development Districts
- E. Other

Best Answer: A, B, C, D, E

Troy’s Response: D

Has your local government adopted zoning codes that give as much opportunity for a mixed-use development as for a typical single-use project (e.g., a medium density housing subdivision, strip mall or office park)?

- A. Yes
- B. No

Best Answer: A

Troy’s Response: B

Survey Responses

A primary source from which many of the ideas in this Plan have been derived is the supplemental survey given to SGRAT Workshop participants, City department heads, and the Planning Commission. The following are a selection of questions and responses which helped inform this Chapter.

What can the City of Troy do to continue to attract world-class businesses?

- Strategic parking plans to make businesses easy to find and convenient and safe for customers and employees to use.
- Improve our roads and pedestrian pathways, maintain high standards in architecture, rigorously enforce zoning violations, retain residential character of our neighborhoods in spite of the majority of City Council pushing to commercialize them with large commercial vehicles and large group child care homes, start the customer solutions department, and more.
- Provide good roads that are well maintained and well operated.

What steps would you take to make Troy a more vibrant and engaging place to live and work?

- Mass transit options to access entertainment in metro Detroit.
- Add paths and trail system in City; increase property maintenance standards; increase art in public places; create synergy.

Should Troy play a role in the development of improved regional transportation?

- Yes, we should work on developing the proposed Transit Center and expand from there.
- Absolutely, we need a creative connector (trolley to Big Beaver Corridor from Maple/Eton Station. More Bike, walking paths from subs to parks. Destination emphasis planning.
- Yes, Troy should play an important role in improving regional transportation. Mass regional transportation will enable people to move from “here to work” economically and efficiently. We can’t build wide enough roads to move traffic; we need to economically and efficiently move people during the course of the day.
- It would help make the City more family friendly. We would be sharing transportation options. It would also help attract world – class business. It is a good selling point.
- Yes. If we are to be the hub of business and fun activities (family, night life, etc) we must make it easy for people in nearby communities to visit Troy without getting into a traffic jam.
- Yes. We need a method for our residents to get to their place of employment without using single occupant vehicles. We need a method of transportation for youth and seniors. Lastly, we need a method to bring employees to the businesses located in Troy. Continue to develop walkability.

What is the most important improvement that Troy can make to ensure that all residents have access to safe and efficient transportation?

- Affordable regional mass public transportation.
- Create a comprehensive pedestrian pathway system (walking, biking, rollerblading, etc.) that system would help to reduce short trip car drives that add to roadway congestion.
- Provide a means within the City to get the residents to the collection points for the regions/ transportation system.
- Create regional public transportation that is efficient, safe and inexpensive.
- Make it affordable and convenient not just within the City.

- Keep the roads nice for all modes of transportation.
- Promote the transit center and the transit services to be housed in it. Then make sure adequate walking and bike paths are connected throughout the whole City.

How can the City better accommodate non-motorized transportation?

- Emphasize bike paths. Include in all developments specific requirements for safe walk & bike access.
- Follow ADA guidelines. Create refugee islands on highways, increase the “walk” time on traffic lights, make bike paths to get bikers off pedestrian sidewalks, and provide adequate lighting.
- Better cross town connected bike routes that also have destinations, i.e. mall or civic center. Have a dedicated 4 foot lane for bicycles.
- Complete the trailways initiative with a completed infrastructure as recommended by Vision 2020.
- The development of pathways and trails is a start. We need an alternate mode of transportation that is cost affective and reliable.
- Promote mixed-use development.
- Plan the City in small village components that can service the daily needs of nearby residents by sufficient shopping areas central to each village.

What does the Smart Growth Readiness Assessment Tell Us?

The SGRAT included a section dedicated to the provision of transportation options. Tenet 8 of the Smart Growth Tenets, “Provide a variety of transportation options” was covered by 15 questions ranging from topics like mass transit to air travel. The assessment granted 33 percent of the available points to Troy for Tenet 8. The City received many points for its strong capital improvements planning, access management standards, well-developed subdivision regulations, provision of transportation options for the mobility impaired (either by income restrictions or physical limitations), and the mitigation of the negative impacts of parking on surrounding areas.

The assessment demonstrated that the City can improve its transportation score in a variety of areas, especially by providing stronger access to public transit, rail service, or a multi-modal method of access to a regional airport. Troy could also gain points by encouraging better infrastructure for cycling as a viable option, and the provision of park-and-ride areas for bus service. Further, the City does not make extensive use of traffic calming devices, which can restrict automobile traffic, but encourage safer non-motorized transportation in certain circumstances. Specific questions from this section included:

Does your community have a Transportation Plan (or a transportation element within your Master Plan) that does any of the following? (Check all that apply, if any).

- A. Establishes consistent policies that reflect and support the Master Plan, Zoning Ordinance, capital improvement program, access management plan and new development on a regional basis?
- B. Coordinates and supports multi-jurisdictional land use and transportation planning along regional transportation corridors?
- C. Provides goals, objectives and strategies to enhance an interconnected pedestrian network which serves the entire community?
- D. Provides goals, objectives and strategies to implement infrastructure and initiatives to promote bicycling and other non-motorized transportation options?
- E. Provides goals, objectives and strategies to implement public transit systems that are appropriate to the size, scale and need of your community?
- F. Provides goals, policies and objectives that prioritize improvements and maintenance of existing roads rather than the construction of new roads?
- G. Identifies where and when public funding will be necessary to implement context sensitive solutions to transportation issues?

Best Answer: A, B, C, D, E, F, G

Troy’s Response: A, B, D, E

Does your transportation plan support and your Zoning Ordinance allow different street widths, depending on the functional classification of the roadway, character of the area, the projected volume of traffic, and/or the desired speed of traffic?

A. Yes

B. No

Best Answer: A

Troy’s Response: A

Does your community provide infrastructure to promote bicycling as a viable, healthy transportation option by any of the following? (Check all that apply, if any).

- A. Providing well-maintained bike lanes, five feet in width along or between local transportation corridors.
- B. Providing non-motorized paths that connect recreation facilities and other community destinations.
- C. Implementing access management strategies that improve safety and efficiency of both bicycle and vehicular travel.
- D. Providing appropriate signage and bike racks in common community destinations such as schools, public buildings, work places and shopping centers.

Best Answer: A, B, C, D

Troy’s Response: None

Does your community have transportation policies or programs that increase mobility options for residents who face financial or physical impediments to driving an automobile?

A. Yes

B. No

Best Answer: A

Troy’s Response: A

Does your region provide an airport that is supported by efficient multi-modal access to your community, regional distribution centers, public transit, highways and emergency response?

A. Yes

B. No

Best Answer: A

Troy’s Response: B

Survey Responses

A primary source from which many of the ideas in this Plan have been derived is the supplemental survey given to SGRAT Workshop participants, City department heads, and the Planning Commission. The following are a selection of questions and responses which helped inform this Chapter.

What kind of image do you want people to think of when they are asked about Troy? (i.e., an office building? A shopping center? A fine restaurant or an evening at a show? A residential neighborhood? Something else?)?

- Efficient, low cost government (low cost – not cheap). I want Troy to continue to be know as the one place you can drive after (or during) a snow storm; a good place to shop, work and live, a place with helpful people in City hall.
- A well maintained City with excellent schools, neighborhoods, corporate residents and good city services.

Do you feel it is important for the City of Troy to promote the advancement of or mandate the practice of sustainable development, such as, but not limited to, the construction of certified “green buildings” and Low Impact Development techniques for stormwater management?

- I believe promotion is desired for construction of certified “green buildings”. Low impact Development techniques for stormwater management are a practice that should be mandated. Economics will determine the practical nature of these areas of development.
- The City should promote such efforts thru various incentives and demonstration but should not mandate.
- Yes – storm water will only become a bigger problem as the years progress. We need to promote sustainable development at the very least and perhaps it should be required or mandated. However, we should be prepared to address the arguments that these activities are cost prohibitive.

What can the City of Troy do to continue to attract world-class businesses?

- Clean and well-maintained infrastructure.
- Offer reasonable incentives. Maintain quality infrastructure. Continue to offer quality City services & A ++ rated schools. Make it attractive for the business community to also want to live here in Troy.
- Provide good services, good infrastructure, low tax rate, good debt ratings, and a solid residential community.

What does the Smart Growth Readiness Assessment Tell Us?

The provision of excellent municipal services is clearly a critical element to the future growth and development (or redevelopment) of the City. However, the Ten Tenets of Smart Growth do not specifically speak to infrastructure in and of itself. Consequently, none of the Sections of the SGRAT are directed exclusively towards infrastructure. There were individual questions, though, designed to bring attention to the issue of utilities and City services. The following questions, taken from Section 9, “Strengthen and direct development towards existing communities,” address infrastructure issues:

Does your community know the capacity of its infrastructure and natural environment to accept new development, by location, type and amount of new development?

- A. Yes
- B. No

Best Answer: A

Troy’s Response: A

If your community provides public sewer and/or water (or is included in a public sewer/water district), does the public sewer and water service area include:

- A. Only developed areas with streets or areas immediately adjacent to the developed areas planned for urban growth?
- B. Undeveloped areas outside the urban service area not immediately adjacent to the developed area and not planned for urban growth?

Best Answer: A

Troy’s Response: A

Has your community adopted a “fix-it-first” policy as part of the Capital Improvement Program process that sets priorities for upgrading existing facilities and infrastructure before new facilities or infrastructure are built?

- A. Yes
- B. No
- C. No, the community is all built out with no opportunity for new facilities in new locations

Best Answer: A, C

Troy’s Response: A

Survey Responses

A primary source from which many of the ideas in this Plan have been derived is the supplemental survey given to SGRAT Workshop participants, City department heads, and the Planning Commission. The following are a selection of questions and responses which helped inform this Chapter.

What is the role of the City of Troy in the region? What role should the region play in the future of Troy? Are there any other additional thoughts or input with regard to community character or image not reflected in the questions of this Section?

- A leader and model of an environmentally friendly community.
- Preserve as much open and park land as possible.

Should the City be a model for responsible care of the natural environment?

- Oh yes! Lead the way! Look at Chicago’s efforts! Bring others on board, garden groups, retailers, community organizations.
- Yes, we only have a natural environment once. The trees, parks and water resources must be protected. The City of Troy is the steward of the resources in the community.
- Yes, but they aren’t. They are not “totally” neglected, but many opportunities have arisen over the years where they looked the other way or they have not acted to become more responsible for the natural environment.
- Yes. The City needs to promote green growth in new developments and within its own buildings. City owned property does not need to be all developed into parks, it can be just left in its natural state. Encourage and educate about mass transit and walkability.
- Yes, we are doing good things but we can always do better. Don’t develop every inch because someone can make a profit, do things for the good of the community.
- It would be very difficult for a City the size of Troy to be such a model in all its various parts. Responsible stewardship and promotion of sustainable building can be done. Troy needs to keep growing its tax base to maintain its level of services, thus redevelopment is needed and that cannot always be done in an environmentally friendly way.

Do you feel it is important for the City of Troy to promote the advancement of or mandate the practice of sustainable development, such as, but not limited to, the construction of certified “green buildings” and Low Impact Development techniques for stormwater management?

- I believe promotion is desired for construction of certified “green buildings.” Low Impact Development techniques for stormwater management are a practice that should be mandated. Economics will determine the practical nature of these areas of development.
- If it helps our environment and future generations – yes.
- Sure, if we can afford it. Who pays?
- The City should promote such efforts thru various incentives and demonstration but should not mandate.

What do you consider to be natural features worth preserving in the City of Troy?

- Our lakes within neighborhoods, the rivers, park system, Nature Center/Troy Farm, trees and landscaping within our rights-of-way.
- The rookery area, wetlands preservation, the parks, and lakes in the City. The streams need to be safe guarded.
- The few remaining wetland and lake prairie areas left (situated in the northern part of the City in the Square Lake Road area) and head waters of the River Rouge.

What does the Smart Growth Readiness Assessment Tell Us?

The implementation of Smart Growth principles over time can have a positive and meaningful impact on the preservation of natural features. Compact development — leading to fewer, shorter vehicle trips and a reduction in impervious surface — complemented by other benefits of Smart Growth techniques help preserve areas that could have otherwise been threatened by conventional development. Tenet 7, in fact, is directly related to the preservation of natural features, open space, and farmland. A selection of SGRAT questions which relate to natural features preservation directly or indirectly are included here.

Does your community Master Plan establish goals, policies and strategies to preserve forest lands (e.g. exclusive forestry district, purchase of development rights program, quarter-quarter zoning, TDR, etc.).

A. Yes
B. No
Best Answer: A
Troy’s Response: B

Does your community have provisions within the Site Plan Review standards of the Zoning Ordinance to identify and protect renewable resource lands such as farmland and forest land?

A. Yes
B. No
Best Answer: A
Troy’s Response: B

Are developers implementing projects which contain public open spaces (such as parks or natural areas) that connect to adjacent open spaces and/or preserve sensitive natural features?

A. Yes
B. No
Best Answer: A
Troy’s Response: B

In public and private meetings, do community leaders and elected officials:

A. Promote cluster housing development as an approach to preserve open space in the community?
B. Oppose the development of cluster housing development?
Best Answer: A
Troy’s Response: A

Survey Responses

A primary source from which many of the ideas in this Plan have been derived is the supplemental survey given to SGRAT Workshop participants, City department heads, and the Planning Commission. The following are a selection of questions and responses which helped inform this Chapter.

What steps would you take to make Troy a more vibrant and engaging place to live and work?

- We need to start redeveloping our community to fit into the requirements of a global economy. The ways in which we lived in 1957 is not how we live today or will live in 2020. Areas where we can redevelop should be mixed use of housing, retail and business. They should incorporate the latest technology and be green.

What new and innovative approaches should be encouraged in the City of Troy to provide a better housing stock for the aging population?

- Facilitate loans for home repair and improvement to keep aging populations in their older homes and to prevent blight. Keep housing affordable. Canvas the aging population to determine what they are looking for and what they would buy
- Allow some more assisted – living facilities/nursing homes. More single story condos.
- Mixed use developments with independent and assisted living components, with barrier free walkability.
- High end options are needed. Currently there is no where in Troy to appeal to seniors selling their \$400,00+ houses. Multi family units on city golf course? Seniors want activities.
- Smaller single family homes on one floor.
- Variety of housing stock. Site condo that look like ranch style homes, condos, assisted living, nursing care. Location needs to provide proximity to shopping, health care, transportation, necessary services and recreation.
- Keep prices reasonable! Many are so expensive only the really well to do can afford to stay in Troy. Ask all the seniors what they want, you may be surprised.
- The City should encourage any type of residential use that will attract economically desirable residents. The current interest in mixed uses should be encouraged as well as all new future types that will attract solid citizens

Is the available housing stock in Troy sufficient to serve the City’s needs?

- No, fewer children and many older residents wanting to stay without upkeep require creative building ideas and economy and green spaces.
- We don’t have residential units that also serve as business. Troy’s ordinances work against having both a residence and a business in the same building. Changes should be made to allow for that. Some residential areas could serve in that function and zoning (a new zoning class) should be made.
- Number of units is sufficient, but more condos should be available for those not choosing to cut grass and shovel snow.

Do you have any additional thoughts or input with regard to housing?

- Starter homes. Young families with lower income don’t have much opportunity to buy in Troy.
- We need a development of mixed use housing for seniors that included individual small residents, assisted living, senior apartments, nursing home so that a person can remain at one development. Incorporate recreation, transportation and other amenities for seniors.
- We need more affordable housing for younger population. Not everyone can afford million dollar homes. Get them young and keep them to move up.

What does the Smart Growth Readiness Assessment Tell Us?

The SGRAT includes a section dedicated to Tenet 1: “Create a range of housing opportunities and choices.” The results of this portion of the analysis in Troy revealed that while Troy has made some steps towards smart growth as it relates to affordability of a wide variety of housing types, it has room for improvement. For instance, while the City has funded training for City staff for housing affordability programs, it has not actively promoted housing affordability. Further, while there are a variety of housing types in the City that may allow for an array of people to become homeowners, the City has not proactively pursued funding assistance or renovation assistance for the lowest ends of the economic spectrum. Specific questions contributing to these results include:

Are homes or apartments readily available in your community that people of all income levels can buy or rent (from service industry workers, to teachers, police and small business owners, to the elderly, young marrieds, professionals and executives)?

A. Yes
B. No
Best Answer: A
Troy’s Response: A

Do community leaders and elected officials actively promote a wide range of housing types to meet the full spectrum of household incomes and preferences?

A. Yes
B. No
Best Answer: A
Troy’s Response: B

Do many of the people who work in your community live in another community because they cannot afford housing in your community?

A. Yes, most workers, especially those earning low/moderate incomes, live outside the community.
B. No, most of the people who work in our community, including low to moderate income workers, live in our community.
Best Answer: B
Troy’s Response: A

Does the Zoning Ordinance provide for areas zoned multi-family residential or for mobile home parks that are close to job centers and transit or other access opportunities? In order to answer yes, areas must be zoned and not fully developed in order to count.

A. Yes
B. No
Best Answer: A
Troy’s Response: B

Survey Responses



PLAN TROY 2040