



Blackman Charter Township Master Plan

2018 Edition

Created by the Blackman Charter Township
Planning Commission

**Planning Commission Draft
6/21/18**



The 2018 edition of the *Blackman Charter Township Master Plan* was adopted by the Blackman Charter Township Planning Commission on xxxxxxxx x, 2018

Blackman Charter Township Planning Commission Chair

The 2018 edition of the *Blackman Charter Township Master Plan* was approved by the Blackman Charter Township Board on xxxxxxxx x, 2018

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Table of Contents

TABLE OF CONTENTS

SECTION	PAGE
Table of Contents	v
Chapter 1 Introduction	1
What is a Master Plan?.....	1
The Master Plan and the Zoning Ordinance.....	1
Planning Process and Plan Organization	2
Planning and Zoning Responsibilities	2
Chapter 2 Background	7
A Brief History of the Settlement of Blackman Township.....	8
Chapter 3 Issue Identification.....	13
Chapter 4 Goals, Objectives, and Strategies	17
Natural Features Goals, Objectives, and Strategies	18
Residential Goals, Objectives, and Strategies	19
Commercial Goals, Objectives, and Strategies.....	22
Office Goals, Objectives, and Strategies	24
Industrial Goals, Objectives, and Strategies.....	25
Infrastructure Goals, Objectives, and Strategies.....	26
Transportation Goals, Objectives, and Strategies.....	27
Community Identity Goals, Objectives, and Strategies.....	28
Chapter 5 Land Use Plan.....	29
Land Use Plan Overview	29
Residential	29
Office	30
Commercial	30
Industrial.....	30
Public/Quasi-Public	31
Chapter 6 Plan Implementation and Zoning Plan.....	33
Preserving Natural Resources	33
Accommodate a Mix of Land Uses	33
Plan Publicity	33
Keeping the Plan Current	33
Compliance with the Planning and Zoning Enabling Statutes.....	33
Maintenance of the Zoning Ordinance	34
Subdivision and Condominium Regulations.....	34
Capital Improvements Plan/Program.....	34
Implementation Program	35

Table of Contents

SECTION	PAGE
Zoning Plan.....	39
What is a Zoning Plan?	39
Zoning Districts.....	39
Dimensional Standards	41
Rezoning Criteria	44
Relationship to the Land Use Plan Map	44
Capital Improvements Program (CIP)	47
What is a Capital Improvements Program?	47
Why Prepare a Capital Improvements Program?	47
Developing a Capital Improvements Program	47

APPENDICES

APPENDIX	PAGE
A. Community Profile	A-3
A1. Population.....	A-5
A2. Housing	A-13
A3. Natural Features	A-15
A4. Current Land Use	A-25
A5. Transportation and Circulation.....	A-29
A6. Community Facilities.....	A-39
B. Comments Received from Plan Distribution.....	TBD

LIST OF TABLES

TABLE	PAGE
A1. Comparative Population Growth, 1930-2015.....	A-6
A2. Employment by Occupation/Industry.....	A-10
A3. Property Assessment	A-25
A4. 20 Highest Traffic Volume Road Segments.....	A-31
A5. Blackman Township DPS Incidents by Year	A-39

LIST OF FIGURES

FIGURE	PAGE
A1. Population Trend, 1930-2015	A-5
A2. Comparative Population Growth, 1930-2015.....	A-6
A3. Generations.....	A-6
A4. Race and Ethnicity.....	A-7
A5. Ambulatory Disability.....	A-7
A6. 2015 Household and Family Income.....	A-9
A7. 2045 Population Projection	A-11
A8. Dwelling Occupancy.....	A-13
A9. Dwelling Types	A-13
A10. Age of Housing.....	A-14
A11. Rent as a Percent of Household Income.....	A-14

Table of Contents

LIST OF MAPS

MAP	PAGE
1. DDA & LDFA	5
2. Blackman Township—Vicinity.....	7
3. Sections.....	12
4. Agriculturally Assessed Property	16
5. Land Use Plan.....	32
6. Zoning	46
A1. School Districts.....	A-12
A2. Topography	A-18
A3. Surface Geology	A-19
A4. Groundwater Recharge Areas.....	A-20
A5. Productive Agricultural Soils	A-21
A6. Hydric Soils.....	A-22
A7. Flood Plains	A-23
A8. Wetlands	A-24
A9. Property Assessment	A-27
A10. National Functional Classification.....	A-34
A11. Surface Condition Ratings for Federal Aid Roads	A-35
A12. Railroads & Airport	A-36
A13. Current Jackson County Airport Runway Layout	A-37
A14. Community Facilities.....	A-43
A15. Sewer Service Area	A-44
A16. Water Service Area	A-45

Table of Contents

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Chapter 1 INTRODUCTION

What is a Master Plan?

This community planning effort provided the Blackman Charter Township Planning Commission with an opportunity to consider the future course of development in the community. Among the reasons for the effort is a desire to avoid a random and inefficient land development pattern. Other purposes for planning included the following:

- Improvements to infrastructure, emergency services, utilities, and other community facilities and services can be done in a more efficient manner when an up-to-date community plan is available for guidance.
- A plan provides a guide for zoning decisions.
- A land use plan directs future growth toward areas more capable of handling the specific nature and intensity of land uses.
- Planning and zoning help to identify and conserve areas of significant natural features.
- Planning is a continuous process that allows the adjustment of goals and objectives according to changing growth and demographic patterns.
- Adherence to the community land use plan reduces the potential for conflicting land uses.
- Plans are required to be kept up-to-date by Michigan planning and zoning enabling legislation.

The Master Plan and the Zoning Ordinance

The Master Plan is intended to guide the future growth and development of the Township. It is not an ordinance and does not have the force of law. The Plan takes a long-term view of the Township and provides a vision 20 years or more in the future. As such, the Plan represents a vision for the Township for the year 2038. As with all plans, contained within are goals, objectives, policies, plan implementation measures, and a land use plan map. The land use plan map indicates appropriate areas for future land uses according to a vision for a desired future development pattern.

The Zoning Ordinance is the primary instrument used to implement this plan. The Zoning Ordinance creates zoning districts in which permitted land uses are listed, prohibited land uses are omitted, and lot requirements including density, building setbacks, maximum height, and maximum lot coverage percentages are provided. The Zoning Ordinance includes a zoning map indicating where zoning districts are located in the community.

The Zoning Plan, included as part of Chapter 6, provides information on the relationship of the Master Plan to the Zoning Ordinance. The Zoning Plan “translates” future land use plan designations to existing and proposed zoning district designations.

In the State of Michigan, enabling authority for community planning is provided by the Michigan Planning Enabling Act (P.A. 33 of 2008). The Michigan Zoning Enabling Act (P.A. 110 of 2006) also requires that zoning be based on a plan that promotes health, safety, and general welfare.

Introduction

Planning Process and Plan Organization

This edition of the *Blackman Charter Township Master Plan* is an update of the 2010 edition of the document. Work began with an update of the inventory of existing conditions. Information was reviewed regarding population and housing trends, the economy, natural features, infrastructure, land use trends, and the transportation system. The results of this research are summarized in Appendix A - Community Profile.

After collecting, organizing, and digesting data from the community profile for the 2010 edition, the Planning Commission developed a list of major issues to be addressed in the Plan. The issues that were identified fell into general categories of transportation, demographics, land use development patterns, housing, natural features, property maintenance, economy, and community identity. The results of this effort are provided in Chapter 3.

Identification of planning issues was an important step in the development of goals, objectives, and strategies. The community goals, objectives, and strategies comprise the heart of the Plan and can be found in Chapter 4.

Chapter 5 provides the Land Use Plan which reflects the Township's guide for future land development. The land use plan contains a land use plan map which serves as a tool for the Planning Commission to use in making decisions regarding changes to the zoning map.

Finally, Chapter 6 identifies measures that will be taken to implement the Master Plan. Because the Plan is not of value as a guide unless it is implemented, this chapter is an important element. Implementation measures include action steps that are needed if the goals of the plan are to be realized.

As required by the Michigan Planning Enabling Act, the final task in the planning process was to reach out to the citizens of Blackman Township for additional public input through the public hearing process. The plan was distributed to surrounding communities, the Region 2 Planning Commission, and the Jackson County Planning Commission.

By working with residents, business owners, township officials, planners, surrounding communities, and other stakeholders, Blackman Township has prepared a plan that balances the competing interests that affect land use decisions. These decisions include, for example, jobs and tax base on one side and protection of quality of life and natural resources on the other. Through careful implementation of the Master Plan, the Township is preparing to build its tax base and provide for high quality new growth, while preserving existing natural assets and protecting the overall health, safety, and welfare of its residents.

Planning and Zoning Responsibilities

Several committees, agencies, and individuals are involved in planning, zoning, and other aspects of the Township's development. These entities are listed below with a brief description of their roles.

Board of Trustees

The Blackman Charter Township Board of Trustees is the legislative body that is elected to serve the residents of Blackman Township. As the legislative body, the Township Board has the authority to formally adopt the Zoning Ordinance and amendments to the text and zoning map. The Board also sets the budget (including capital improvement projects), and appoints members to committees.

Introduction

Planning Commission

The Planning Commission consists of a chairperson, vice chairperson, secretary, Township Board liaison, and a Zoning Board of Appeals representative. Their main duties include the following:

- Take action on requests for amendments to the Zoning Ordinance.
- Create and maintain the Township Master Plan.
- Review development proposals including site plan review, conditional uses, land divisions and subdivisions, and site condominium proposals.

Though the Planning Commission is primarily a recommending body, it has the primary responsibility in development of the Master Plan.

Zoning Board of Appeals (ZBA)

The Zoning Board of Appeals is the only body at the Township level that hears appeals on zoning matters. When administrative decisions are made in connection with enforcing the ordinance, they can be appealed. When this occurs, the ZBA hears appeals and judges the merit of the request based on criteria listed in the Zoning Ordinance.

The ZBA also has the responsibility of interpreting the Zoning Ordinance when it is alleged that the Zoning Administrator or another Township official or agency is in error. The ZBA has the authority to provide the official interpretation of the Zoning Ordinance with appeals to their interpretation taken to Circuit Court.

Zoning Administrator

The Township Zoning Administrator is the primary official responsible for the enforcement of the Zoning Ordinance and other ordinances. The Zoning Administrator has several responsibilities, being the primary contact person for developers seeking project approval, site plan review, issuance of zoning compliance permits, scheduling and arrangement of committee meetings, issuance of citations and court appearances, and public hearing notification.

Downtown Development Authority (DDA)

The purpose of the Blackman Charter Township Downtown Development Authority (DDA) is to plan, propose, and implement the construction, repair, remodeling, restoration, preservation or reconstruction of public facilities, existing buildings, or new buildings within the boundaries of the DDA. The DDA also develops long-range plans to halt the deterioration of property values in the downtown district and to promote the long-term economic growth of the downtown district. The DDA has taxing authority under a tax increment financing authority (TIFA) plan. Please see Map 1 for the boundaries of the DDA.

Local Development Finance Authority (LDFA)

The purpose of the Local Development Finance Authority (LDFA) is to encourage local development to prevent conditions of unemployment and promote economic growth. The LDFA provides for the creation and implementation of development plans. The LDFA can buy and sell interests in real and personal property. It can also incur debt to further the goals and purposes of the LDFA. Please see Map 1 for the boundaries of the LDFA.

Introduction

Parks and Recreation Committee

The Parks and Recreation Committee is charged with planning for and implementing recreational services and facilities in the community. The Committee assesses the needs and desires of the community (e.g., creating the *Blackman Charter Township Park and Recreation Plan.*); makes appropriate budget requests to the Township Board, and seeks out grant opportunities on behalf of the Township.

Region 2 Planning Commission Staff

Staff from the Region 2 Planning Commission routinely advises the Planning Commission with rezoning recommendations and assisted the Planning Commission in the development of this Master Plan.

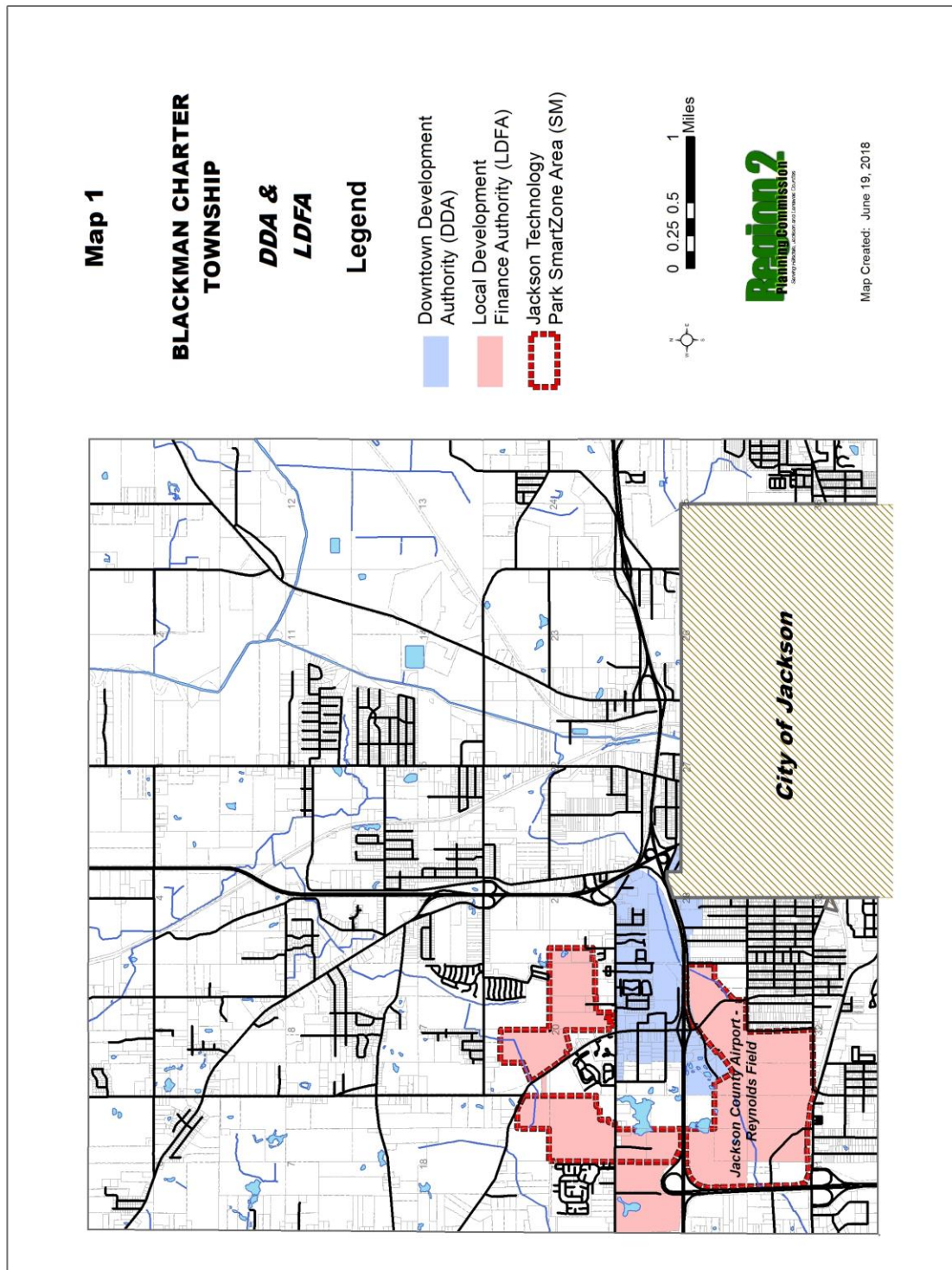
Jackson Area Comprehensive Transportation Study (JACTS)

The JACTS Policy and Advisory committees administer the Jackson Area Long-Range Transportation Plan and the JACTS Transportation Improvement Program.

Jackson County Planning Commission (JCPC)

The JCPC reviews and makes recommendations on township zoning ordinance amendments and municipal master plans from Jackson County communities.

Introduction



Introduction

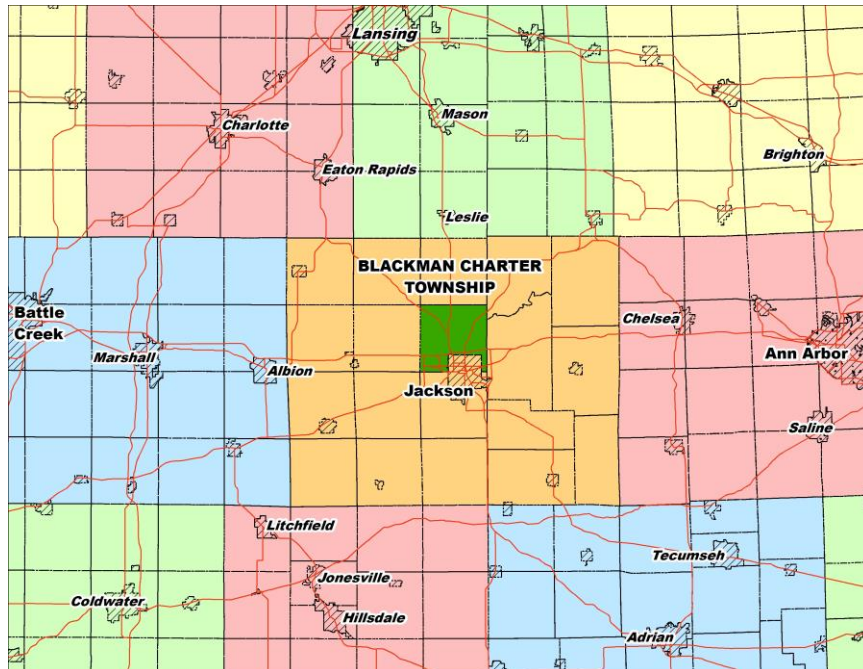
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Background

Chapter 2 BACKGROUND

Blackman Charter Township is located in the north-central portion of Jackson County (see Map 2). The Township is surrounded by Rives Township to the north, Leoni and Henrietta Townships to the east, the City of Jackson and Summit Township to the south, and Sandstone Township to the west.

Map 2
Blackman Charter Township — Vicinity



Several cities are located within an hour of Blackman Township. Lansing is 30 miles to the north, Ann Arbor is 30 miles to the east, the City of Jackson abuts the Township to the south, and Battle Creek is 45 miles to the west.

Several important freeways and state highways traverse the Township providing access to other parts of Jackson County as well as other regions and states. Jackson County Airport is also located within the Township. Major airports in Detroit, Lansing and Toledo are located within one hour of the Township.

Blackman Township has an area of 31.9 square miles. The population density of the township was estimated to be 751.8 persons per square mile in 2015, considerably higher than the estimated overall Jackson County population density of 220.8 persons per square mile.

The population of Blackman Township was estimated to be 23,982 in 2015 which represents a 0.3% decrease from the 2010 population figure of 24,051. This slight estimated population loss mirrors what is estimated to have happened countywide. However, that loss is expected to be regained by 2025 when the population is projected to be 24,058. The population is then expected to grow slightly to 24,635 by 2035.

Blackman Township features a variety of land uses from suburban to rural. The area of the Township near the City of Jackson is built-up and includes general commercial, moderate- and high-density resi-

Background

dential, industrial, educational and governmental uses. Land uses to the northwest and northeast are more rural, including farms, farmsteads, low density residential, environmentally-sensitive areas, and vacant land.

The Township features two important rivers. The Grand River flows north out of the City of Jackson from its headwaters farther south in Somerset Township. The Grand River joins with its tributary - the Portage River - in Section 11 and exits the Township in Section 2 (see Map 3). There are no large bodies of water in the Township although several small lakes and ponds are present.

An increase in the development of residential land uses of all kinds has been an important land use trend in Blackman Township through the early 2000s, similar to other areas in the urbanizing portions of Jackson County. Commercial and industrial development was also on the increase, especially in portions of the Township with available utilities and access to major transportation routes. However, those development trends were interrupted by the Great Recession of 2008 and have yet to fully recover.

The existing settlement pattern was the result of decisions made by residents, entrepreneurs, utilities, transportation officials and governments. Some of these decisions were made many years ago. It is worthwhile to review the history of settlement of the Township in order to better understand the current landscape.

A Brief History of the Settlement of Blackman Township

The area now known as Blackman Township was once occupied by the Pottawatomie Indians before settlement began in the mid-1800s. Pottawatomie territory extended from portions of southern Michigan into Illinois and Wisconsin. The Ottawa tribe also occupied parts of southern Michigan, but was more frequently found in the southwestern portion of the state. They occasionally came to the Jackson area to trade with settlers.

It was Horace Blackman who heard of fertile land west of the Washtenaw Valley from a Pottawatomie Indian named Pewatum. Blackman and Capt. Alexander Lavery were guided along an Indian trail by Pewatum to the area. The trip was a two-day journey that began on July 2, 1829. The following day the three men had reached the banks of what was later to be called the Grand River. They camped the night of July 3, 1829 near what is now the intersection of Jackson and Trail Streets

Horace Blackman had plans to make the area west of Washtenaw County the next county seat when the next tier of counties was created. His settlement was located within 12 miles of the center of the Territory of Michigan. Blackman had hoped that his new settlement might someday become the state capital.

By the winter of 1829-1830 the Legislative Council in Detroit, responsible for dividing the Territory of Michigan into counties, created a new tier of counties along the Indian trail west of Washtenaw County to Lake Michigan. Jackson, Calhoun, Kalamazoo, and St. Joseph Counties were formed. Jackson County had 720 square miles with Blackman's settlement located within one-half mile of its geographic center. The Legislative Council also authorized the building of Territorial Road which was to run through the new tier of counties and open them up for settlement. Territorial Road was located north of Chicago Road, which ran east and west from Detroit to the fort on the Chicago River, and ran parallel with Chicago Road.

In the winter of 1830, a Commission was appointed to locate Territorial Road. They reached the area where Blackman had erected a primitive log cabin on January 13, 1830. Two of the Commissioners were appointed to name the settlement. They determined the village should be called "Jacksonburgh" in honor of President Andrew Jackson. For a time postal officials named the settlement Jacksonopolis so

Background

as to avoid confusion over the numerous Jacksonburghs across the nation. Having dual names, however, actually created more confusion and so the ends were dropped from the name and the settlement became known as "Jackson" in 1838.

In the spring and summer of 1830 families came from New York State to settle Jackson. To a lesser extent they also came from Maine, Massachusetts, and Ohio. By November, 1830, 30 families were in Jackson. The town was planned early in 1830 by surveyors and engineers. The public square was laid out with two major roads crossing at right angles in the center of the town square. Main Street (now Michigan Avenue) was the base road running east and west while Jackson Street was the meridian line forming the north/south street. Other roads were plotted in a grid pattern. Today only a portion of the town square remains open—the northwest corner of the intersection at Blackman Park. The Village was platted to include the area bound by Trail Street to the north, Franklin Street to the south, the Grand River on the east, and Blackstone to the west.

Territorial Road, connecting Detroit with Chicago, was located about a mile north of the village square. Because the road did not run through the village, traffic bypassed the village square. As the territory to the west began to develop and people began to use Territorial Road, the village was faced with a problem of losing business. Travelers passed by Jackson without shopping because there was no means of access to the village from the north. The community addressed this problem by building a road connecting Territorial Road with the village. East Michigan Avenue and Wildwood made the connection possible.

February 6, 1831 was the day that Jacksonburgh became the county seat as Horace Blackman had wished when he first settled the area. In 1847, State legislators planned to move the capitol of Michigan from Detroit to a more central area. Jonathon Stratton, a surveyor who helped shape Jackson early on, recommended that the capitol be moved to Jackson, the fourth largest community in the state with a population of 3,000 by this time. Contrary to Blackman's wishes, politicians moved the capitol to Lansing in 1847 because it was more centrally located to the entire state and also because political forces wanted to open up this area for development.

Blackman Township was part of the territory of Jackson until 1857 when it was organized into a political township. It was created out of geographic township 2 south, range 1 west (T2S, R1W), except that part included in the City of Jackson.¹ The first settler in the territory included in the Township was Lyman Pease in June, 1830. That homestead was located in Section 26 (see Map 3). Minerals were also found in abundant supplies. Iron, coal, fire clay, and large quarries of excellent limestone could be found in the Township. The supply of ore and coal were found in sufficient quantities to meet the early needs of the community.

The first formal church organization was established by Rev. Elijah H. Pilcher. The congregation was the Methodist Episcopal Church in 1832. It wasn't until 1850, however, that the church building was built. The First Congregational Church was built in 1837. They were organized as a Presbyterian church but later broke off as the Congregational Church, because of disagreement over slavery policies. Many other churches followed through the mid-1800s.

As the population grew, there was a need for schools to educate the children of Jackson County. The first school was built in 1832 at the southwest corner of Michigan Avenue and Blackstone Street. The

¹ Geographic townships contain 36 square mile sections (i.e., 6 sections high and 6 sections wide) and are identified by their distance from a meridian line and a base line. Michigan's meridian line forms the eastern boundary of Blackman Township and Michigan's base line forms the northern boundary of Jackson County. Accordingly, the geographic township is the second township south of the base line and the first township west of the meridian line.

Background

school remained in use for over a century. Between 1838 and 1897 there were two school districts. Eventually the two districts were united into one and called the Union School District. The first public high school was built in 1908. It served everyone in Jackson and was located on the northeast corner of Jackson Street and Washington Avenue. The high school was moved in 1927 to Wildwood Avenue. A second high school was built in 1963 on Fourth Street next to Ella Sharp Park, but was changed to a middle school in 1983 after enrollment dropped.

The Jackson area may be best known for hosting the first Republican convention on July 6, 1854. An anti-slavery sentiment was building in the north. The underground railroad that helped move fugitive slaves passed through Jackson. Jackson was selected for the site of the first Republican convention because it was in Michigan where the political unrest over slavery began, and Jackson was a geographically central area with local politicians active in the political organization of the party.

Before Jackson grew into a major commercial and industrial area, the city and surrounding area including Blackman Township was primarily an agricultural community. In fact, agriculture continued to be important within Jackson even after the area incorporated into a city. More corn was grown per acre in Jackson than anywhere east of the Mississippi River. The county led the state in bean production and horses from Jackson were known for their speed and quality.

Although agriculture was important to the area early on in the development of the city, the prison may have been responsible for the industrial boom in Jackson that began in the mid-1800s. Inmates were used as an inexpensive source of labor in some factories until 1909 when the practice was prohibited by the State Legislature. Nevertheless, inexpensive prison labor made Jackson an attractive place to do business.

Small companies began springing up all over Jackson County throughout the 1800s. Several cigar makers used tobacco grown west of the City. Two breweries were producing beer in 1884. Jackson was also home to companies that made sewer pipe, paving bricks, and small oil heaters. The Gilbert Candy Company also began production bringing Jackson national recognition.

Large industries also began operations in Jackson. Railroading, coal mining, and corset making were considered major industries in Jackson. Unfortunately, the coal was of poor quality making it less profitable. Also, the underground mines kept filling up with water which drove up the cost of mining. The corset business helped launch Jackson into the undergarment business. Factors such as the central location of the City with a handy rail connection made Jackson a good choice for corset production. Several corset manufacturers sprung up around the area, however, changing fashions and competition from outside eventually drove most out of business.

Railroad lines through the Jackson area were important to business and industry. The railroad also transported people through the County. Jackson had more passenger traffic than any other community in the state. Jackson County was second in freight shipped with only Detroit surpassing the amount of freight shipped per year. Jackson also became home to the Michigan Central Railroad. The company located its engine manufacturing and repair facility in the City.

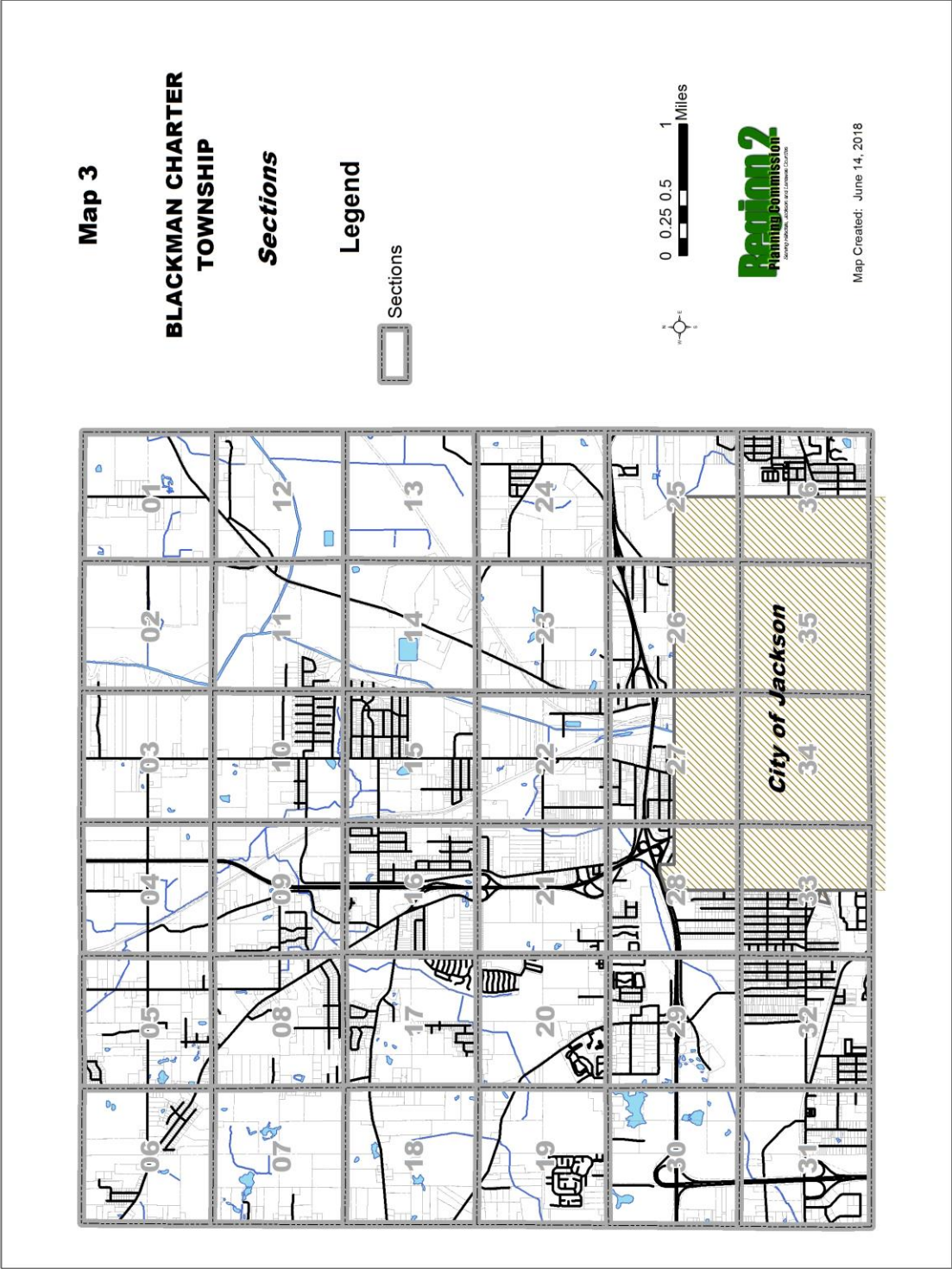
Jackson got a late start in the production of the automobile. Carriage makers were not convinced that the automobile would soon replace the buggies built here. The Jackson Automobile Company was the most successful auto maker in Jackson. At least 25 companies were making automobiles in Jackson at some time in the early 1900s. However, Jackson couldn't compete with Detroit and Flint in the production of the automobile. The loss of auto production was replaced with auto parts makers. By the mid-1920s, half of Jackson was involved in parts production.

Background

Other industries have played an important role in the County. Aeroquip (now Eaton Corporation) became involved in the production of hoses for the aircraft industry in 1939. Commonwealth Power (now Consumers Energy), established its headquarters in Jackson. Commonwealth Associates, one time part of Consumers Energy, also was a large employer in Jackson. Commerce and industry were important in shaping early Jackson. Surprisingly little attention was given by city planners to the recreation needs of the community. Most forms of recreation were provided by the private sector at the area's lakes, theaters, dance halls, and fairgrounds. A public park system was neglected in the 19th century.

By the 1930s, Jackson had transformed from an agricultural community in the mid-1800s to a bustling city with a downtown lined with skyscrapers built of limestone and marble.

As quickly as the City reached its peak, a decline became apparent. The automobile was allowing the population to be more mobile. As the community became more mobile, population in the City declined and the population of Blackman Township increased. With a population of 55,187 in 1930, the city slowly declined to an estimated 33,255 in 2015. Suburbanization of the city's population continues even today as township population has increased dramatically since 1930.



Chapter 3 ISSUE IDENTIFICATION

Before, during and after the development of the Community Profile in 2010, the Planning Commission identified a number of pertinent issues that the Plan should attempt to address. Care was taken to ensure that the identified issues did not fall outside of what can be feasibly addressed as part of a community plan. In order to develop this list of issues, the Planning Commission reviewed the physical characteristics and demographic trends in the Township. Those physical characteristics and demographic trends were then updated for this edition of the Master Plan (see Appendix A). Presentations were made at Planning Commission meetings and different perspectives on growth were considered.

The issue identification effort served two principal purposes: to focus the plan toward addressing community strengths and weaknesses, and to provide guidance in the development of goals. A discussion on several of the major issues identified by the Planning Commission is provided in this chapter.

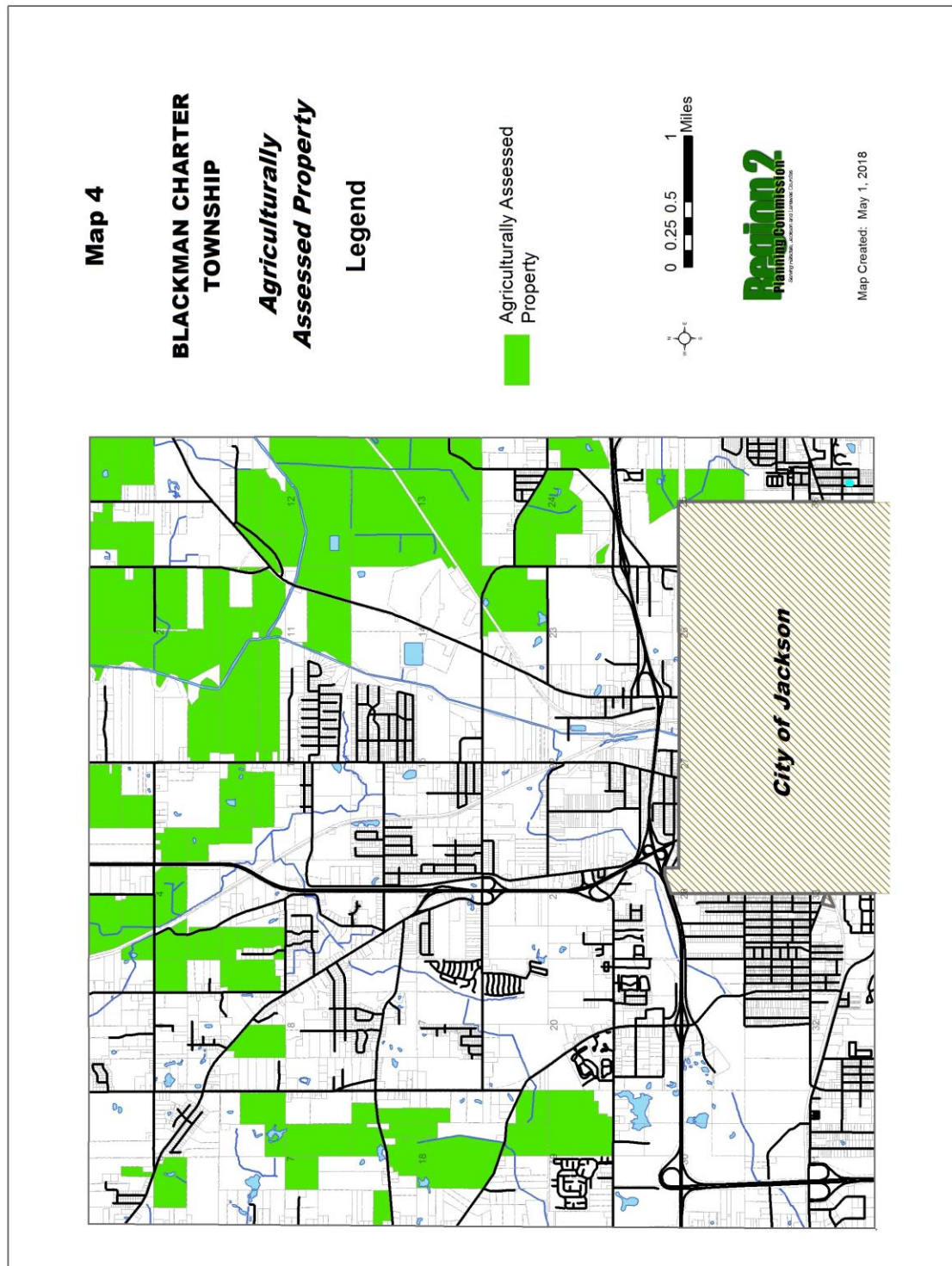
- ***Improve the Airport Road/O'Neill Drive/I-94 interchange.*** Negotiating the Airport Road intersection with O'Neill Drive and Boardman Road is challenging. A combination of factors including high traffic volumes (18,893 vehicles per day in 2014), topography, the presence of a freeway interchange, the intersection with Boardman Road and O'Neil Drive, and poorly located commercial driveways all contribute to the problem. The Township should continue to encourage the Jackson County Department of Transportation and Michigan Department of Transportation to resolve these issues. New driveways should only be allowed near the intersection after careful consideration of the effects on traffic safety, delay, and turning movements. Access management techniques should be employed to limit curb cuts at the intersection and reduce traffic conflicts.
- ***Road corridors appearance.*** Several road corridors are continuing the process of development in a combination of residential, commercial, and office uses. The corridors include Lawrence Avenue/Airport Road/Springport Road, Lansing Avenue, W. Michigan Avenue, and Parnall Road. The appearance and safety of these corridors could be improved and measures could be taken now to ensure that they do not fall further into a strip commercial pattern. The sign provisions of the Zoning Ordinance were amended to improve the aesthetics of signs.
- ***Aging of the population.*** The average age of the Township's population is increasing. The baby boom generation began to reach retirement age in approximately 2010 which will peak in the mid- to late-2020s. The aging population will have different lifestyle preferences and the Township should anticipate the need for services geared toward senior citizens. The Zoning Ordinance should be reviewed and, if necessary, amended so that it reflects that fact by allowing for uses such as accessory apartments and other senior housing opportunities. The Plan should provide for transportation options for senior citizens by encouraging public transit, making streets safe for seniors, and coordinating plans for housing, human services, and transportation facilities.
- ***Roads need to be better maintained.*** Road maintenance continues to be an issue. Information should be gathered on an ongoing basis to identify road deficiencies and either identify funding sources or lobby appropriate road agencies to make repairs. Federal-aid eligible roads in Blackman Township are rated on a semi-annual basis as part of MDOT's Asset Management program (see Chapter A5 of Appendix A).

Issue Identification

- **Residential development outside of the sewer service area.** Some residential developments have taken place outside of the Township's sewer service area, especially in the northwest quarter. In some cases, this has resulted in an inefficient strip development pattern where road frontage is taken up with vacant land behind. It would be better to encourage a clustering of development, or require larger setbacks in these areas to preserve rural atmosphere. Other Township services can also become stretched thin as population expands away from population centers.
- **Plan for the safety of road corridors.** Investigate the feasibility of access management techniques to reduce the number of conflict points along major road corridors. Work with applicable road agencies to resolve those traffic safety issues.
- **Property maintenance.** Ensure that properties are well maintained with the enforcement of blight and noxious weed ordinances, especially in residential areas.
- **Need for higher percentage of owner-occupied housing.** According to American Community Survey estimates, rental units comprised 48.4% of the Township's occupied housing units in 2015, compared to 28.1% countywide. The Township should encourage a higher rate of home ownership while seeking ways to promote affordable housing.
- **Protection of natural features.** As identified in Appendix A, Blackman Township has a variety of natural features including wetlands, woodlands, groundwater recharge areas, and waterways. Natural features should be preserved because they are an essential part of the remaining rural nature of the township. They also can form part of a greenways system.
- **Avoid strip commercial development.** Strip development is inefficient, consumes natural resources, grows outward from the limits of existing development, and ruins sense of place. Consider using zoning to prevent strips, adopt architectural standards, use plantings to soften the view, and deal with traffic congestion and pedestrian access.
- **Potential for land use conflicts.** Blackman Township has a considerable potential for land use conflicts, especially between residential uses and more intensive types of development. Continued care must be taken to ensure that conflicting land uses are separated while encouraging compatible uses to coexist in an organized manner.
- **Encourage a mix of land uses.** Commercial and residential uses can be compatible and should be encouraged to mix when appropriate. This can help to reduce the number of vehicles on the road and provide for pedestrian access.
- **Ensure the quality of commercial development.** Encourage quality commercial development with the use of design standards, landscaping, reduction of conflicts between pedestrian and vehicles, pedestrian orientation, etc.
- **Alternate energy sources not dealt with in Zoning Ordinance.** Alternative energy sources are becoming more prevalent. The Zoning Ordinance may need to be amended to respond to requests for alternate energy systems such as solar power, wood, and wind energy systems.
- **Lack of community identity.** Blackman Township's motto is "*Progress at the Crossroads*" — a reference to the intersection of highways I-94 and US-127. Development continues to occur in Blackman Township's "downtown" area but whether Blackman Township has created an identity is unknown.

Issue Identification

- ***Economic woes.*** Much of the Michigan economy is dependent on the auto industry and spin-off business. When the auto industry declines, the poor economy suffered by the nation is magnified in Michigan. The State and localities need to attract diversified businesses to reduce their vulnerability to recession.
- ***Loss of agricultural land.*** The amount of agricultural land is decreasing and this land use category only makes up 25% of the assessed land in the Township (see Map 4). Much of the agricultural land that exists is being fragmented into smaller and smaller areas. Among the factors that must be present for agriculture to remain viable, it must be free from encroachment from conflicting land uses, should be in large contiguous concentrated areas, and should not be fragmented into smaller parcels. Very few areas of the Township exist where this combination of factors are present. The threat to remaining agricultural lands was recognized in the 2002 Township Land Use Plan which conceded that agriculture was a threatened land use and did not include agriculture as a land use planning category. It seems that viable agriculture is a thing of the past in Blackman Township.



Chapter 4

GOALS, OBJECTIVES, AND STRATEGIES

The goals, objectives, and strategies section are the culmination of the studies that were developed as part of the community profile, issue identification, and community input efforts. It brings together other Plan sections regarding trends, alternative analysis, and visioning. It is important in creating the Township Land Use Plan map, which is a reflection of adopted goals and objectives.

Goals, objectives, and strategies each serve different purposes. A *goal* is a general statement that is used to describe a desired end point. An *objective* is an effort directed toward achieving a goal. A *strategy* is a specific method employed to achieve a goal and objective. The *Blackman Charter Township Master Plan* lists goals, objectives, and strategies under the categories of Natural Features, Residential, Commercial, Office, Industrial, Infrastructure, Transportation, and Community Identity.

For the most part, the goals, objectives, and policies listed in this Plan do not represent a major overhaul from the previous plan. However, minor corrections and adjustments were seen to be appropriate in accordance with discussions held by the Planning Commission.

The land use goals, objectives, and strategies are presented on the following pages. After that, the Land Use Plan map is discussed in Chapter 5.

NATURAL FEATURES GOALS, OBJECTIVES, AND STRATEGIES

Goal: Encourage the protection and preservation of the Township's natural resources for the purpose of maintaining the quality of the local environment.

- Objective:** Require development site plans to conform to the topography, instead of the topography conforming to the site plan.
- Areas of poor soils should be discouraged for the purpose of development.
 - Areas located within designated 100-Year and 500-Year Flood Zones' on the flood plains map should be discouraged for the purpose of development.
 - Areas identified as environmentally sensitive on the soils, wetlands, and flood-plain maps should be preserved from incompatible and unnecessary urban development.

Natural Features Overview

As discussed in Appendix A3, Blackman Township has a variety of natural features including wetlands, woodlands, groundwater recharge areas, and waterways. One of the issues identified was the need to protect these natural features.

Natural features should be preserved because they are an essential part of the remaining rural nature of the Township and they form links in a possible greenways system.

Goal: Encourage the preservation of wetlands.

- Objective:** Inform Township residents about the value of wetlands and the need to obtain a wetland permit from the Michigan Department of Environmental Quality prior to dredging or filling any protected wetland.
- Require that proper permits have been obtained prior to issuing a building permit for construction in a wetland in the site plan review of the Zoning Ordinance.
 - Explore other methods for using the Zoning Ordinance to regulate the use of wetlands.

Goal: Encourage the protection of the Township's groundwater resources.

- Objective:** Encourage proper maintenance of on-site septic systems.
- Regulate the above ground storage of hazardous substances and underground storage tanks.

RESIDENTIAL GOALS, OBJECTIVES, AND STRATEGIES

Goal: Protect existing residential neighborhoods from encroachment by incompatible land uses.

Objective: Require landscaping or physical buffers where residential uses are adjacent to potentially incompatible commercial or industrial uses, and review zoning regulations to ensure the effectiveness of existing buffering techniques.

- Review existing commercial zoning areas in which the predominant land use is nonconforming residential development for possible down-zoning.
- Prohibit commercial zoning districts from expanding along local residential streets.

Goal: Encourage the development of residential areas to meet population increases, while conserving environmentally sensitive lands.

Objective: Low-density residential developments should be located on sites having good physical characteristics including those conducive to on-site sewage disposal, appropriate soils, slopes, and water table.

- New residential development should be clustered in subdivisions, condominiums, and neighborhood areas located near appropriate shopping facilities, community services, and utilities or where these supportive services may be feasibly provided to promote efficient utilization of land and discourage dispersed strip development.
- High density residential land uses such as mobile home parks, and multiple-family developments should be located in areas having or expected to have necessary services and facilities including major roads and central sewer and water facilities.
- Residential areas should be developed in areas that will avoid potential conflicts with incompatible land uses.

Goal: Encourage the development of a variety of housing types and subdivision design which will promote an efficient use of space, and preserve the integrity of the area's rural character.

Objective: Single-family and two-family subdivision developments should be encouraged in areas where adequate services exist or are expected to be provided in the near future.

- Subdivision development should be encouraged in areas adjacent to other existing subdivision developments that have sewer and water services to allow for the expansion of these services.
- Promote curvilinear subdivision design and cluster or planned unit subdivision layouts rather than "grid" plots

Residential Overview

Residential issues include the need for a more efficient development pattern. This could include clustering, PUD's, and open space zoning. This can also occur outside areas with central sewer and water facilities at lower densities.

The potential for conflicts between residential and more intensive land uses remains. While avoidance of conflicts is a worthy goal, the advantages of mixing of commercial, office, and residential land uses can be realized.

Blackman Township has a low home ownership rate compared the County. The Plan should seek ways to address this to achieve a more desirable balance.

RESIDENTIAL GOALS, OBJECTIVES, AND STRATEGIES (CONT.)

- Encourage continuous and coordinated platting of land through the State's Land Division Act rather than piecemeal development scattered throughout the Township.
- Encourage residential development which would reduce the number of driveway and street access points along major roads.
- Separate low-density, mobile home, and multiple-family residential areas from other uses, and allow low and moderate density townhouse type development to associate more closely with single-family uses in transition areas.
- Provide alternatives such as cluster development and senior citizens housing in moderate and medium density areas.
- Multiple-family residential developments should be encouraged to locate in areas having adequate soils for development, available municipal or central water and sewer as well as adequate recreation and transportation facilities and services, and should be located where compatibility with other land uses can be assured.
- Prohibit commercial zoning districts from expanding on local residential streets.
- Discourage the rezoning of additional land to high-density residential zoning districts such as RM-1 and RMH-1 until existing areas have been built out.
- Develop and/or enhance zoning standards which encourage innovative development patterns that result in open space buffers between residential and non-residential uses.
- Include Zoning Ordinance incentives to encourage the preservation of open space.
- Enhance the sense of community and improve pedestrian transportation options by connecting residential developments to schools, parks, cultural facilities, and other neighborhoods.

Residential Overview

It is possible to allow for a mix of residential, commercial, and office uses. Separation of these uses results in a disconnect between interrelated uses resulting in the potential for sprawl, unnecessary use of roads, over-reliance on automobiles, idleness, loss of community identity, and strip commercial development.

Require buffering between conflicting uses, but encourage a reasonable mix of land uses.

While allowing additional rental housing to keep housing costs affordable, a way needs to be found to encourage home ownership. Site condominium, subdivision, and other forms of owner-based development should be encouraged.

Compact residential development should be encouraged. Such development is more efficient, reduces the length of utility lines, and allows for the preservation of open space.

Goal: Ensure that the housing needs of senior citizens are met.

Objective: To the greatest extent possible, ensure that the needs of senior citizens are taken into consideration.

- Encourage existing and proposed land uses that serve senior citizens and provide for accessibility needs.

Goals, Objectives, and Strategies

RESIDENTIAL GOALS, OBJECTIVES, AND STRATEGIES (CONT.)

- Review zoning regulations to ensure that they do not inadvertently discriminate against senior citizens.
- Review new development proposals with an eye toward providing senior citizen access.
- Provide alternative types of housing (e.g. accessory apartments, Elderly Community Housing Opportunities) to accommodate senior housing needs.

COMMERCIAL GOALS, OBJECTIVES AND STRATEGIES

Goal: Encourage the development of commercial uses to support the retail needs of the Township and to diversify the local economy. Commercial uses should be located in areas that will provide convenient shopping and office-related services to the Township residents and assure compatibility of commercial districts with other uses.

Objective: Encourage clustered commercial development rather than sprawled development.

- Provide for commercial development along major thoroughfares, preferably at the intersections of such thoroughfares with controlled access to and from the development.
- Locate commercial uses so as to avoid incompatible adjacent uses.
- Promote the grouping of commercial activities on sites sufficiently large to furnish adequate off-street parking.
- Promote commercial development in areas easily accessible to Township residents.
- Provide for adequate buffering requirements between conflicting land uses, and between parking areas and road rights-of-way.
- Encourage diversification in the type of commercial and business establishments in order to meet a greater range of citizen's needs.
- Promote development of commercial establishments which will help retain local dollars rather than force residents to spend dollars outside the area.
- Control and limit advertising signs so as to control the size and type of billboards in all commercial districts.
- Maintain the aesthetics of the community through the regulation of signs.
- Concentrate on redevelopment and restoration of existing commercial areas rather than promoting new commercial development in fringe or strip areas.
- Encourage the use of existing commercially zoned property before rezoning new land.

Commercial Overview

Issues related to commercial land use include avoidance of strip development, encouragement of a mix of land uses, ensure the quality of commercial development, and address specific aspects of commercial development including signs, parking, design, site drainage, and pedestrian access.

Goal: Ensure that commercial development continues to be of high quality.

Objective: Design standards should be considered to minimize the negative impact on roads, adjacent land uses, and the environment.

- Consider implementation of access management techniques such as shared drives, service roads, internal connections, and proper driveway design, to maintain roadway safety and capacity.
- Consider amending the Zoning Ordinance to encourage parking in the rear and to the side of stores in order to create more pedestrian-friendly and aesthetically appealing retail developments.

Goals, Objectives, and Strategies

COMMERCIAL GOALS, OBJECTIVES AND STRATEGIES (CONT.)

- Review and amend the Planned Commercial (PC-1) zoning district to ensure that it allows for an appropriate mix of residential, cultural, municipal, and commercial uses.

Objective: Prevent premature commercial development in outlying areas ahead of demand for new floor area and public infrastructure to support the development.

- Require all major commercial developments to locate where sewer and/or water service is existing or is extended.
- Work with road agencies and developers to provide shared driveways whenever possible, and locate new driveways in appropriate locations for safety and access.

OFFICE GOALS, OBJECTIVES AND STRATEGIES

Goal: Encourage the development of office uses in transitional areas between residential and commercial or industrial uses.

- Objective:** Discourage office uses in residential districts.
- Encourage more intensive office uses in clustered predetermined areas.
 - Encourage office use in mixed use areas that are in transition.

Goal: Encourage more intensive office/research facilities.

- Objective:** Designate and encourage the development of this new type of land use for the Township in predetermined areas.
- Amend the Zoning Ordinance to provide more flexibility in regulating this type of development.
 - Encourage planned and innovative design of buildings and office parks as a whole rather than by individual developments.
 - Require all major office park developments to locate where sewer and/or water service is existing or extended by developer.
 - Encourage the preservation of natural features to enhance the aesthetics of the development.

Office Overview

The purpose of the office designation is to serve as a transition between commercial or industrial uses and residential uses. Standalone offices are to be discouraged in residential neighborhoods. This is carried out in the Zoning Ordinance which does not allow offices in any residential district. Home occupations are allowed on a limited basis.

The other office goal regards the development of office research parks using flexible standards and encouragement of innovative design, clustering, and preservation of natural features.

INDUSTRIAL GOALS, OBJECTIVES, AND STRATEGIES

Goal: Encourage the development of industrial uses to diversify the local economy and to provide a stable tax base for the Township, at locations that will allow the quality of the local environment to be maintained.

Objective: Industrial areas should be encouraged in sections of West Blackman where a high degree of compatibility with surrounding land uses can be assured.

- Industrial areas should be encouraged along major thoroughfares having access to the surrounding region or state.
- Encourage industrial development in areas where soils are suitable and potential for groundwater contamination is minimized.
- Encourage redevelopment or expansion of existing industrial areas before considering new areas.
- Encourage location of industrial uses where sufficient infrastructure can support these uses.
- Encourage light, clean industrial development in industrial parks or subdivisions where there is sufficient room for growth and expansion.
- Buffer industrial uses from residential uses.
- Favor uses that do not pollute the air, soil, water or are offensive to neighboring land uses because of noise, sight, or odor.
- Plan additional industrial areas in the Township to assist in providing an employment base and tax base for the residents of the Township.
- Require appropriate landscaping of each industrial site.
- Support the attraction, retention and expansion of new and emerging businesses focused on life sciences, advanced manufacturing, and alternative energy in order to transform and sustain Blackman Township's long-term economic health and vitality.

Industrial Overview

More economic diversity is needed. The state is dependent on auto-related industries as part of the industrial base.

Because Blackman Township is not isolated, it is subject to the same regional economic factors that face the remainder of the county, state, and Upper Midwest region.

Other economic development work is being conducted by the Enterprise Group, County Land Bank, Michigan Economic Development Corporation, and other agencies.

INFRASTRUCTURE GOALS, OBJECTIVES, AND STRATEGIES

Goal: Provide for adequate public infrastructure.

- Objective:** Maintain sewer, water, and transportation systems to protect the health, safety, and welfare of Township residents, provide needed services, and provide for efficient movement of people and goods.
- Identify target areas as first priority to receive expanded water and sewer services.
 - Recognize roadway conditions and traffic volumes in order to target areas which should receive priority for road improvements.
 - Amend the Zoning Ordinance to require the use of access management techniques to reduce the potential for traffic conflicts along major roads.
 - Additional development should be timed to coincide with adequate roadway, sewer, and water systems needed to service the development.

Goals, Objectives, and Strategies

TRANSPORTATION GOALS, OBJECTIVES, AND STRATEGIES

Goal: Ensure an efficient and safe transportation system.

Objective: Encourage developers to use access management techniques, particularly as part of the site plan review process.

- In order to reduce the number of potential conflict points, strive to reduce the number of driveways along major roads.
- Encourage joint driveways and cross access between adjacent properties to reduce traffic conflict points and allow internal circulation between developments.
- Consider appropriate spacing between driveways in identified road corridors.

Objective: Take the needs of pedestrians into consideration in site development.

- Insure that pedestrian access and safety is taken into account for all developments.
- Encourage pedestrian cross-access when residential projects are located in proximity to residential, commercial, and recreational properties.

Objective: Partner with neighboring jurisdictions, the Jackson County Department of Transportation, and the Michigan Department of Transportation to work toward regional traffic management solutions.

Goals, Objectives, and Strategies

COMMUNITY IDENTITY GOALS, OBJECTIVES, AND STRATEGIES

Goal: Establish a community identity.

Objective: Establish a sense of community and belonging.

- Encourage unique new single-family developments that create a sense of community, provide pedestrian and emergency services connections between neighborhoods, and work with the natural features of the Township to preserve open space.

Objective: Provide for adequate design of commercial developments in the Township.

Objective: Improve the appearance of dilapidated properties which detract from the Township's image.

- Continue to enforce Township ordinances that control blight.

Goal: Allow the continuation of existing agricultural activities with minimal interference from residential development.

Objective: Continue to allow agricultural activities to take place in the Township.

- Rezone non-conforming agriculturally-zoned properties to a conforming residential district.
- Discourage the location of dense residential development in the area of intensive agricultural uses.
- If applicable, inform residents of the provisions of the Michigan Right-to-Farm Act.

Chapter 5 LAND USE PLAN

The Land Use Plan consists of descriptive text and accompanying map that describe where land uses are encouraged to develop in the future. The Land Use Plan map is not intended to reflect current zoning. Instead, the Land Use Plan is intended to serve as a vision for the future development of the Township 20 years or more in the future.

The development of the Land Use Plan map is based on many factors including the type and distribution of existing land uses, presence of natural features, access to major transportation routes, convenience, and availability of public utilities. Community preferences and future needs must be considered, including the desire for a mixture of land uses and a balanced tax base. Often the goals, objectives, and strategies in Chapter 4 are the basis for decisions on location of future land uses. At other times, the goals were used in conjunction with other factors.

Map 5 contains Blackman Charter Township's Land Use Plan map for 2038. The map indicates locations where five basic types of uses are to be encouraged. The five types of land uses are residential, office, commercial, industrial, and public/quasi-public. Within each type of land use there may be subgroups such as low-density residential and general commercial. Details on the plan map are provided in the following pages.

Land Use Plan Overview

Historically Blackman Township has developed more intensively immediately north of the I-94 corridor and in areas adjacent to the City of Jackson. Much of the development that has taken place is in the southern half of the Township with Parnall Road acting as a north-south dividing line. North of Parnall Road, several single-family subdivisions are located in the central portion with more rural residential found in the remainder of the area.

Farming has not played a major role in the Township in recent history. It is not a goal of this Plan to encourage continued agricultural production of those properties currently in farming. Therefore, no strict policy measures are identified to promote farming.

Preservation of environmentally sensitive areas is a goal of the Plan. The importance of sensitive areas such as floodplains and wetlands to the community is recognized and protection of these resources is a benefit to the entire Township. However, within areas that have been mapped as environmentally-sensitive there may be locations where less-intensive uses may be appropriate provided precautions are taken to minimize disruption to those ecosystems. It is not necessarily the goal of the Plan to prohibit all use in these areas, rather to encourage uses which will have a minimum impact. There may be small areas within a mapped wetland unit where some type of use could coexist and benefit from the presence of a wetland. However, where site plans are required for certain uses, the site plan should show the wetland or floodplain boundaries and preservation of those sensitive systems will be required whenever possible.

Residential

In Appendix A, the population of the Township was projected to the year 2045. Population is projected to increase by at least an estimated 665 people in that time. Using that projection and the estimated 2015 persons per household rate of 2.16, at least 308 new housing units will be needed by 2045. A variety of housing types and densities will be required to meet this demand.

Land Use Plan

Residential Densities

Low-density residential development is proposed for most of the vacant land that remains in the Township. Based on the densities required in the Zoning Ordinance, low-density residential developments are considered single-family dwellings that are developed at no greater than 4.3 dwellings per acre where central sewers are available and no greater than 2.9 dwellings per acres where on-site septic systems are used. Moderate-density residential development is defined as those single-family and two-family developments that will not exceed 5.8 dwellings per acre. High-density residential development is defined as those residential developments that may exceed 5.8 dwellings per acre. High-density residential developments must be connected to a central water and sewage system.

Low-density residential development is encouraged throughout most of the Township north of Parnall Road. Moderate-density residential developments are suggested in and around existing subdivisions built to moderate-density standards. They are found in the southwest and southeast portions of the Township in older established subdivisions. A large area has been reserved for high-density residential developments. The area north of Parnall Road between Springport Road and US-127 is suggested for multiple-family and other residential developments that are intensively developed. A good road network and municipal services are available to meet the needs of a high density of population.

Office

Two types of office uses are suggested on the Land Use Plan map. The first is the standard office use in which medical, laboratory, executive, and administrative functions take place. These are the most common type of office uses. A larger scale type of office use is also found on the Land Use Plan map. The Office/Research category is typically larger scale and may be corporate headquarters or research facilities involved in engineering or research and development. Both types of office uses are those found in the O-1 (Office) and O-2 (Office Research) districts as either a permitted use or as a conditional use.

Commercial

Two types of commercial uses are found on the Land Use Plan map. Local Commercial areas are those types of commercial uses that provide commercial services to the surrounding area but not necessarily intended to draw people from around Jackson County. Local commercial areas are found between Parnall and Cunningham Roads and at the intersection of Springport and Rives Junction Roads.

General commercial areas are all other types of commercial uses that are intended to draw traffic from not only the surrounding area, but from a regional area as well. Some commercial uses may even draw traffic from areas outside Blackman Township or Jackson County. General commercial areas are found along parts of the I-94, US-127, Airport Road, and Lansing Road corridors as well as at intersection Clinton Road (M-50) and Rives Junction Road.

Industrial

Industry is important to the Blackman Township community. Industrial uses provide jobs for local residents and contribute significantly to the Township tax base. The Land Use Plan has combined both light and heavy industrial areas into a single industrial classification. It is conceivable that either type of industrial use could be appropriate in areas suggested for industrial development on the Map. However, where existing industry has already been developed, future development of surrounding property should be consistent with the existing type of industry in the area. If no industrial uses are currently located in the immediate area, the Township will consider the most appropriate industrial use for a site based on other factors such as surrounding uses, the availability of water and sewer, the road network and surrounding zoning.

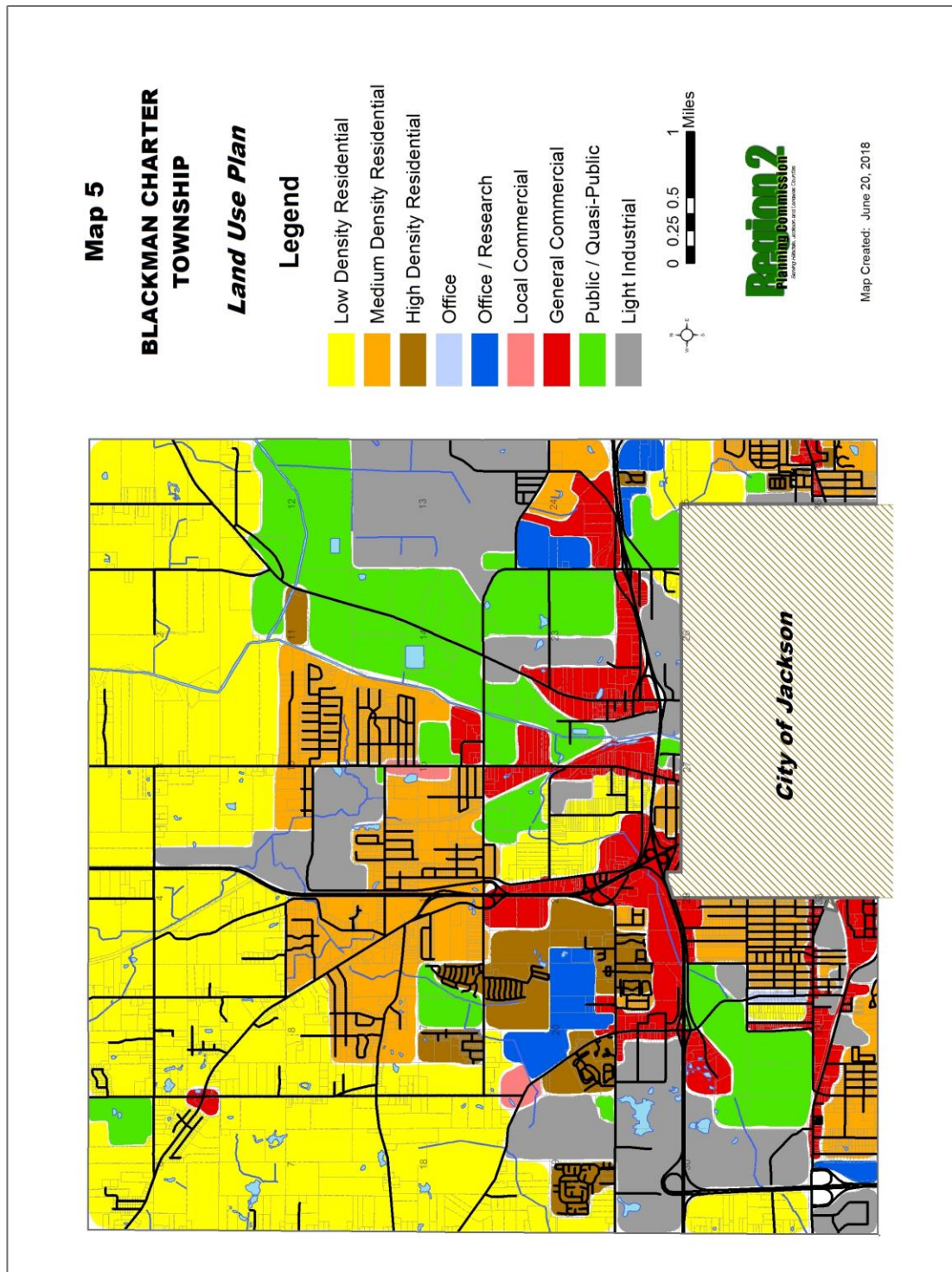
Land Use Plan

Industrial areas have been reserved either to accommodate existing industrial uses or provide areas for future development. These areas are located along County Farm Road west of Scheele Industrial Park; south of I-94 and east of M-60; north of County Farm Road and south of Springport Road; south of I-94 west of Elm Road, south of Woodworth and west of Lansing Avenue, north and south of Chanter Road west of M-106, north of O’Leary Road in Section 13, and, in the northern portion of the Township, an area north of Cunningham Road, south of Van Horn Road, and east of US-127.

In 2008, the Michigan Economic Development Corporation (MEDC) awarded Jackson County a SmartZone designation for some of the properties currently located in Blackman Township’s Local Development Finance Authority (LDFA), including Jackson County Airport-Reynolds Field (Map 1); those properties were identified on the Land Use Plan map included in the 2010 edition of this document as the Jackson Technology Park SmartZone Area (SM). The general purpose of the SmartZone was to provide areas where technology-based firms, entrepreneurs and researchers could locate in close proximity to the community assets that would assist in their efforts, helping to promote collaborations among colleges and universities, industry, research firms, government, and technology-based businesses. The primary financial advantage for the community was the availability of tax increment financing (TIF), which does not expire until 2023. Although the vision of the SmartZone as a technology park was not realized, light industrial and office/research uses are anticipated on those properties located north of Jackson County Airport-Reynolds Field.

Public and Quasi-Public

Vast areas are designated as public or quasi-public. The State of Michigan owns considerable acreage around the Parnall/Cooper/Elm Street area. The Southern Michigan Prison provides many jobs for residents of Blackman Township and Jackson County. Jackson County also owns property in the southwest portion of the Township around the County Airport. The Township owns land on Parnall between Rives Junction Road and US-127 and the Northwest Schools own considerable acreage on Lansing Avenue and at the Rives Junction Road/Van Horn Road intersection. All of these areas are encouraged to continue on the Land Use Plan map.



Chapter 6

PLAN IMPLEMENTATION AND ZONING PLAN

The successful pursuit of plan goals requires aggressive implementation strategies. The purpose of this Chapter is to identify the means by which the plan is to be implemented and follows upon the previous section on plan goals, objectives and strategies. Some of the major planning topics are described in the following paragraphs.

Preserving Natural Resources

One of the goals of the Plan is to preserve the natural features of the Township. Development standards should be created to encourage that natural features and open space be set aside and protect sensitive environmental features such as wetlands, floodplains, woodlands, areas of steep slopes, and groundwater recharge areas. These standards should be adopted as part of site plan review, planned unit development regulations, and subdivision and site condominium approval processes.

Accommodate a Mix of Land Uses

Provide in the Zoning Ordinance for a mix of land uses in certain areas of the Township. This designated zoning district or zoning overlay would be reserved primarily for areas where sewer lines and major transportation corridors are present and/or where low-impact office and commercial uses are compatible with existing residential uses. The mixed use category would not include intensive land uses such as industry, extractive operations, mobile home parks, and similar uses that may not be compatible with low-density residential uses or mixed-use developments.

Plan Publicity

One of the issues identified by the Planning Commission was the fact that previous land use plans were not consulted by developers. Development proposals (e.g. site plans, subdivisions, site condominiums) were created and presented to the Planning Commission without taking the preferences of the Planning Commission into consideration. Several means have been identified to publicize this Plan including placement on the Township website, distribution of an electronic version of the Plan to developers, pre-application meetings, brochures, development of an executive summary, and creation of checklists to ensure adherence to Plan objectives.

Keeping the Plan Current

The Michigan Planning Enabling Act (P.A. 33 of 2008) requires that the Plan be reviewed and evaluated a minimum of once every five years. It is recommended that the plan be reviewed at a minimum of once per year and evaluated for consistency with existing land use development trends. The Planning Commission should keep up with current trends with periodic reviews of building permit activity, variance requests, conditional use requests, rezonings, population estimates in relation to population projections, and other available information. With the American Community Survey from the U.S. Census Bureau, some demographic and housing data is available on a more frequent basis than in the past.

Compliance with the Planning and Zoning Enabling Statutes

The Michigan statutes related to planning and zoning — the Michigan Planning Enabling Act (P.A. 33 of 2008) and The Michigan Zoning Enabling Act (P.A. 110 of 2006), respectively — list a number of planning, zoning, and administrative duties for township planning commissions. Become familiar with the requirements of these statutes and incorporate these into a standard operating procedure.

Plan Implementation and Zoning Plan

Maintenance of the Zoning Ordinance

The Zoning Ordinance is the most important and commonly-used tool to implement the Plan. The Zoning Ordinance should be reviewed initially for consistency with the Plan and reviewed periodically in relation to the goals. Among the Zoning Ordinance measures that should be considered to implement the plan are overlay zoning districts for such purposes as natural features preservation, corridor development, mixed use zoning, commercial corridor enhancement, and historic preservation.

Subdivision and Condominium Regulations

Subdivision and condominium ordinances are helpful in achieving residential development as desired by the Township. These ordinances should be developed in order to provide effective standards that will result in high quality, attractive developments with adequate buffer zones.

Capital Improvements Plan/Program

A capital improvements programs, together with an annual capital improvements program, is important in linking capital expenditures to the furtherance of the Master Plan.

Plan Implementation and Zoning Plan

IMPLEMENTATION PROGRAM

The following table provides a summary of the plan's goals along with the recommended implementation measures.

	GOAL	RECOMMENDED IMPLEMENTATION MEASURES
GENERAL	<i>Ensure that the Master Plan remains a vital component that is consulted by Township residents, developers, members of the Township Board, in addition to the Planning Commission.</i>	<ol style="list-style-type: none"> 1. Place the Master Plan on Township web site. 2. Create executive summary of plan. 3. Create brochures which summarize plan. 4. Pre-application meetings between staff and developers. 5. Distribution of electronic version of plan with cover letter and executive summary to frequent developers in area. 6. Use checklists for site plan review and other development procedures to ensure that the goals of the plan are taken into account. 7. Planning commissioners adhere to the plan. 8. Prepare an annual report to the township board as required by the Michigan Planning Enabling Act (P.A. 33 or 2008).
ENVIRONMENT	<i>Encourage the protection and preservation of the Township's natural resources for the purpose of maintaining the quality of the local environment. / Encourage the preservation of wetlands. / Encourage the protection of the Township's groundwater resources.</i>	<ol style="list-style-type: none"> 1. Develop ordinance language to preserve and protect natural resources. 2. Use development approval procedures such as site plan review, planned unit developments, and conditional uses to encourage developers to enforce ordinance language. 3. Educate members of the public about the benefits of protecting the natural resources of the Township. 4. Use the maps from the natural resource inventory to help to identify sensitive areas for development.
RESIDENTIAL	Protect existing residential neighborhoods from encroachment by incompatible land uses.	<ol style="list-style-type: none"> 1. While allowing for the possibility of mixed uses with the review and approval of the Planning Commission, discourage incompatible land uses. 2. Require landscaping and buffer strips between incompatible land uses when they occur. 3. Screen and buffer commercial and office parking areas from residential areas and road right-of-ways.
	Encourage the development of residential areas to meet population increases, while conserving environmentally sensitive lands.	<ol style="list-style-type: none"> 1. Use open space zoning techniques to accommodate residential development while preserving rural atmosphere and protecting sensitive areas. 2. Concentrate new residential development at convenience to existing commercial areas, central infrastructure, schools, and emergency services.

Plan Implementation and Zoning Plan

	GOAL	RECOMMENDED IMPLEMENTATION MEASURES
	Encourage the development of a variety of housing types and subdivision design which will promote an efficient use of space, and preserve the integrity of the area's rural character.	<ol style="list-style-type: none"> 1. Set aside land to provide a variety of housing types at various densities. 2. Expand from existing built-up areas. 3. Provide zoning incentives to preserve open space. 4. Encourage pedestrian and bicycle connections between residential developments and nearby commercial areas. 5. Develop subdivision and condominium regulations that provide standards for residential development.
	Ensure that the housing needs of senior citizens are met.	<ol style="list-style-type: none"> 1. Allow for accessory apartments in single-family residential zoning districts. 2. Provide in the Zoning Ordinance for flexibility in living arrangements to allow senior citizens to live with relatives. 3. Provide for facilities that offer a range of care options. 4. Encourage pedestrian paths and bicycle lanes that easily and safely connect residential developments to places that elderly residents like to go. 5. Consider location of senior citizen housing in areas that contain frequently-used facilities by the elderly. 6. Apply Elder Friendly Assessment.
COMMERCIAL	Encourage the development of commercial uses to support the commercial needs of the Township and to diversify the local economy in areas that will provide convenient shopping and office related services to the Township residents and assure compatibility of commercial districts with other areas.	<ol style="list-style-type: none"> 1. Provide in the Zoning Ordinance for a variety of commercial uses. 2. Identify on the land use plan map the limits of commercial development. Limit commercial development to those areas as much as possible to avoid strip commercial appearance.
	Ensure that commercial development continues to be of high quality.	<ol style="list-style-type: none"> 1. Limit the height and size of signs in commercial areas. 2. Limit the adverse environmental effects of commercial parking areas by reducing parking requirements, provision of landscaping, and control of storm water runoff. 3. Place restrictions to control commercial lighting. 4. Require all major commercial developments to locate where sewer and/or water facilities exist or could be feasibly extended.
OFFICE	Encourage the development of office uses in transitional areas between residential and commercial or industrial uses.	Discourage stand-alone office use in areas that are primarily residential.
	Encourage more intensive office/research facilities.	Amend the Zoning Ordinance to allow greater flexibility for office park development.

Plan Implementation and Zoning Plan

	GOAL	RECOMMENDED IMPLEMENTATION MEASURES
INDUSTRIAL	Encourage the development of industrial uses to diversify the local economy and to provide a stable tax base for the Township, at locations that will allow the quality of the local environment to be maintained.	<ol style="list-style-type: none"> 1. Encourage the location of new industry in one of the industrial parks. 2. Work with local economic development agencies to identify a wide array of new industries to locate in Blackman Township. 3. Locate industrial areas away from areas identified as environmentally-sensitive. 4. Use the planned unit development option for flexibility in industrial site design.
INFRA-STRUCTURE	Provide for adequate public infrastructure.	<ol style="list-style-type: none"> 1. Develop a capital improvements program that links the Master Plan with capital expenditures. 2. As part of the annual budget process, solicit projects from department heads and evaluate those projects in relation to several criteria.
TRANSPORTATION	Ensure an efficient and safe transportation system.	<ol style="list-style-type: none"> 1. Use site plan review and other Zoning Ordinance provisions to ensure safe and efficient transportation access. 2. Study the O'Neill Road, I-94, Airport Road interchange for safety and access.
COMMUNITY IDENTITY	Establish a community identity.	<ol style="list-style-type: none"> 1. Identify a township center. 2. Avoid strip commercial development which appears the same in every community.
	Allow the continuation of existing agricultural activities with minimal interference from residential development.	If possible, separate agricultural and residential uses.

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ZONING PLAN

What is a Zoning Plan?

One of the purposes of the Blackman Charter Township Master Plan is to serve as a basis for the Zoning Ordinance. To this end, the Plan contains a special element known as a “Zoning Plan”. According to the Michigan’s planning and zoning enabling acts, a Zoning Plan is intended to describe the various zoning districts controlling area, bulk, location, and use of buildings and property. The Zoning Plan includes an explanation of how the land use categories on the Land Use Plan Map relate to the zoning districts provided on the Zoning Map.

While the Zoning Plan is intended to promote zoning that is consistent with the Land Use Plan, it should be kept in mind that the Zoning Ordinance has a short-term focus of up to five years and the Master Plan has a long-range focus of 20 or more years in the future. Accordingly, not all areas on the Land Use Plan Map should be rezoned until growth indicates the need for zoning changes and/or infrastructure is in place to service new development.

Zoning Districts

The Blackman Township Zoning Ordinance currently divides the Township into the following zoning districts (see Map 6). The districts fall into the general categories of open districts, residential districts, office districts, commercial districts, and industrial districts.

Open Districts

Agricultural district (AG-1)

The purpose of the Agricultural district is to set aside land suitable for agriculture and related uses. Uses are limited to general and specialized farming, single-family detached homes, schools, public and semi-public uses, sales of agriculturally-related products, aircraft landing areas, and recreational uses.

Recreation Open Space district (RO-1)

The intent of the Recreation Open Space district is to set aside lands which, due to their physical characteristics, would be suitable for recreation and open space. The RO-1 district allows various types of recreational uses, limited agricultural-related activities, and single-family dwellings.

Residential Districts

Rural Non-Farm Residential district (RNF-1)

The Rural Non-Farm Residential is the lowest-density residential zoning district. The district is intended to allow for single-family residential use to preserve rural character in areas where soils are suitable for septic tank disposal systems. As permitted uses, this district allows single-family dwellings, the raising of small animals for on premise use and consumption, the keeping of horses and ponies, planned residential developments, recreation, and complimentary non-residential uses (e.g. churches, schools, government buildings, etc.).

Suburban Residential district (RS-1)

The purpose of the Suburban Residential district is to provide residential areas where urban services and facilities, including central sewer, can be feasibly provided. Permitted uses include single-family homes, recreational uses, complimentary nonresidential uses, and planned residential developments.

Plan Implementation and Zoning Plan

Urban Residential district (RU-1)

The Urban Residential district was established to accommodate high-density single-family dwellings where necessary urban services and facilities, including central sewer, are provided. RU-1 allows all of the uses that the Suburban Residential district does but at a higher density.

Two-Family Urban Residential district (RU-2)

The Two-Family Residential district is intended to permit residential development at moderate densities. Like RS-1 and RU-1, the RU-2 district is intended for areas where urban services and facilities, including central sewer facilities, can be feasibly provided. The RU-2 district allows single- and two-family residential developments as well as complimentary non-residential uses.

Multiple-Family Residential district (RM-1)

The Multiple-Family Residential district has been designed to allow high-density residential concentrations and a high intensity of land use in areas served by central sewer and water systems. The RM-1 district is best located in areas that abut uses or amenities that support, complement, or serve higher residential densities. The Multiple-Family Residential district allows all densities of residential development, recreation facilities, and other complimentary non-residential uses.

Planned Residential district (PR-1)

The Planned Residential district promotes a variety of housing types and flexibility in site design. In providing flexibility in site design, the PR-1 district also seeks to preserve trees, natural topography, and prevent soil erosion. The overall purpose of PR-1 is to create a more desirable environment than would be possible with the strict application of zoning requirements. The PR-1 district allows a variety of housing types from low- to high-density, and customary complimentary uses such as churches, schools, recreation, and community activities.

Mobile Home Residential district (MH-1)

The Mobile Home Residential district is primarily designed to accommodate mobile home dwellings at a density of population and land use in areas served by central water and sewer systems, and which abut or are adjacent to other uses, buildings, structures, or amenities which support, compliment, or serve such an intensity of land use.

Office Districts

Office district (O-1)

The Office district is intended to accommodate offices and associated uses. The district allows uses such as medical clinics, professional offices, and funeral homes as permitted uses. As conditional uses, the district allows hospitals, schools, and similar uses.

Office/Research district (O-2)

The Office/Research district is intended to accommodate the needs of commerce, industry, and education. The O-2 district is characterized by low-intensity development in a campus-like setting preserving natural features while limiting the detrimental effects of heavy industry.

Commercial Districts

Local Commercial district (C-1)

The Local Commercial district is intended to allow for retail uses and services conveniently located to nearby residential uses. C-1 generally allows for less intensive uses (e.g. beauty shop, banks, medical

Plan Implementation and Zoning Plan

offices, etc.) as permitted uses, and more intensive uses and non-retail uses (e.g. planned commercial, churches, government offices, etc.) as conditional uses.

General Commercial district (C-2)

The purpose of the General Commercial district is to allow commercial uses and services which provide convenience and comparison goods to serve a wider area than provided for in the local commercial district. C-2 allows more intensive commercial uses such as drive-in businesses, automobile service stations, motels, automobile dealerships, car wash facilities, and self-storage facilities.

Highway Service Commercial district (C-3)

The Highway Service Commercial district is intended to accommodate commercial establishments that service local areas as well as through automobile and truck traffic. Highway commercial areas should be located near major thoroughfares and interchange ramps of limited access highways and should encourage groupings of various facilities into centers and discourage dispersion.

Planned Commercial district (PC-1)

The purpose of the Planned Commercial district is to add flexibility in land use and design regulations for regional shopping centers. Planned Commercial areas should complement uses in the surrounding area and be designed to serve as a self-sustaining commercial development. Creativity in design is encouraged in the PC-1 district.

Industrial Districts

Light Industrial district (I-1)

The Light Industrial district is intended to permit industries that operate in a safe and non-objectionable manner and require minimal buffering from adjoining non-industrial uses and zoning districts. Permitted uses generate a minimum of objectionable effects and include such uses as warehousing, industrial office buildings, research and testing laboratories, self-storage facilities, and trucking terminals. Conditional uses requiring review by the Planning Commission include transfer stations, adult uses, and airports.

Heavy Industrial district (I-2)

The Heavy Industrial district allows for industrial uses of all types to the extent that they can comply with all the provisions of the Zoning Ordinance and ensure that the public interest is served and surrounding property is protected.

Dimensional Standards

Bulk, height, and setbacks for each district are included in the Zoning Ordinance. The following table summarizes the current bulk, height, and setback requirements.

Plan Implementation and Zoning Plan

Bulk, Height, and Setback Requirements

Zoning District	Zoning Symbol	LOT REQUIREMENTS			MAX. ALLOWED DENSITY (Dwelling Units Per Gross Acre)***	MIN. YARD REQUIREMENTS (SETBACKS)			MAXIMUM BUILDING HEIGHT REQUIREMENTS		MINIMUM TRANSITION STRIP REQUIREMENTS	REMARKS
		Min. Lot Area ¹	Min. Lot Width	Max. Lot Coverage		Front	Side	Rear	Principal	Accessory		
Agricultural	AG-1	2 acres 5 acres	200'	10%	0.5 --	60'	30' 60**	50'	2 story or 35'	80' *****	None	Single-family detached dwelling units. All other uses
Recreational Open Space	RO-1	5 acres	300'	10%	0.2	60'	20' 60**	50'	2 story or 35'	80'	None	--
Rural Non-Farm Residential ²	RNF-1	1 acre 2 acres	150'	20%	1.0 --	60'	20' 60**	35'	2 story or 30**	12'	None	Single-family detached dwelling units. All other uses.
Suburban Residential ²	RS-1	10,000 sq' 15,000 sq'	75' 90'	30%	4.3 2.9	35'	10' 25' tot 35**	20'	2 story or 30**	12'	None	Single-family detached dwelling units with central sewerage. Single-family detached dwelling units without central sewerage.
Urban Residential ²	RU-1	1 acre 7,500 sq'	120'	30%	-- 5.8	35'	10' 25' tot	25'	2 story or 30**	12'	None	All other uses. Single-family detached dwelling.
Two-Family Urban Residential ²	RU-2	7,500 sq' 12,500 sq' 15,000 sq' 25,000 sq'	60' 90'	30%	5.8 3.4 2.9 1.7	35'	10' 25' tot	25'	22 story or 30**	12'	That the rear yard setback be 3 times the height of the proposed multi-family dwellings if less than a visual screening be provided per discretion of the charter township planning commission.	Single-family with sewerage. Single-family without sewerage. Two-family with central sewerage. Two-family without central sewerage. All other uses.
Multi-Family Residential ²	RM-1	7,500 sq' 10,000 sq' 15,000 sq'	60' 80' 120'	--	5.8 4.3 17.2****	35'	10' 25' tot 35'	25'	3 story or 35'	12'	That the rear yard setback be 3 times the height of the proposed multi-family dwellings if less than a visual screening be provided per discretion of the charter township planning commission.	Single-family detached dwelling unit. Two-family detached dwelling unit. 15,000 sq. ft. first 3 units plus 2,000 sq. ft. for each additional dwelling. All other uses.
Planned Residential Development ³	PR-1	(see PR-1 District)--			--	--	--	--	None	--	--	--
Mobile Home Residential**** ³	MH-1	For Mobile Home Subdivisions:			4.3	35'	10' 25' tot 35'	20'	2 story or 30***	12'	None	Mobile home site with central sewerage. Mobile home site without central sewerage.
		For Mobile Home Parks:			2.9							
		10 acres 5,000 sq'	35'	15%	-- 8.7	8' 20' tot	10' 25' tot	8' 20' tot	1 story or 15'	12'	See MH-1 District	Minimum site size of a Mobile Home Park. Mobile home site w/in a Mobile Home Park.
		10,000 sq' 15,000 sq'	80' 100'	35%	-- --	35'	10' 25' tot 25**	25'	2 story or 35'	25'	Fence, wall, or hedge 4'-6' ft. abutting a residential district. Also 20' deep landscaped strip along a public street if adjacent to a public street.	Uses with central sewerage and water systems. Uses without central sewerage and water systems.
Office ³ Research	O-1	10,000 sq' 15,000 sq'	80' 100'	35%	-- --	35'	10' 25' tot 25**	25'	22 story or 35'	25'	Fence, wall, or hedge 4'-6' ft. abutting a residential district. Also 20' deep landscaped strip along a public street if adjacent to a public street.	
Office ³ Research	O-2	10,000 sq' 15,000 sq'	80' 100'	35%	-- --	35'	10' 25' tot 25**	25'	22 story or 35'	25'		

* Corner lot.
 ** (See 4.6.4b) One additional foot of side, rear, and front yard setback required for every one foot of building height over 25 feet if any part of the lot abuts a residential district.
 *** Maximum allowed density (dwelling units per gross acre) represents density per acre (43,560 sq. ft.), inclusive of streets, parks, all other land uses.
 **** 17.2 units for the first acre, plus 21.7 units per acre for each additional acre.
 ***** Does not include signs.
 1 Lot width for CUI-DE-SAC will be determined as required setback.
 2 Preliminary Plat Review Required.
 3 Site Plan approval by Planning Commission.

Plan Implementation and Zoning Plan

Bulk, Height, and Setback Requirements (Cont.)

Zoning District	Zoning Symbol	LOT REQUIREMENTS				MAX. ALLOWED DENSITY (Dwelling Units Per Gross Acre) ^{***}	MIN. YARD REQUIREMENTS (SETBACKS)			MAXIMUM BUILDING HEIGHT REQUIREMENTS		MINIMUM TRANSITION STRIP REQUIREMENTS	REMARKS
		Min. Lot Area ¹	Min. Lot Width	Max. Lot Coverage	Front		Side	Rear	Principal	Accessory			
Local Commercial ¹	C-1	10,000 sq'	80'	25%	--	35'	20' 35**	35'	25'	25'	4'-6" high fence and 5' wide strip or solid masonry wall of 4'-6" in height if abutting a residential district. Also 20' deep landscaped strip along public street if adjacent to a public street.	With central sewage and water systems.	
		15,000 sq'	100'									Without central sewage and water systems.	
General Commercial ¹	C-2	10,000 sq'	80'	25%	--	35'	20' 35**	20'	35***	35***	6'-8" high fence not more than 50% void (to provide ventilation and light). The minimum dimension of any opening not greater than 4" and a 10' wide buffer strip or a 6'-8" solid masonry wall if abutting a residential district. Also 20' deep landscaped strip along a public street if adjacent to a public street.	With central sewage and water systems.	
												Without central sewage and water systems.	
Highway Service Commercial ¹	C-3	15,000 sq'	100'	25%	--	35'	20' 35**	20'	35***	35*****	6'-8" high fence not more than 50% void (to provide ventilation and light). The minimum dimension of any opening not greater than 4" and a 15' wide buffer strip or a 6'-8" solid masonry wall if abutting a residential district. Also 20' deep landscaped strip along a public street if adjacent to a public street.	--	
Planned Commercial District ²	PC-1	(See PC-1 District)				--	--	--	--	--		--	
Light Industrial ¹	I-1	20,000 sq'	100'	25%	--	35'	20' 35**	35'	35'	35'	Buffer strip to be 5' wide and a solid masonry wall not less than 6' but not greater than 8' in height if abutting a residential or commercial district. Also 20' deep landscaped strip along a public street if adjacent to a public street.	--	
Heavy Industrial ¹	I-2	3 acres	300'	25%	--	50'	60'	60'	35'	35'	Buffer strip to be 5' wide and a solid masonry wall not less than 6' but not greater than 8' in height if abutting a residential or commercial district. Also 20' deep landscaped strip along a public street if adjacent to a public street.	--	

* Corner lot.
 ** (See 4.6.4b) One additional foot of side, rear, and front yard setback required for every one foot of building height over 25 feet if any part of the lot abuts a residential district.
 *** Maximum allowed density (dwelling units per gross acre) represents density per acre (43,560 sq. ft.), inclusive of streets, parks, all other land uses.
 **** Does not include signs.
 1 Lot width for CUI-DE-SAC will be determined as required setback.
 2 Preliminary Plat Review Required.
 3 Site Plan approval by Planning Commission.

Plan Implementation and Zoning Plan

Rezoning Criteria

The most common application of the Land Use Plan is during the rezoning process. Accordingly, a rezoning should be required to meet set criteria in order to be considered consistent with the Land Use Plan. The following standards satisfy this requirement:

- Is the proposed rezoning consistent with the policies and uses proposed for that area in the Master Plan?
- Will all of the uses allowed under the proposed rezoning be compatible with other zones and uses in the surrounding area?
- Will public services and facilities be significantly adversely impacted by a development or use allowed under the requested rezoning?
- Will the uses allowed under the proposed rezoning be equally or better suited to the area than uses allowed under the current zoning district?

Relationship to the Land Use Plan Map

The remainder of this section equates the various zoning districts included on the Zoning map with the various categories included on the Land Use Plan Map.

Residential areas

The following residential designations are included on the Land Use Plan Map:

Low-Density Residential

Low-density residential areas are addressed generally on the Land Use Plan Map. They are generally located in somewhat rural at some distance from built-up areas in the vicinity of the City of Jackson. The following zoning districts can be used to implement the low-density residential Land Use Plan designations:

- AG-1, Agriculture
- RO-1, Recreation Open Space
- RNF-1, Rural Non-Farm Residential

Moderate-Density Residential

Found in more developed areas nearer to the City of Jackson, moderate-density residential areas surround the urbanized area around the City. Several moderate-density platted subdivisions are located within this ring. The following zoning districts are intended to implement the moderate-density Land Use Plan designation:

- RS-1, Suburban Residential
- RU-1, Urban Residential
- RU-2, Two-Family Residential

High-Density Residential

Several high-density residential areas are indicated on the Land Use Plan map in several areas within the sewer service area. This Land Use Plan designation is primarily intended to be implemented using the following two zoning districts:

- RM-1, Multiple-Family Residential
- MH-1, Mobile Home Residential

Plan Implementation and Zoning Plan

Office Areas

Appropriate areas for office use are identified by two categories.

Office

The office Land Use Plan designation is primarily to be implemented by the O-1, Office zoning district. This designation is often found in transition areas and is used to buffer residential areas from higher-intensity uses.

Office/Research

The office-research designation is to be carried out with the O-2, Office Research zoning district.

Commercial Areas

The following commercial plan designations are included on the Land Use Plan map.

Local Commercial

The local commercial designation is indicated generally on the Land Use Plan map. These areas are generally to be implemented with the C-1, Local Commercial zoning district.

General Commercial

The general commercial planning areas indicated on the Land Use Plan map are to be implemented using the following zoning districts:

- C-2, General Commercial
- C-3, Highway Service Commercial
- PC-1, Planned Commercial

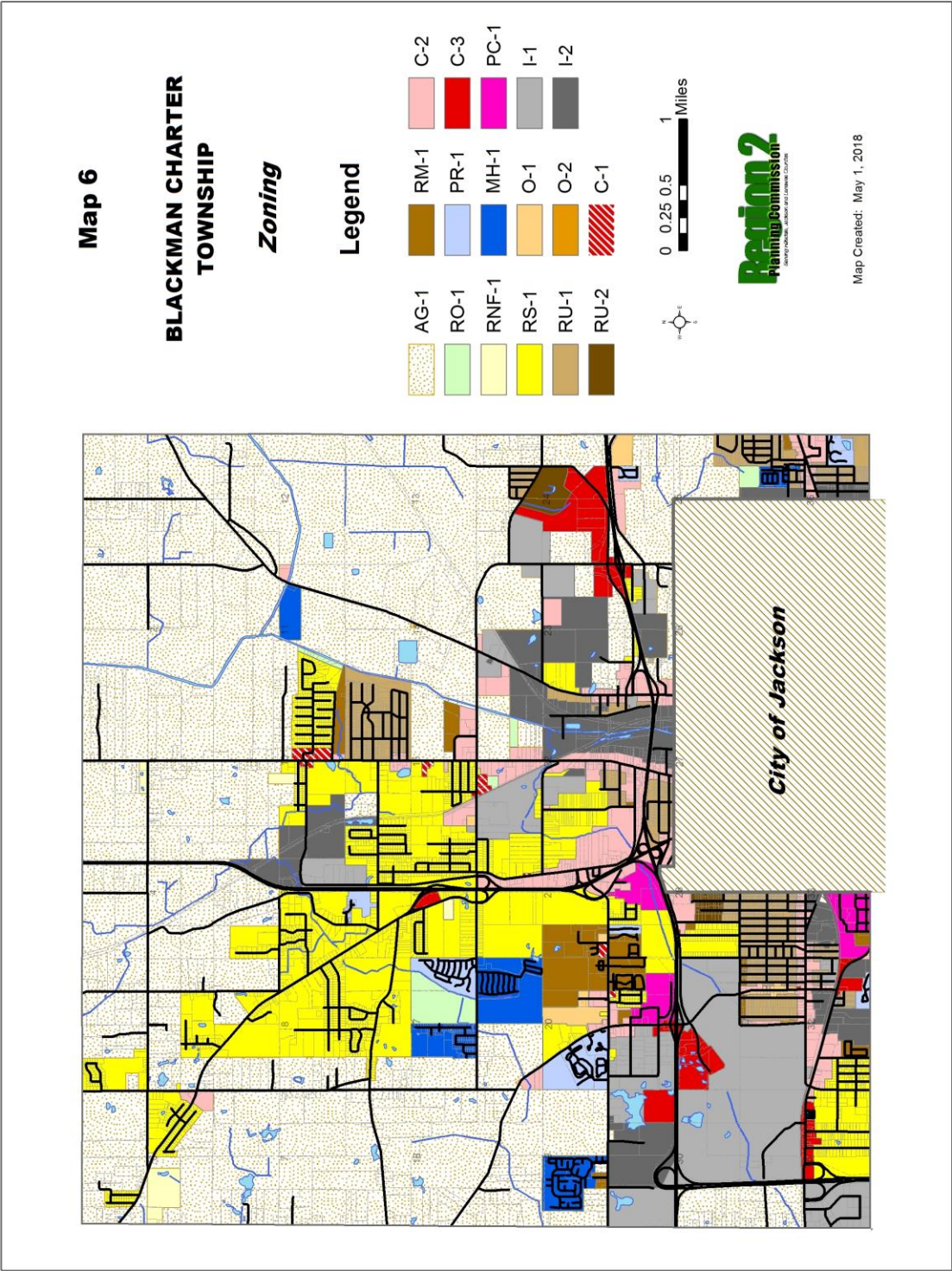
Light Industrial Areas

The light industrial Land Use Plan designation is intended to be implemented using two zoning districts.

- I-1, Light Industrial
- I-2, Heavy Industrial

Public/Quasi-Public

No zoning district has been designated to implement this plan designation. Instead, uses that fall under this category are allowed in most zoning districts as a permitted or conditional use.



CAPITAL IMPROVEMENTS PROGRAM (CIP)

What is a Capital Improvements Program?

Capital improvements are investments in those physical facilities which involve a substantial expenditure and are of a more lasting nature, as opposed to the operating expenses which occur during the same year they are budgeted. Examples of capital improvements include: municipal buildings (e.g., township Hall, fire stations, etc.), parks and recreation facilities, streets and alleys, and utilities (e.g., water and sewer lines, etc.). A capital improvements program (CIP) is a six-year prioritized listing of those projects which often includes the following information: project location, date of construction, project cost, means of financing, sponsor, and relationship to other facilities. The CIP is updated annually with the first year being the current year capital budget.

Why Prepare a Capital Improvements Program?

The Michigan Planning Enabling Act (MPEA) requires planning commissions to annually prepare a capital improvements program upon the adoption of the Master Plan unless exempted by the Township Board. If the Planning Commission is exempted, the Township Board is required to prepare and adopt a capital improvements program separate from or as a part of the annual budget, or delegate the preparation of the capital improvements program to the Township Supervisor or a designee subject to final approval by the Township Board.

The CIP indicates those public structures and improvements, in the general order of their priority, which in the judgment of the Planning Commission, will be needed or desirable and can be undertaken within the ensuing six-year period. The improvements are to be based upon the requirements of Blackman Township for all types of public structures and improvements. Upon the request of the Planning Commission, each Township department with authority for public structures or improvements is required to provide lists, plans, and estimates of time and cost of those public structures and improvements.

Among the benefits of creating a CIP is the coordination of seemingly disparate projects. For example, water and sewer projects can be coordinated with street paving projects, eliminating the potential for a street to be repaved and then torn up for a water or sewer project two or three years later. New public works projects that are identified in the Master Plan can come to fruition through the CIP process which is intended to ensure that new public facilities are built in locations consistent with the public policy for development in particular areas or neighborhoods as spelled out in the Master Plan.

Developing a Capital Improvements Program

The following information should be used to develop the (CIP) upon the completion of the Master Plan:

Establishing Objective Criteria

Without objective criteria for rating proposed projects, the capital improvements review process can quickly break down. Simply ranking proposed projects with subjective labels such as “urgent”, “important”, or “desirable” can leave room for disagreement in determining priority. Rather, it is recommended that a set of objective criteria, such as the list that follows, be considered for examining the merit of each proposed capital improvements project:

- Does the project advance the goals of the Master Plan?
- Does the proposed facility address a risk to public safety or health?

Plan Implementation and Zoning Plan

- Is the current facility deteriorated or unsafe?
- Is the proposed facility part of a systematic replacement program?
- Will the proposed facility result in improvement of operating efficiency?
- Is the proposed facility necessary to:
 - Ensure the success of another capital improvement?
 - Meet a state or federal statutory or administrative requirement?
 - A court order?
 - A major public goal of the legislative body?
- Will the proposed facility result in the equitable provision of services or facilities to a part of the population with special needs?
- Will the proposed facility protect or conserve sensitive natural features or natural resources or the air or water quality of Blackman Township?
- Will the proposed facility protect the investment in existing infrastructure from becoming over capacity?
- Will the proposed facility result in a new or substantially expanded facility to provide a new service or new level of service in Blackman Township?

Those answers can then be used to place proposed facilities into groups based upon the following criteria:

- The proposed facility is urgent and fills a high priority need that should be met.
- The proposed facility is a high priority that should be done as funding becomes available.
- The proposed facility is worthwhile if funding is available (but may be deferred).
- The proposed facility is a low priority that is desirable but not essential.

Establishing a Process

Once the criteria are put in place, the Township could consider using the Planning Commission as-a-whole, or establish an advisory committee, to provide recommendations regarding capital improvement projects. Though the committee itself, or the composition of the committee, is not mandated by the MPEA, it might consist of members of the Planning Commission, Township Supervisor, other Township Board members, and representatives from the pertinent Township departments. The role of the committee is to advise the Planning Commission which in turn advises the Township Board during the budget development process.



Blackman Charter Township Master Plan

Appendix A

Community Profile

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Appendix A COMMUNITY PROFILE

The purpose of the community profile is to provide general information about Blackman Charter Township. This examination of Township demographics, housing trends, land use, natural features, transportation, and community services provided the Planning Commission with an opportunity to chart a course that encourages desirable aspects of Township facilities and quality of life, but also promotes change when necessary.

There are many influences on population growth and decline - both internal (e.g. fertility, migration, mortality, etc.) and external (e.g. regional population trends, etc.). In many cases, it is good to review regional trends and compare Blackman Township with other communities in the County and State. Included with the demographic information to be considered are population trends, group quarters population, age, education, occupation, income, commuting, race, and disability status. To provide an estimate of expected growth, the population of the Township is projected to the year 2045. Population data are reviewed in Chapter A1.

Housing is highly influenced by the people who live in a community. The type of jobs people have, their income, marital status, and age are among the important factors that play into the type of housing that is desired. Among the housing data provided is the number of housing units, renter vs. owner units, housing type, age of housing stock, and housing costs. The Township's housing stock is examined in Chapter A2.

The natural features of a community play a vital role in determining current and future land use patterns. Physical features including topography, geology, soils, and floodplains are examined to determine how they shape future development patterns. The natural features of Blackman Township are described and mapped in Chapter A3.

Similarly, the current land use pattern and land use trends have resulted from a variety of influences including the location of natural features as well as such factors as transportation routes, location of the community relative to other centers of population, history of settlement, location of sewer, water, and electric utilities, availability of suitable soils for septic systems, and availability of groundwater supplies. The results of these factors in shaping the development pattern are examined in Chapter A4.

The transportation and circulation systems of a community play an important role in community development. Information regarding road functional classification, traffic volumes, the Jackson County Airport-Reynolds Field, and rail availability are presented in Chapter A5.

Finally, a community needs to provide services of all kinds for the welfare of its residents. Community services include utilities, emergency services, schools, and parks are described in Chapter A6.

Appendix A – Community Profile

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Chapter A1 POPULATION

Chapter A1 examines the demographics of Blackman Township. Information is presented on population trends, group quarters population, migration, household population, household size, age structure, education, income, employment, and population projections. Unless otherwise stated, the U.S. Census Bureau, including its American Community Survey (ACS), is the source of all population statistics in this Chapter.

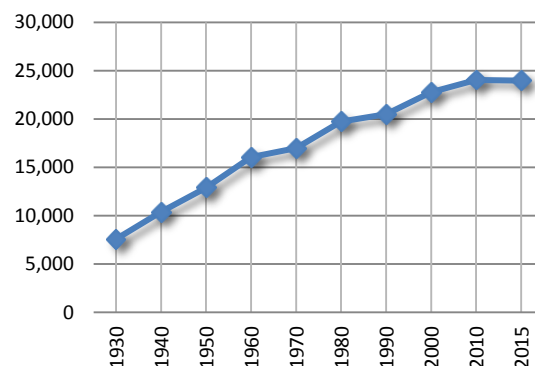
Population Trend

The population of Blackman Township was 24,051 in 2010. The population increased 6% between 2000 and 2010, which is below the growth rate during the 2000s when the Township grew 11%. More recent estimates indicate that the population of the Township decreased slightly to an estimated 23,982 people in 2015.

While growth rates have varied from decade to decade, the Township population rose consistently between 1930 and 2010. As shown in Figure A1, no decade saw a population decline with periods of maximum growth occurring during the 30s, 40s, 50s, and the 70s. However, there was an estimated slight decline between 2010 and 2015.

The relocation of the Southern Michigan Prison in 1924 from the City of Jackson to Blackman Township boosted the population significantly. At that time, the prison population was approximately 5,280 and the general Township population was approximately 2,300. The Southern Michigan Prison was closed in 2007. However, several other state correctional facilities are currently located in the Township.

Figure A1
Population Trend, 1930-2015



Group Quarters Population

The Census Bureau classifies all people who do not reside in a household as living in group quarters. Two types of group quarters are identified: institutional (e.g. correctional facilities, nursing homes, and mental hospitals) and non-institutional (e.g. college dormitories, military barracks, group homes, missions, and shelters).

A significant portion of the Blackman Township population resides within group quarters. The group quarters population in 2015 was estimated to be 6,825 persons, or 29% of the estimated total population. The Michigan Department of Corrections (MDOC) operates several correctional facilities in the Township and their combined capacity is 5,852 beds (i.e., 1,382 beds for the Charles E. Egeler Reception Guidance Center; 800 beds for the Cooper Street Correctional Facility; 1,974 beds for the G. Robert Cotton Correctional Facility; and 1,696 beds for the Parnall Correctional Facility), comprising up to 86% of the group quarters population.¹ The remainder of the group quarters population is housed in assisted living/nursing homes and other types of settings.

¹ The capacities of the various correctional facilities were identified online, using Google.

Appendix A – Community Profile

Comparative Population Growth

Table A-1 and Figure A-2 illustrate the comparative growth rate among selected Jackson County townships and the City of Jackson. The three metro townships surrounding the City of Jackson — Blackman, Leoni, and Summit — have shown a similar pattern of growth over the decades. That is, all three had a close range of populations in 1930 and had proportionately similar populations in 2010. Meanwhile the City of Jackson began with a stable population from 1930-1960 but has lost population precipitously since that time.

Figure A2
Comparative Population Growth, 1930-2015

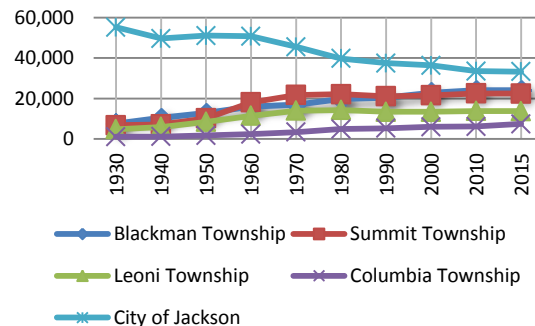


Table A1 - COMPARATIVE POPULATION GROWTH, 1930-2015

Community	1930	1940	1950	1960	1970	1980	1990	2000	2010	2015
Blackman Township	7,583	10,401	12,903	16,060	16,997	19,741	20,492	22,800	24,051	23,982
Summit Township	6,754	7,177	10,215	18,101	21,754	22,113	21,230	21,534	22,508	22,468
Leoni Township	4,794	5,918	8,468	11,430	13,953	14,259	13,435	13,459	13,807	13,764
Columbia Township	1,097	1,159	1,744	2,360	3,369	4,871	5,253	6,058	6,181	7,413
City of Jackson	55,187	49,656	51,088	50,720	45,484	39,739	37,425	36,316	33,534	33,255

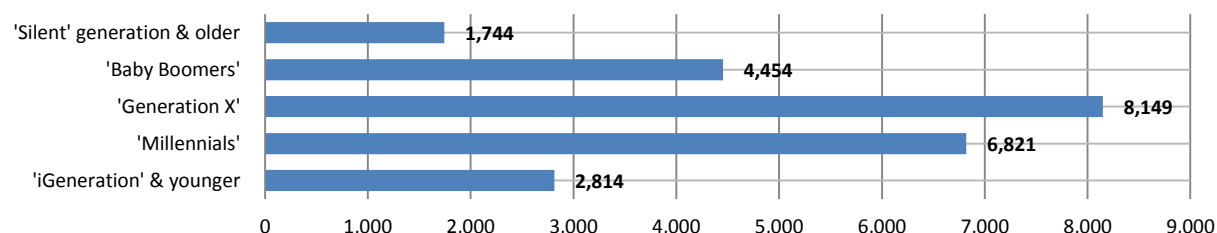
Sources: U.S. Census Bureau and the American Community Survey 2015 estimates.

In contrast, Columbia Township (and some other rural townships in Jackson County) has experienced recent growth. While rural townships saw little or no growth through the 1950s, the 1960s began a period of increasing growth, greater than other types of communities. Some of this growth in rural townships is attributed to losses in urban areas. In Jackson County, rural communities in the eastern portion of the County have tended to experience greater growth than other areas. In the past, growth communities tended to have the characteristics of proximity to population centers, transportation routes, cultural activities, public facilities, schools, and place of work. While these factors remain important, recent trends have shown that there are new factors in play in determining place of residence such as rural atmosphere, low rural residential density, and the increased availability of community services in rural areas.

Age Structure

Age is an important factor in determining the needs of Township residents now, and in the future. The age of the population determines such demographic factors as the number of retirees, school-age children, employees, and fertility ratios. The study of age patterns (i.e., generations) can be useful in planning for recreation, education, services for the elderly, and other services. Figure A3 provides the estimated age pattern in Blackman Township in 2015.

Figure A3 | Generations



Appendix A – Community Profile

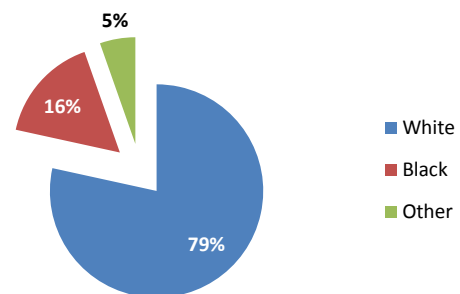
Generation X —people between 35 and 54 years of age in 2015— was estimated to be the largest age group, comprising an estimated 34% of residents. Millennials —people between 15 and 34 years of age in 2015— were estimated to be the second largest age group, comprising an estimated 28% of residents. Baby Boomers —people between 55 and 74 years of age in 2015— were estimated to be the third largest age group, comprising an estimated 19% of residents. The iGeneration and younger —people 14 years of age and younger in 2015— was estimated to be the fourth largest age group, comprising an estimated 12% of residents. The Silent Generation and older —people 75 years of age and older in 2015— was estimated to be the smallest age group, comprising an estimated 7% of residents.

Another indicator of the age of a community is the trend in the median age. The median age—the age at which half of the residents are older and half younger—increased in Blackman Township from 35 in 1990, to 38 in 2000, to 39.9 in 2010, and to an estimated 41.5 in 2015. The increasing median age is a phenomenon that is likely to continue when senior citizens, many of them retired, make up a larger percentage of the population. The percentage of senior citizens will likely continue to grow. Due to a decreased birth rate and relatively few women of child-bearing age, the number of school age children has not increased in proportion to population gains.

Race and Ethnicity

The population of Blackman Township is more diverse than the Jackson County population. It is estimated that 79% of Township residents were white in 2015 (see Figure A4), compared to 88% of residents countywide. An estimated 16% were African-American, compared to 9% countywide. An estimated 5% were of some other race (e.g., Native American, Asian, etc.), compared to 4% countywide. An estimated 4% of Township residents identified as Hispanic, compared with 3% countywide. Please note that race and ethnicity are calculated separately.

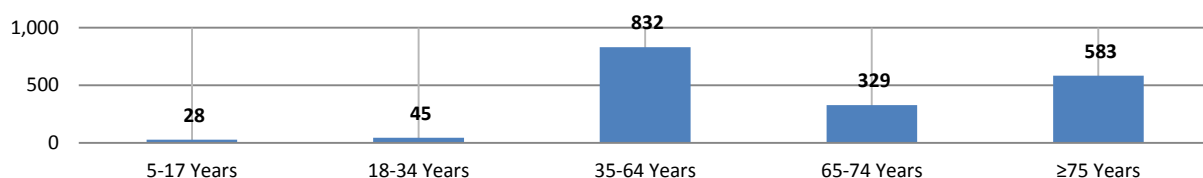
Figure A4
Race and Ethnicity



Disabilities

The population of Blackman Township is more disabled than the Jackson County population. It is estimated that 20% of residents were disabled in some way in 2015 (e.g., hearing, vision, cognitive, etc.) compared to 15% of residents countywide. An estimated 11% had an ambulatory disability, compared to 9% countywide. The percentage of Township residents with an ambulatory disability increases with age (see Figure A5). For example, 1% of residents 5 to 34 years of age in 2015 had an ambulatory disability. This increased to 12% of residents aged 35 to 64 years of age, 22% of residents 65 to 74 years of age, and 34.0% of people at least 75 years of age.

Figure A5
Ambulatory Disability



Appendix A – Community Profile

Education

The residents of Blackman Township have followed a national trend toward higher levels of education. In 1990, for example, the percentage of residents, 25 years of age and older, who achieved at least a high school education was 75%. This percentage increased to 84% by 2000 and an estimated 88% by 2015.

The largest recent increases in educational attainment are those residents who have a college education. Of the 17,825 people in Blackman Township age 25 years and above in 2015, 8,309, or 47%, attended college at some point. Of the number who attended some level of college, 4,601 had not yet received a degree while the remaining 3,708 possessed an associate's degree, bachelor's degree, or a graduate or professional degree.

In 2015, there were an estimated 4,209 Blackman Township residents 3 years and over and enrolled in school. An estimated 65% or 2,738 of these students were attending elementary (including kindergarten) or high school. As shown on Map A1, portions of four school districts are contained within Blackman Township — the East Jackson Community Schools, Jackson Public Schools, Northwest Community Schools, and the Western School District.

Household Population

According to the Census Bureau definition, households are categorized into families and non-families. A family is a group of individuals that are related and live in the same home. A family can consist of a two-parent home or a one-parent home. A non-family consists of a person living alone or with a group of unrelated individuals in the same dwelling. The total number of households in Blackman Township was 6,658 in 2000; 7,602 in 2010; and an estimated 7,929 in 2015. Families comprised 63% of households in 2000; 58% in 2010; and an estimated 54% in 2015. Non-families comprised 37% of households in 2000; 42% in 2010; and an estimated 46% in 2015. Of the non-family households, 83% contained persons living alone in 2000; 86% in 2010, and an estimated 89% in 2015. Of the non-family households, 34% contained persons 65 or older living alone in 2000; 37% in 2010; and an estimated 40% in 2015. The number of people living alone has the potential to continue increasing in the upcoming years with an influx in the number of senior citizens as a result of the baby boom.

Household Size

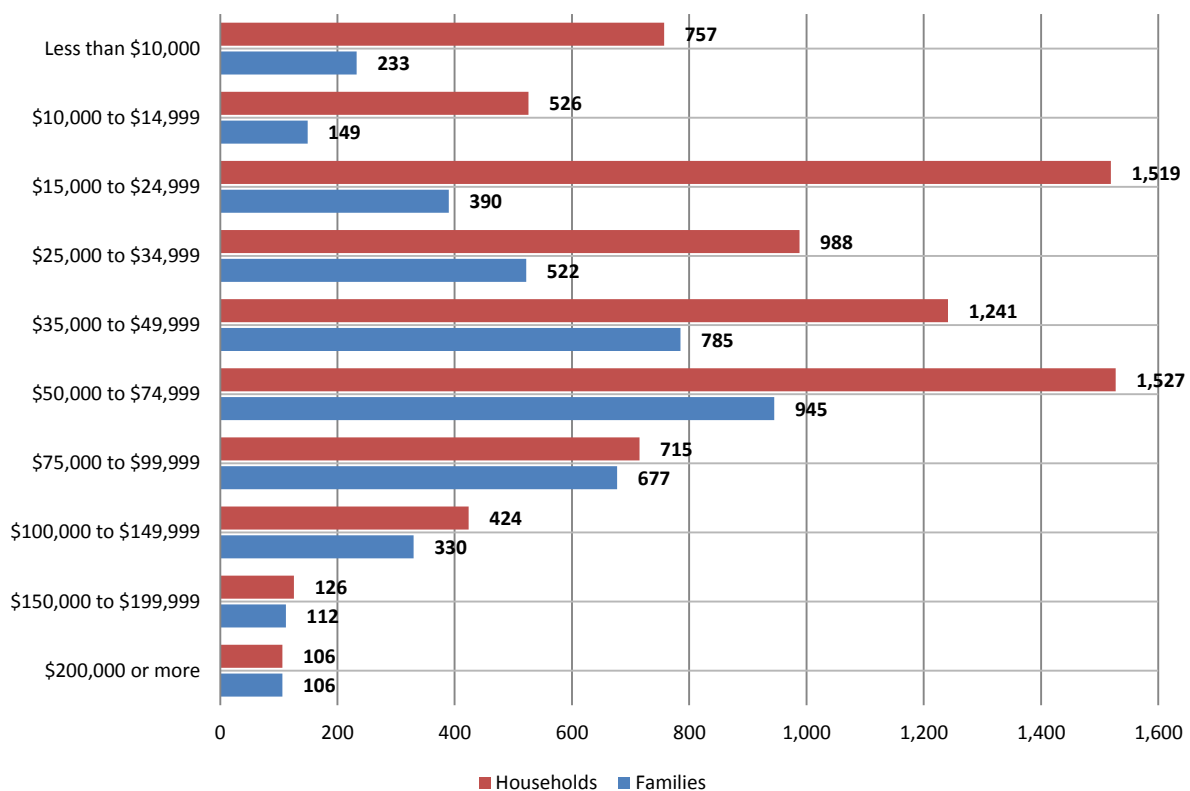
For decades the average household size in most areas in the United States has been declining. In 1980, the average number of people per household in Blackman Township was 2.60. By 1990, the number had declined to 2.33, where it remained in 2000. However, the average household size declined to 2.23 people in 2010 and an estimated 2.16 people in 2015. The average household size in Blackman Township is lower than Jackson County (i.e., 2.48 in 2010 and 2015 (estimated)) and the State of Michigan (i.e., 2.49 in 2010 and an estimated 2.52 in 2015). Among the reasons are the large number of residents that live alone, large number of renter units, and a large number of residents who delay having children. The result of the relatively low persons per household ratio is that more dwellings are needed to house an equivalent number of people.

Income

The estimated 2015 annual median income for all households (i.e. families and non-families) was \$36,268 for Blackman Township, less than Jackson County (\$46,326) and the State of Michigan (\$49,576). Blackman Township's 2000 annual median household income was \$40,286. An estimated 35% of all Township households made \$24,999 or less annually in 2015 (see Figure A6); an estimated 28% made \$25,000-\$49,999; an estimated 28% made \$50,000-\$99,999; and an estimated 8% made at least \$100,000.

Appendix A – Community Profile

Figure A6
2015 Household and Family Income



The estimated 2015 annual median income for families was \$51,961 for Blackman Township, less than Jackson County (\$58,432) and the State of Michigan (\$62,247). An estimated 18% of Township families made \$24,999 or less annually in 2015 (see Figure A6); an estimated 31% made \$25,000-\$49,999; an estimated 38% made \$50,000-\$99,999; and an estimated 13% made at least \$100,000.

The estimated per capita income in 2015 was \$18,271 for Blackman, less than Jackson County (\$23,377) and the State of Michigan (\$26,607). Blackman Township's per capita income in 2000 was \$18,708.

Employment

Two aspects of employment in Blackman Township are considered here — employment by occupation and employment by industry. Occupation is a description of the type of work that an employee performs while employment by industry describes the sector that an employer falls into. Table A2 provides employment and occupation data for Blackman Township and compares the Township to Jackson County. The employees are 16 years old or older.

As Table A2 shows, the employment pattern by industry in Blackman Township mirrors Jackson County to a remarkable degree with the majority of industry figures within one percent of one another. The largest gap is the 'educational services, and health care and social services' industry where there is a negative 3% difference between the Township and the County. The second largest gap is the 'professional, scientific, management, administrative, and waste management' services industry where there is a 3% difference between the Township and the County. The third largest gap is the 'retail trade' industry where there is a negative 2% difference between the Township and the County.

Appendix A – Community Profile

Table A2 – EMPLOYMENT BY OCCUPATION/INDUSTRY

TABLE A2 EMPLOYMENT BY OCCUPATION/INDUSTRY

Occupation/Industry	Blackman Township		Jackson County	
OCCUPATION				
Management, business, science, and arts	1,750	24.7%	18,909	29.0%
Service	1,511	21.3%	12,518	19.2%
Sales and office	1,523	21.5%	16,112	24.7%
Natural resources, construction, extraction, and maintenance	688	9.4%	5,546	8.5%
Production, transportation, and material moving	1,630	23.0%	12,098	18.6%
Total	7,082	100.0%	65,183	100.0%
INDUSTRY				
Agricultural, forestry, fishing and hunting, and mining	75	1.1%	631	1.0%
Construction	353	5.0%	3,541	5.4%
Manufacturing	1,453	20.5%	12,767	19.6%
Wholesale trade	190	2.7%	1,657	2.5%
Retail trade	719	10.2%	7,616	11.7%
Transportation and warehousing, and utilities	348	4.9%	3,283	5.0%
Information	58	0.8%	692	1.1%
Finance, insurance, real estate, and rental and leasing	373	5.3%	3,232	5.0%
Professional, scientific, management, administrative, and waste management services	729	10.3%	4,776	7.3%
Educational services, and health care and social services	1,401	19.8%	15,128	23.2%
Arts, entertainment, and recreation, and accommodation and food services	534	7.5%	5,315	8.2%
Other services (except public administration)	451	6.4%	3,381	5.2%
Public administration	398	5.6%	3,164	4.9%
Total	7,082	100.0%	65,183	100.0%

2015 American Community Survey

The employment pattern by occupation is more disparate between Blackman Township and Jackson County. The largest gap regards ‘production, transportation, and material moving’ occupations where there is a negative 4% difference between the Township and the County. The second largest gap regards ‘management, business, science, and arts’ occupations where there is a negative 4% difference between the Township and the County. The third largest gap regards ‘sales and office’ occupations where there is a negative 3% difference between the Township and the County. The fourth largest gap is in the ‘service’ occupation where there is a 2% difference between the Township and the County.

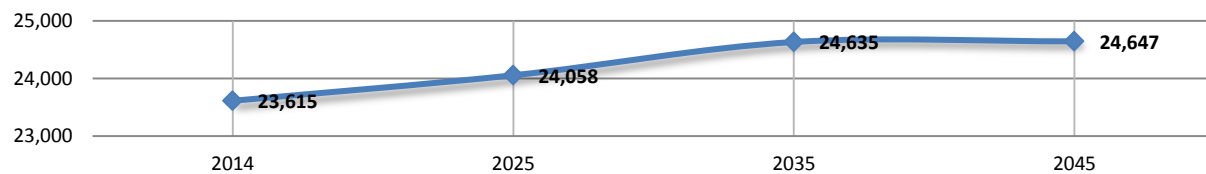
Workers in a so-called “bedroom community” in which many people reside, but in which few jobs are available, are likely to have long trips to work because few jobs are available locally. It is estimated that 27% of employed Blackman Township residents worked in the Township in 2015, more than the estimated 22% of employed Jackson County residents who worked in the same municipality in which they lived. It is further estimated that 21% of employed Blackman Township residents worked in another Michigan county in 2015 and 1% worked outside of the State of Michigan. That means that an estimated 79% of employed Blackman Township residents worked in Jackson County. This coincides with the estimated 25% of employed Blackman Township residents who traveled 30 minutes or more to work in 2015. An estimated 5% traveled less than 5 minutes to work, 16% traveled 5 to 9 minutes, 24% traveled 10 to 14 minutes, 17% traveled 20 to 24 minutes, and 12% traveled 25 to 29 minutes. The estimated average travel time to work in 2015 was 21.5 minutes for employed Blackman Township residents, less than the 23.1 minutes for employed Jackson County residents that year.

Appendix A – Community Profile

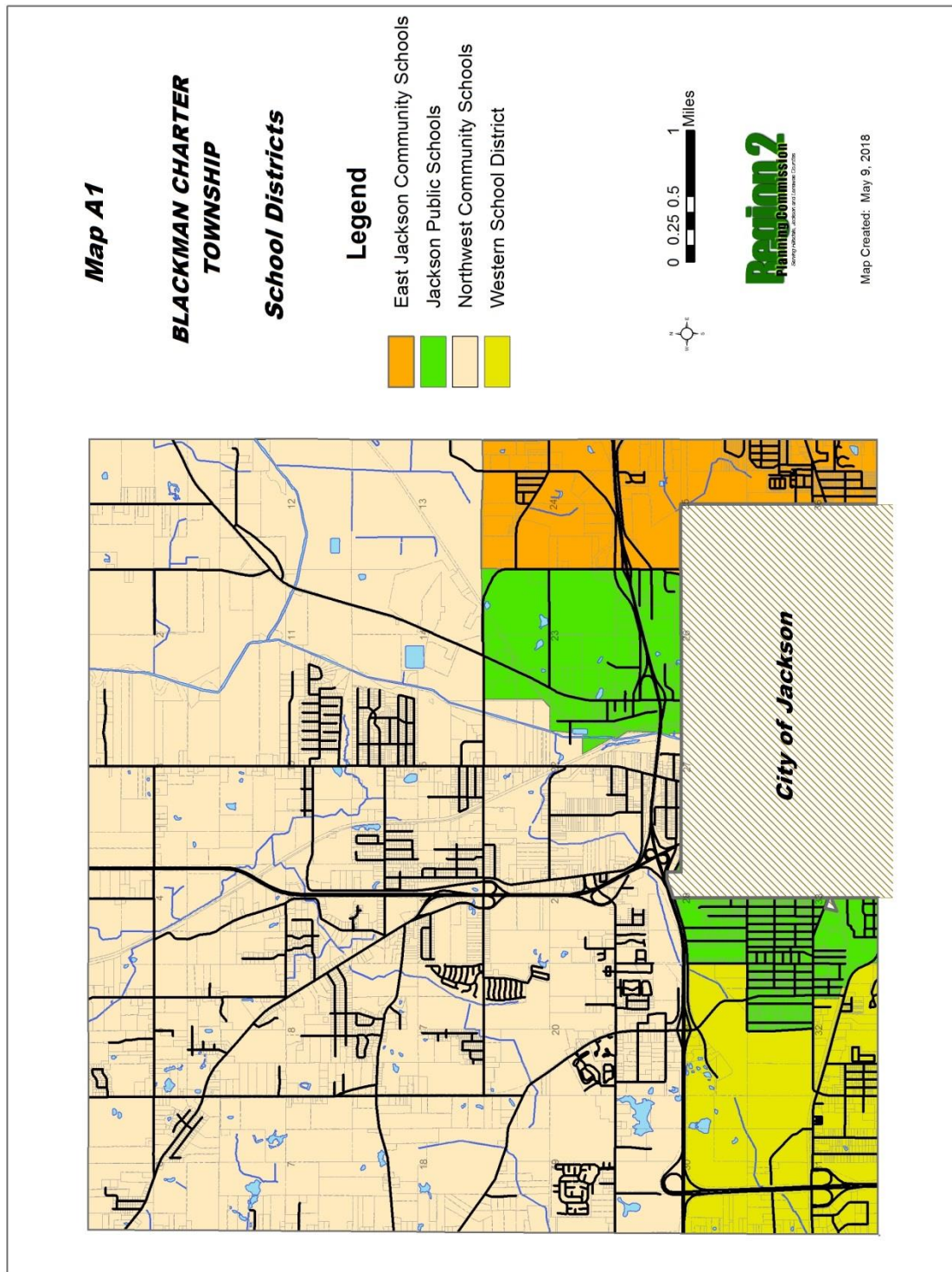
2045 Population Projection

The population projections utilized in this Plan were developed for the Jackson Area Comprehensive Transportation Study (JACTS). The 2014-2045 projections are grounded on historic census trends and Regional Economic Models Inc. (REMI) forecasts (see Figure A7). The 2014 population for the Township was estimated to be 23,615 residents for the Township and 159,896 residents countywide. The 2025 population is projected to be 24,058 people, a 1.9% increase from 2014. The 2035 population is projected to be 24,635 people, a 2.4% increase from 2025. The 2045 population is projected to be 24,647 people, a 0.0% increase from 2035. Utilizing that information, it is reasonable to expect that the population will increase 4.4% between 2014 and 2045. Population growth countywide is only expected to be 2.3%.

**Figure A7
Population Projections**



Appendix A – Community Profile



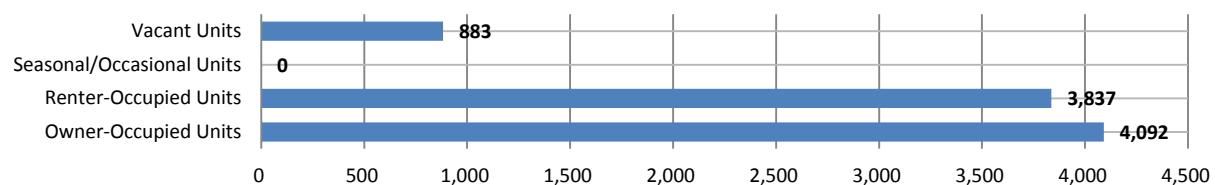
Chapter A2 HOUSING

Chapter A2 examines the Blackman Township housing stock and trends in housing development. Reviewed in this chapter are trends in the number of housing units, types of housing, occupancy, age of housing stock, and housing affordability.

Housing Trends

In 2015, there were an estimated 8,812 housing units in Blackman Township which was an increase of 27.3% from the 2000 total of 6,921 (compared to 9.9% countywide for the same time period). An estimated 90.0% of dwellings were occupied in 2015, similar to the 87.7% of countywide housing units (see Figure A8). However, an estimated 23.6% of vacant homes are used seasonally/occasionally countywide compared to 0.0% in Blackman Township. Owner-occupied units made up an estimated 51.6% of all occupied dwellings in 2015, compared to 67% in 2000. Rental units increased to 48.4% of occupied dwellings in 2015, up from 33% in 2000.

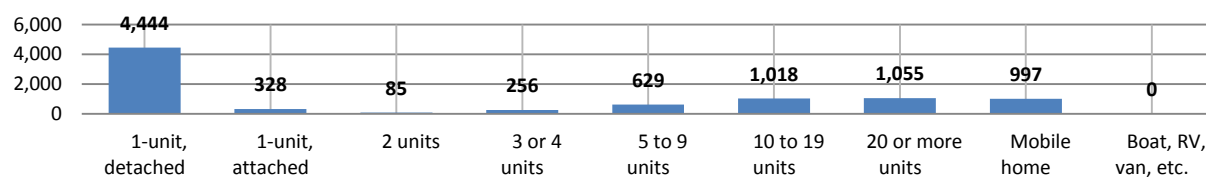
**Figure A8
Dwelling Occupancy**



Type of Dwellings

Over half of the housing stock in Blackman Township consists of single-family dwellings. For example, an estimated 50% of housing units in the Township are one-family detached dwellings (see Figure A9), compared to 76% of dwellings countywide. An additional 4% are attached one-family dwellings, compared to 2% countywide. Multiple-family units comprised 35% of dwellings in the Township, compared to 16% countywide. Mobile homes comprised the remaining estimated 11% of dwellings in the Township, compared to 6% countywide.

**Figure A9
Dwelling Types**

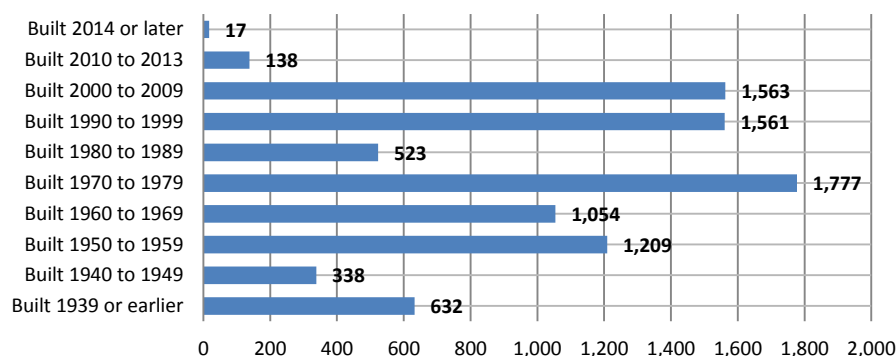


Age of Housing

The age of the housing stock in Blackman Township is relatively young. For example, approximately 46% of the Township's residential structures in 2015 were built between 1950 and 1979, compared to 36% countywide (see Figure A10). An estimated 41% were built between 1980 and 2009, compared to 32% countywide. Only an estimated 11% were built prior to 1950, compared to 29% countywide. Approximately 2% of dwellings were built between 2010 and 2014, compared to 1% countywide.

Appendix A – Community Profile

Figure A10
Age of Housing



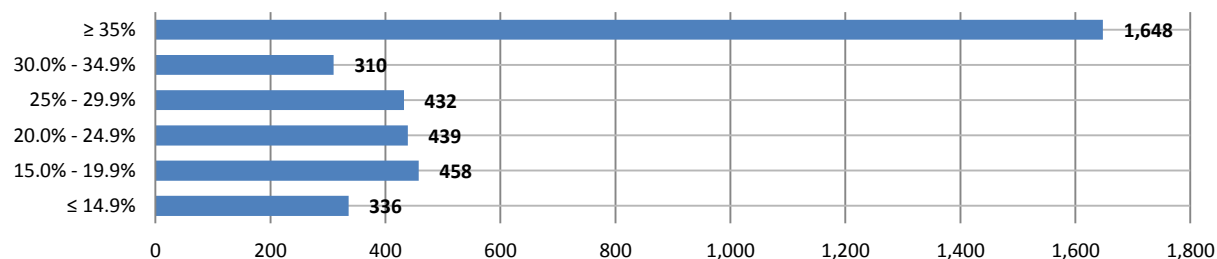
Housing Affordability

An important aspect of the housing stock is affordability. Housing supply is not adequate if the workers who reside in the community cannot afford to reside live they work. However, as has been pointed out the Township has an abundant supply of affordable housing.

The estimated median value of housing units in the Township was \$95,900 in 2015, compared to \$93,900 in 2000. The estimated median value of dwellings in Jackson County was \$115,500, compared to \$96,900 in 2000. The estimated median monthly costs for homeowners with a mortgage were \$999 in the Township, compared to \$1,136 countywide. The estimated median monthly costs for homeowners without a mortgage were \$386 in the Township, compared to \$418 countywide. The estimated median monthly rent in Blackman Township was \$722 in 2015, compared to \$525 in 2000. The estimated median monthly rent countywide was \$728 in 2015, compared to \$505 in 2000. A common index of housing affordability is the ratio of income to housing costs.

When housing costs exceed 30% of household income housing is considered unaffordable. It is estimated that 26% of homeowners with a mortgage spent at least 30% of their household income on housing (Figure A11), compared to 29% countywide. It is estimated that 15% of homeowners without a mortgage spent at least 30% of household income on housing, compared to 14% countywide. It is further estimated that 54% of renters spent at least 30% of household income on rent, compared to 56% countywide.

Figure A11
Rent as a Percent of Household Income



Chapter A3 Natural Features

The natural features of Blackman Township are an asset of great value. The identification of these features is important to developing the means to preserve them for the purposes they serve for future residents of Blackman Township.

Topography

Blackman Township is relatively flat for the most part (see Map A2). Elevations range from several high points in the western third of the Township to low points along the Grand River and other drainage ways. The Township elevation ranges from approximately 904 feet above sea level in some areas along the Grand River in the northeast quarter to approximately 1,034 feet above sea level (i.e., west of Clinton Rd. (M50) and north of John Glenn Dr.) in the relatively high ground in the northwest. However, the highest point in the Township (i.e., 1,056 feet above sea level) is located within the McGill Road Landfill on the eastern border with Leoni Township (i.e., east of McGill Rd. and north of Seymour Rd.).

Surface Geology

The landscape of Blackman Township is made up of glacially developed landforms on top of sedimentary bedrock. These landforms have been modified by streams over the last several thousand years and, with the coming of settlement, change has continued at an accelerated pace. Jackson County has been covered by glacial ice a number of times with the last ice sheet receding approximately 12,000 years ago. This latest glacial withdrawal ended the Wisconsin Ice Age which lasted approximately 70,000 years.

A detailed analysis of the surface geology of the area is beyond the scope of the Plan, though Map A3 provides a simplified view of landforms in Blackman Township from a geological viewpoint. Some terms referenced in the map are defined as follows:

- **Moraine:** An accumulation of rock, boulders and debris transported by a glacier and finally deposited by it.
- **Outwash:** Meltwater sediment, especially sand and gravel, showing increasing rounding and sorting into layers with increasing distance from the ice margin.
- **Bog:** An area having a wet, spongy, acidic substrate composed chiefly of sphagnum moss and peat in which characteristic shrubs and herbs and sometimes trees usually grow.
- **Bedrock:** The solid rock that underlies loose material, such as soil, sand, clay, or gravel.

Soils

More so in the past than the present, soils have been a key location factor for crops, pasture, dwellings, open land, forests, wetlands, and other land features. With the introduction of central sewer and water systems into the Township, the role of soils has been somewhat diminished, but still remains an important natural feature.

The Jackson County Soil Survey describes and maps soils throughout Jackson County. The soil survey identifies ten general soil categories assorted according to slopes, drainage, and depth. Five of the general soil classes are present in Blackman Township including Urban Land Oshtemo association; Riddles-Teasdale-Palms association; Spinks-Ormas-Houghton association; Boyer-Oshtemo-Houghton association; and Houghton-Palms-Henrietta association.

Appendix A – Community Profile

- **Urban land Oshtemo** soils are found north of the City of Jackson in much of the area up to and including I-94. These soils are generally well drained, but due to intense urban activity have lost their original characteristics.
- **Riddles-Teasdale-Palms** soils cover most of the Township including the west and north. These soils are somewhat poorly drained to well-drained.
- **Spinks-Ormas-Houghton** soils are located on the eastern edge of the Township running roughly from the City of Jackson north to the Portage River. These soils are deep and drainage varies greatly.
- **Boyer-Oshtemo-Houghton** soils are found in the east central portion of the Township. They have similar characteristics to Spinks-Ormas-Houghton soils and were formed in a similar manner.
- **Houghton-Palms-Henrietta** soils are associated with the Portage River floodplain and the merging of the Portage and Grand rivers. They are deep, very poorly drained, mucky soils that formed organic material and/or areas of glacial deposits.

Based on information provided by the soil survey, special analyses were conducted on the subjects of groundwater recharge, agriculture productivity, and hydric soils. These analyses are summarized in the following pages.

Ground Water Recharge

Ground water supplies are provided by absorption of surface waters into underground areas. These recharge areas are found throughout the Township, especially on the sandy and gravel glacial soils in the area of the Grand and Portage Rivers and other areas such as wetlands and lakes (see Map A4). These recharge areas are significant since some of the Township's drinking water comes from local groundwater supplies. Ground water is obtained from wells driven into the unconsolidated glacial material at depths depending on local conditions.

Two principal factors from the Soil Survey were used to generate Map A4 —soil permeability and clay content— but other factors were also considered including natural vegetation, underlying material, seepage, and the presence of hydric soils. Though the map is useful on a large-scale basis, it is no substitute for field testing and direct knowledge of the area. The map identifies areas that are subject to pollution of ground waters and, therefore, areas that could be targeted if there is a desire to maintain and protect rural water supplies.

Agricultural Productivity

Agricultural productivity is based upon a number of factors and certain soils are deemed to be the most productive in a particular region. While management practices will allow practically any soil to be productive, some soils allow greater productivity with less input. These competitive soils are the ones that are best for crop production.

What is the basis for selection of a particular soil for classification as a productive soil within a region? The most obvious criteria are the production of general field crops—information which is available from a soil survey. Certain crops may need special soils such as mint or blueberries but these are specialty situations, not generally produced crops. To maintain the agricultural economy of the county the most productive soils need to be preserved in the agricultural districts.

Map A5 reflects agricultural productivity in Blackman Township. The map is based on a ranking system which was developed from the Jackson County Soil Survey using production figures for all the crops gen-

Appendix A – Community Profile

erally grown in Jackson County. Yields of corn, corn silage, winter wheat, oats, soybeans, and alfalfa hay were used. The map shows that there is not a clear pattern of agriculturally productive lands in the Township. There are several small areas in the north portion of the Township and north of the City of Jackson but no sizeable concentrations emerge. Further, many areas that have agriculturally productive soils have seen considerable lots splits and the potential for agricultural preservation is low.

Hydric Soils

Hydric soils are poorly drained and subject to occasional flooding. Along with other sources such as the National Wetlands Inventory and aerial photographs, they can be used to identify wetlands and other sensitive lands. Hydric soils are also associated with lakes and streams. Map A6 shows that hydric soils are primarily located along rivers and drains in the Township.

Floodplains

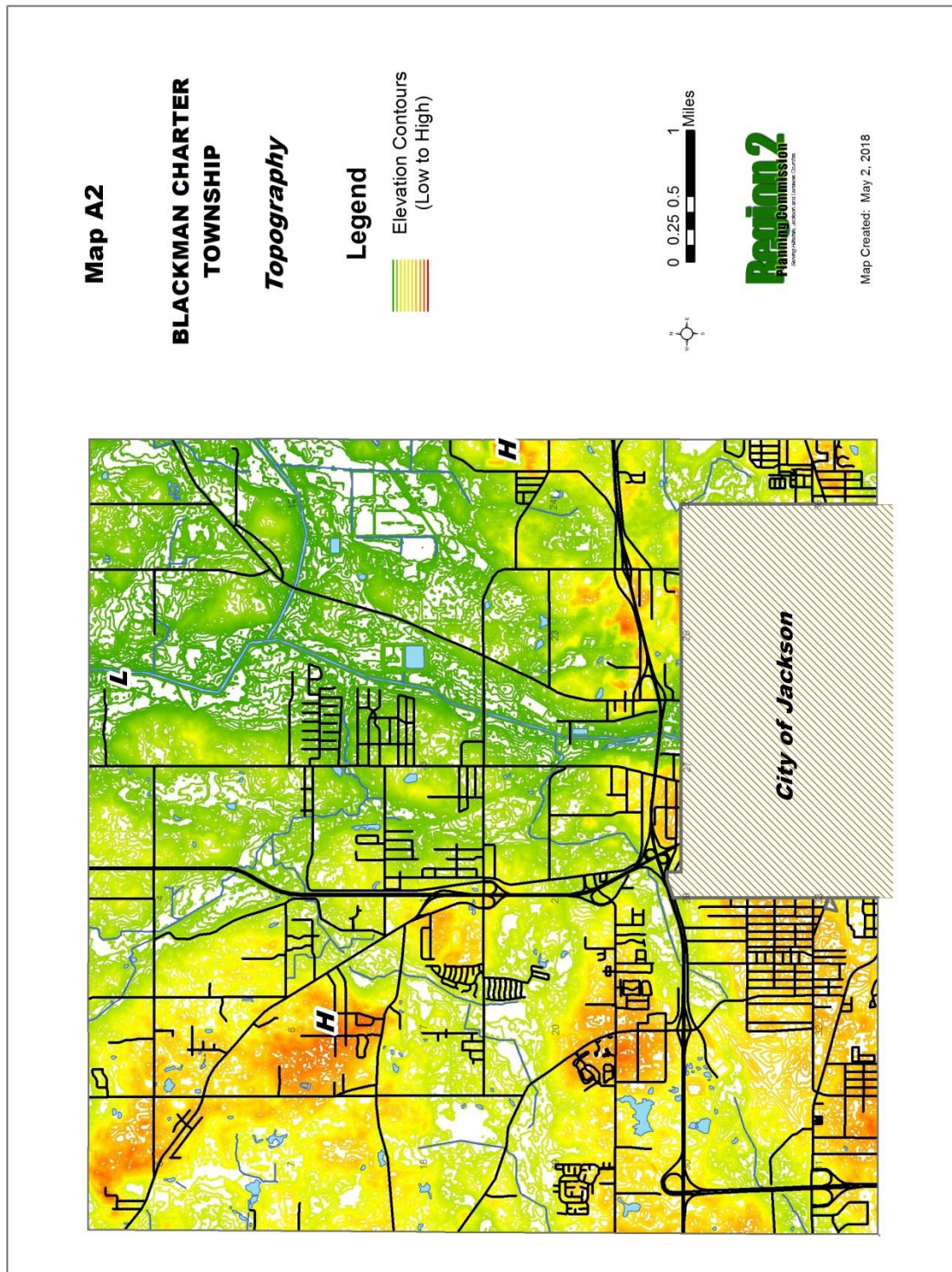
Floodplains are low-lying flat areas adjacent to rivers, streams, drains and lakes. They function as storage basins during periods of high water due to either precipitation or runoff. Encroachment into flood hazard areas not only jeopardizes the structure being placed in the floodplain, but the structure also displaces water that would have otherwise settled. Therefore, development in floodplain areas increases the magnitude of flooding and increases the flood elevation above its normal stage. In addition to State and Federal regulations that control development in flood hazard areas, the Township has zoning regulations specifically adopted and intended to control development in these environmentally-sensitive areas.

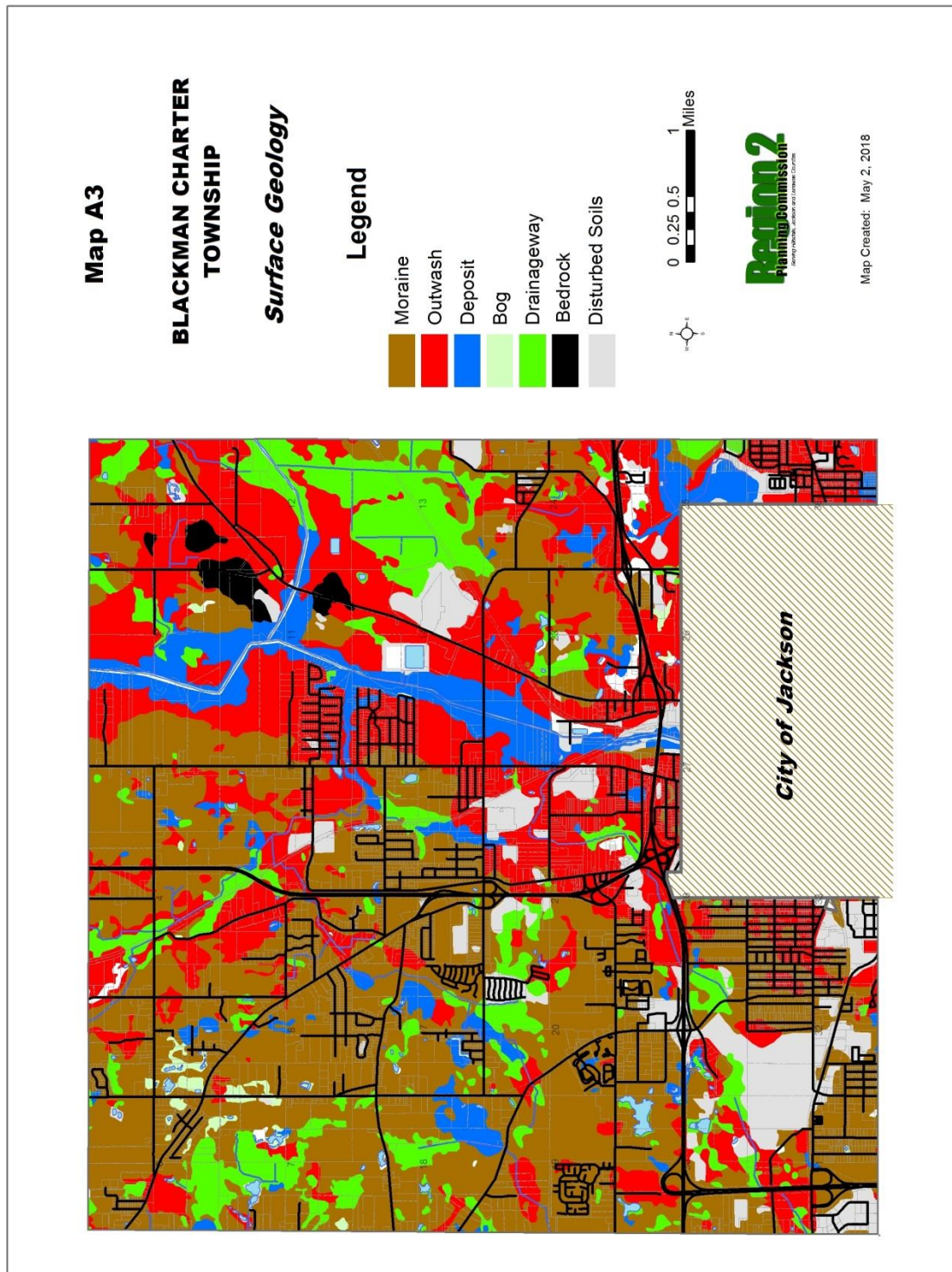
Map A7 shows the limits of floodplains in Blackman Township. The source of the map information is the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) program in which Blackman Township participates. The map shows 100- and 500-year flood boundaries. FEMA defines the 100-floodplain “as the area that will be inundated by the flood event having a 1-percent chance of being equaled or exceeded in any given year”. The 500-year floodplain is defined as “the areas between the limits of the base flood and the 0.2-percent-annual-chance (or 500-year) flood”.

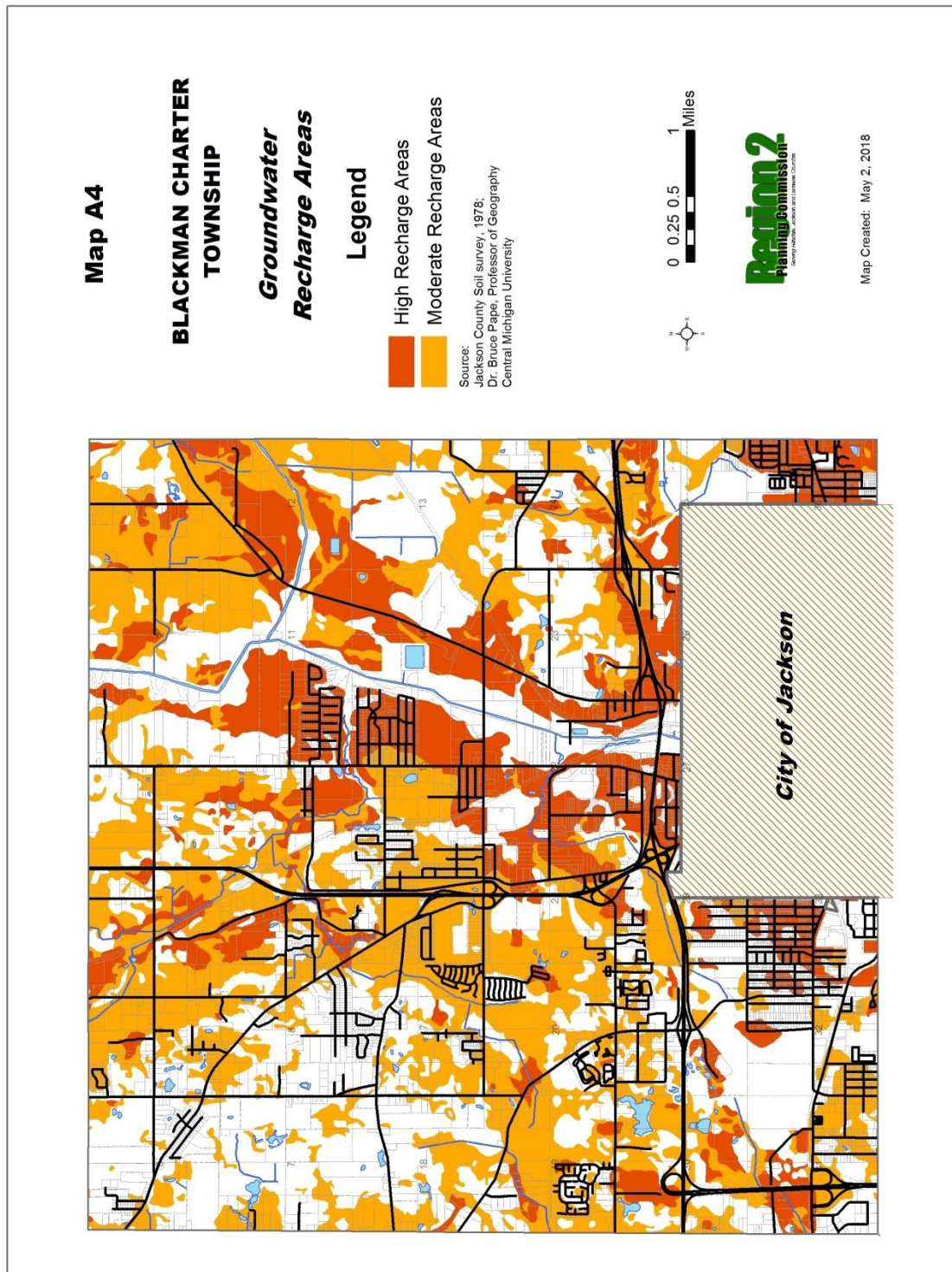
Wetlands

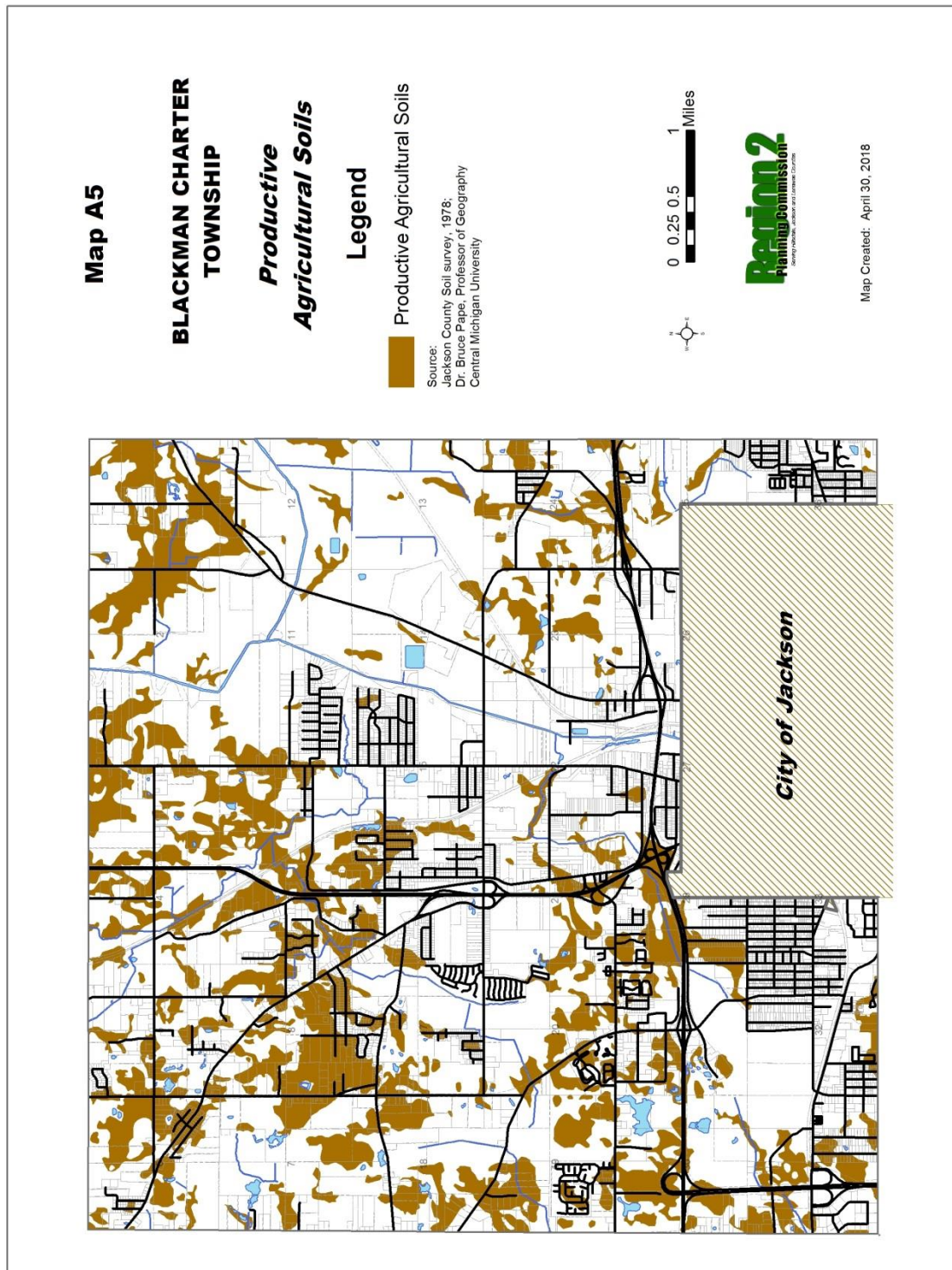
Wetlands are found scattered throughout the Township as shown on Map A8. They are often associated with areas of surface water. For example, wetlands are located along the Grand and Portage Rivers. There is also sometimes a correlation with floodplains and hydric soils.

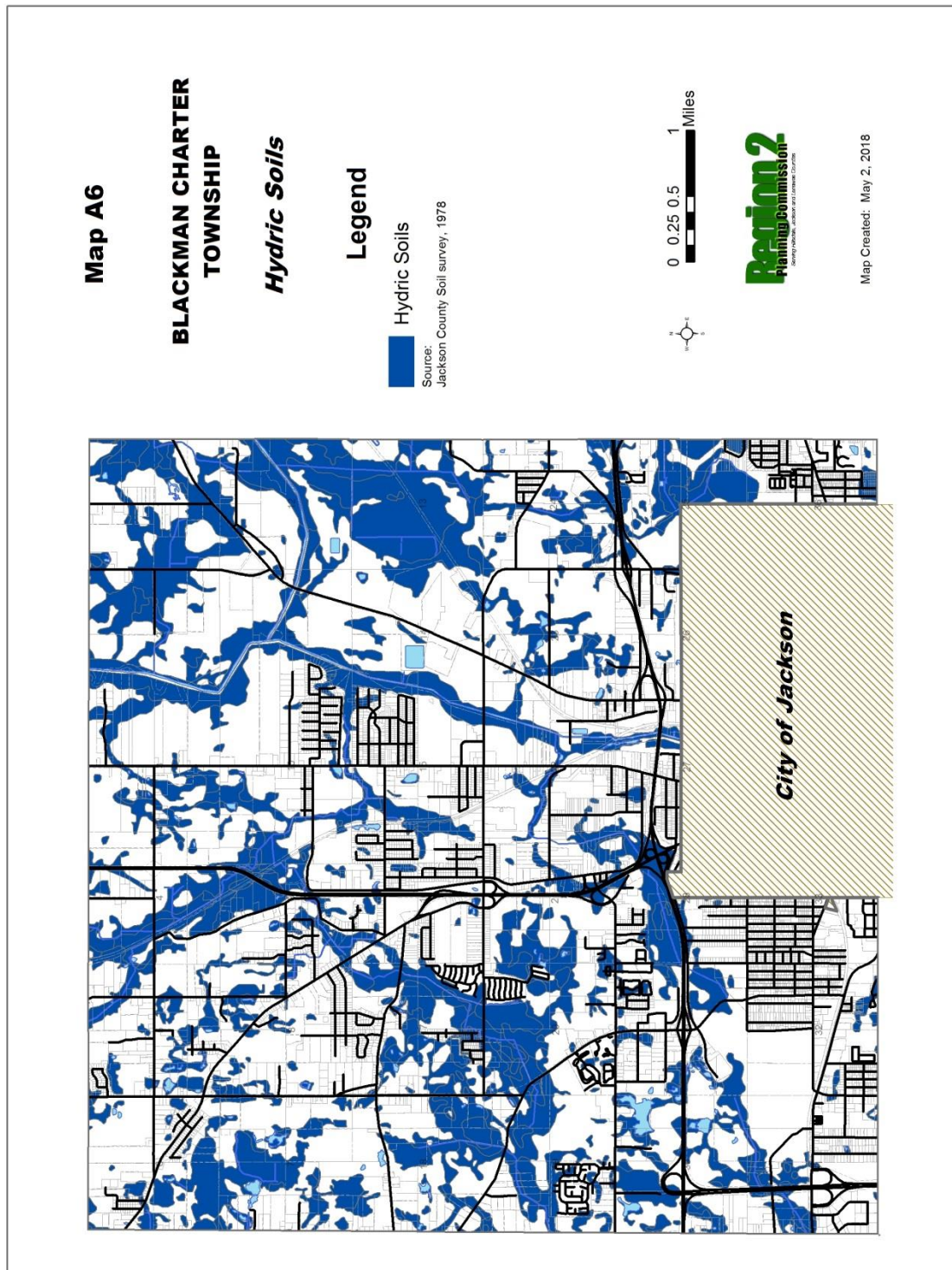
Appendix A – Community Profile

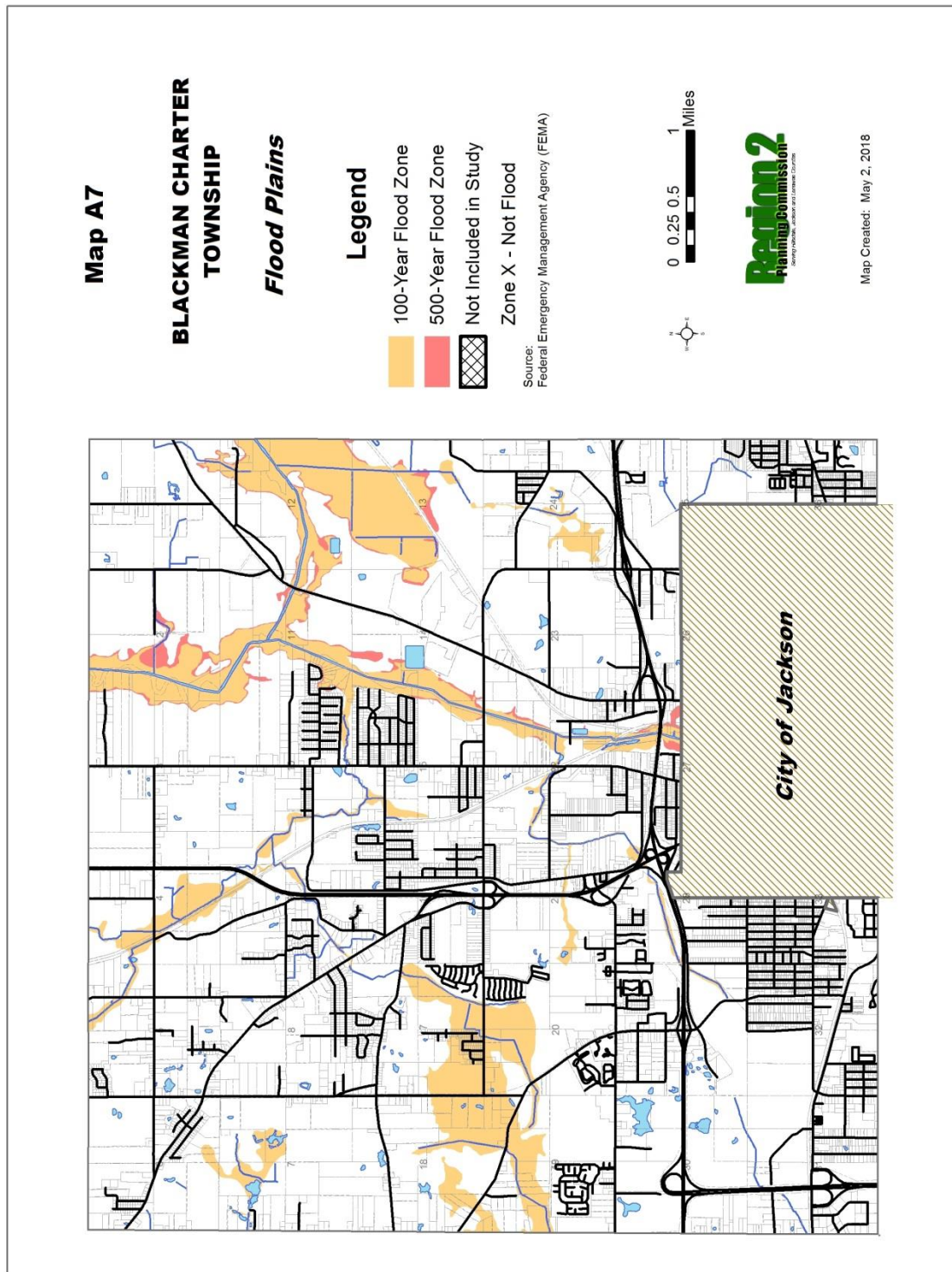


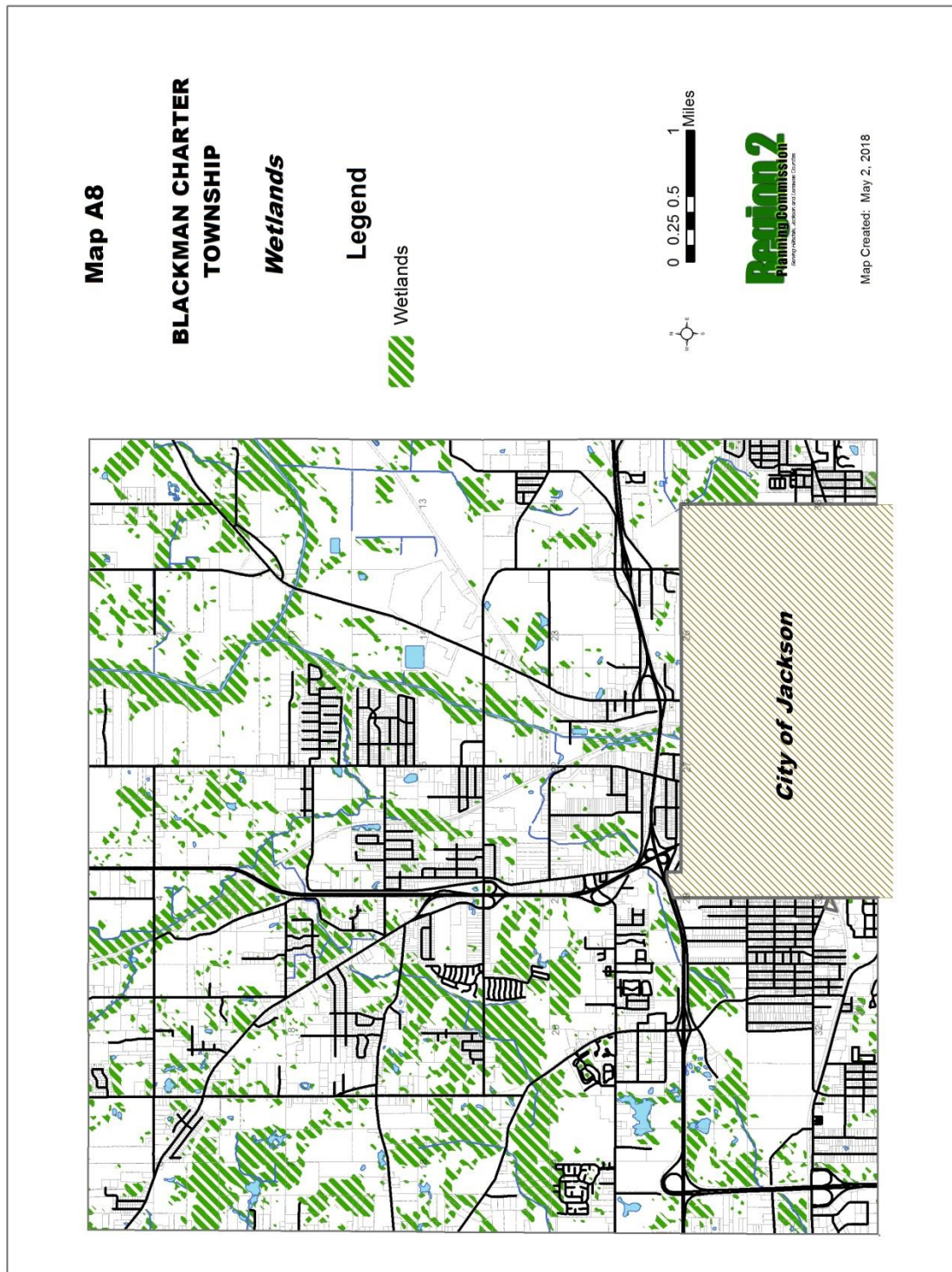












Chapter A4 CURRENT LAND USE

Many factors have influenced the development of land in Blackman Township. Over its history, the Township has become a mixture of agricultural, residential, commercial, institutional, industrial, recreational, and other land uses. Among the factors creating this mix are the location of the Township adjacent to the City of Jackson, the mixture of soil types creating the capability to sustain both urban and rural land uses, the presence of an excellent transportation system, adequate infrastructure, and the location of several important state and regional institutional and transportation facilities.

A full existing land use study was not completed for this Master Plan. Instead, property assessment data collected by the Township and compiled by Jackson County GIS was utilized as a substitute for a land use survey in 2018. The Township Assessor assigned a numeric code to each property as part of the assessment process which was then translated into a broad assessment category for the Master Plan. Only assessed properties are covered by this process. Using this data, Blackman Township properties can be divided into the following assessment categories (i.e., land uses) (see the Map A9 and Table A3):

TABLE A3 – PROPERTY ASSESSMENT

Assessment Category	% of Assessed Property Acreage
Agricultural Assessment	25%
Residential Assessment	40%
Commercial Assessment	14%
Industrial Assessment	7%
Exempt from Assessment	15%

Agricultural Assessment

Agriculture includes active cropland, pasture, orchards, vineyards, feedlots and related land uses. Agriculture in Blackman Township covered approximately 25% of assessed property acreage in 2018 and is found in a dispersed manner with a few large tracts dedicated to farming. Map A9 shows that agriculture tends to be found in a ring in the west, north, and east portions of the Township in undeveloped areas.

Residential Assessment

Residential land use includes single-family/duplex, multiple-family (i.e., low-rise, medium, and high-rise), manufactured home park, and individual manufactured homes. Dwellings in Blackman Township covered approximately 40% of assessed property acreage in 2018. While many residential units are located within low- to moderate-density subdivisions and site condominium developments, there are several instances where single-family units have been developed at very low densities along road frontage in rural areas. Multiple-family development and manufactured housing communities have occurred primarily along sewer lines and access to major roads with proximity to the City of Jackson. However, the assessment process does not differentiate among those housing types. Map A9 shows the distribution of residential uses throughout the Township.

Commercial Assessment

Commercial uses in Blackman Township range from small local commercial establishments serving an individual neighborhood to larger commercial establishments that serve the entire Township and larger region. Commercial uses in Blackman Township cover 14% of assessed property acreage in 2018. Larger businesses tend to be located along East and West Michigan Avenue and I-94 while smaller commercial uses tend to be less concentrated generally serving local and neighborhood areas in addition to being located along major roads. However, the assessment process does not differentiate among those com-

Appendix A – Community Profile

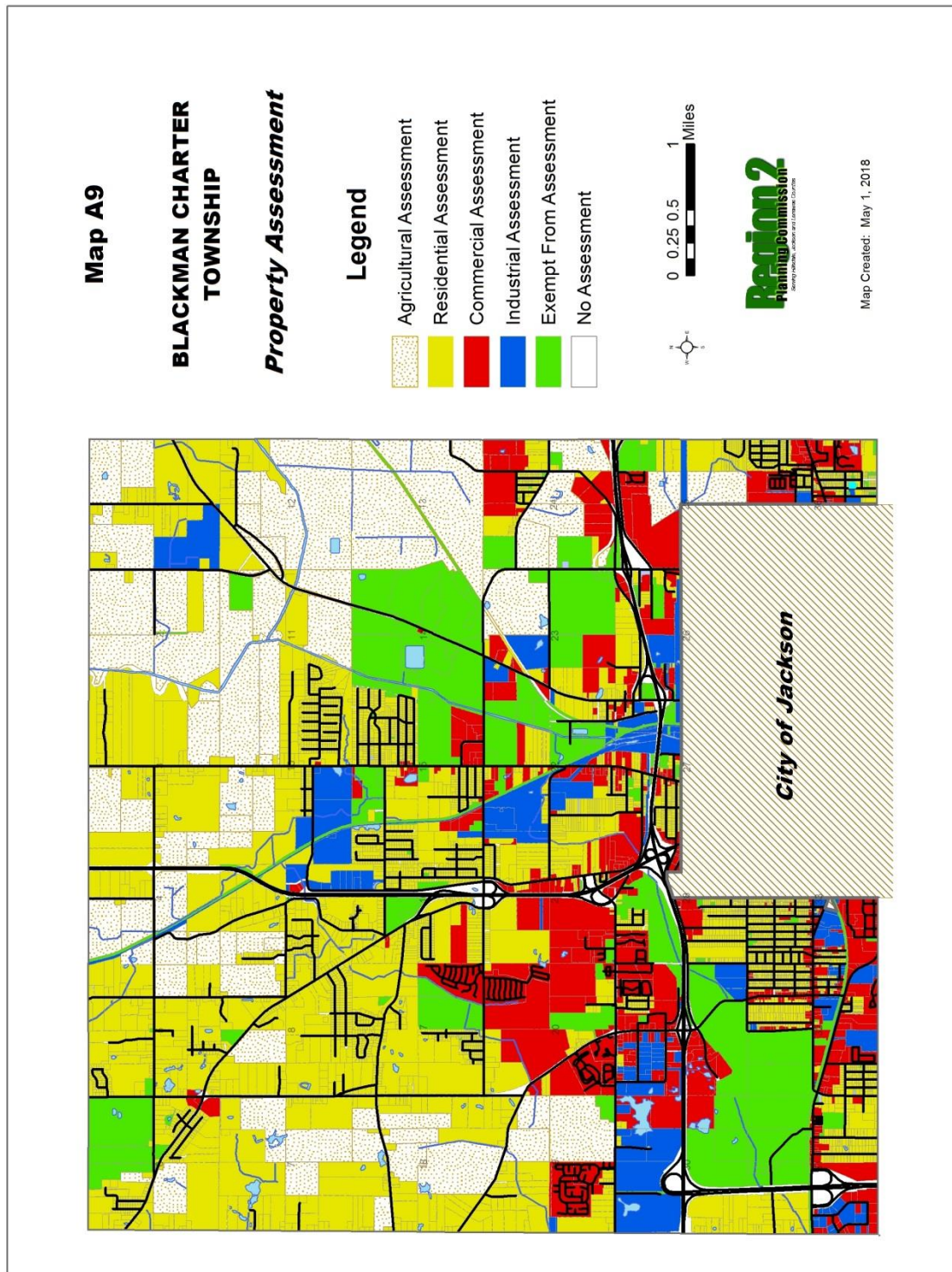
mercial uses. Map A9 shows the location of commercial areas.

Industrial

Industrial land uses have tended to locate either in one of the industrial parks in the Township, or in other areas served by central sewer and water facilities having access to roads capable of handling truck traffic. Industrial uses in Blackman Township covered approximately 7% of assessed property acreage in 2018. As indicated on Map A9, industrial uses are scattered throughout the Township. Land is also available for further industrial expansion in the southwestern portion of the Township.

Exempt

Institutional land uses are exempt from property taxes and include land uses such as schools, churches, medical offices, and government offices and facilities. Institutions covered approximately 15% of assessed property acreage in 2018. The largest institutional land use is the grouping of correctional facilities on M-106 —the Charles E. Egeler Reception Guidance Center; the Cooper Street Correctional Facility; the G. Robert Cotton Correctional Facility; and the Parnall Correctional Facility— run by the Michigan Department of Corrections (see Map A9). The Jackson County Airport-Reynolds Field is the other large institution. Several other institutional uses are found in various locations throughout Blackman Township including Northwest School facilities located on Van Horn Road and Lansing Avenue, Baker College of Jackson on Springport Road, and Jackson College’s W.J. Maher Campus on Blake Road.



Appendix A – Community Profile

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Chapter A5 TRANSPORTATION AND CIRCULATION

Blackman Township is tied to its region by transportation connections. Roads are a prime factor in area development and local economy. The principal forms of transportation are associated with automobiles, trucks, trains, and airplanes.

Road Functional Classification

Roads serve a variety of functions depending on whether they are intended to provide access to property or to deliver traffic from one area to another. Accordingly, one of the ways the Michigan Department of Transportation (MDOT) classifies roads is as *interstates and other freeways*, *arterials*, *collectors* and *locals* (see Map A10).

- **Interstates and other freeways** carry traffic at high speeds between counties, regions, and states. They are principal arterial roads that carry long distance, through-travel movements. They also provide access to important traffic generators, such as major airports or regional shopping centers.
- **Arterial roads** are intended for relatively high speed through traffic providing as little access to individual properties as possible to ensure safe and efficient travel.
- **Collector roads** generally carry lower volumes of traffic at lower speeds than arterials. The purpose of collector roads is to funnel traffic from local streets to arterials.
- **Local roads** take in the remainder of streets and roads. Their primary purpose is to provide a link from arterials and collectors to individual properties. Local roads generally have little or no through purpose and have low traffic volumes.

An interstate and two other freeways traverse Blackman Township; MDOT built and maintains them as part of its state trunkline system. I-94 connects the Detroit area and Canada to points west and is the northernmost east-west interstate in the nation. Because of the international connection it provides between Canada and the United States, I-94 is an important international trade route. US-127 is a freeway which runs north-south and divides the Township into east and west halves. It provides access between Jackson and Lansing. Farther north, it merges with I-75 south of Grayling. Just to the east of the Township, US-127 runs south and becomes a two-lane highway south of the Jackson Area. M-60 is a freeway located in the southwestern portion of the Township. It runs in a north-south direction south of I-94 before turning toward the southwest, where it becomes a two-lane highway connecting with I-69 north of Coldwater.

Other arterial routes that are part of the state trunkline system include Cooper Road (M-106) which connects downtown Jackson to areas in northwest Jackson County toward Stockbridge. Clinton Road (M-50) is a business route traversing the Jackson Area and runs between Monroe and I-96 (east of Grand Rapids). Michigan Avenue crosses the southern portions of the Township (and the City of Jackson) and is designated as an I-94 business route (BL-94) through the Jackson Area.

Wildwood Avenue is an arterial that intersects with West Michigan Avenue (BL-94) west of the Jackson city limits. Ganson Street emerges from the City on the east side for a short segment in the Township where it intersects with E. Michigan Avenue. Elm Road and Parnall Road comprise an arterial corridor which forms a loop connecting important governmental, commercial, and industrial areas with I-94 and US-127. The Laurence Avenue/Airport Road/Springport Road/Rives Junction Road corridor plays a similar role connecting Jackson County Airport and important office, commercial, and residential areas with

Appendix A – Community Profile

I-94 and other destinations located to the north and south. Lansing Avenue runs from Jackson to Lansing and was the main route between the urban areas prior to the construction of US-127.

There are relatively few connector roads in the Township. In the northeast, Cooper Road connects rural areas (primarily residential) to M-106 while Rives Junction Road serves a similar purpose north of M-50. O’Leary, Chanter, Rosehill, Seymour, and Dettman roads connect commercial, governmental, and industrial uses to M-106 and Elm Road on the east side of the Township. Shirley Drive connects a business area with Parnall Road and Lansing Avenue in the vicinity of the I-94/US-127 interchange. Springport Road (west of Rives Junction Road) delivers traffic from areas to the west to the Laurence Avenue/Airport Road/Springport Road/Rives Junction Road corridor and I-94. Parnall Road (west of US-127) and Clinton Way (south of the M-50 on-ramp to US-127) connect residential areas to arterials and interstates. The remaining roads in Blackman Township are classified as local roads providing access to individual properties.

Of the 187 miles of roadway in the Township, approximately 35 miles are freeways or interstates (18%), 30 miles are arterial roads (16%), 18 miles are collector roads (10%), local roads total 76 miles (41%), and the remaining 28 miles are not certified public roads (15%).

Traffic Volumes

Annual traffic estimates are estimated along state trunkline (i.e., I-94, US-127, M-50, M-106, and Michigan Avenue) by the Michigan Department of Transportation (MDOT) while the Jackson County Department of Transportation (JCDOT) conducts traffic counts on other public roads (outside of the city and villages) in Jackson County.

State Trunkline

The heaviest state trunkline traffic traversing the Township is located on the interstate and other freeways. MDOT estimated that I-94 traffic volumes in 2018 were heaviest between the US-127 North and M-106 interchanges, at 60,600 vehicles per day (vpd). I-94 traffic decreased to approximately 56,475 vpd between the M-106 (Cooper Road) and Elm Road interchanges, before increasing to 58,000 vpd east of the Elm Road interchange. Traffic on I-94 between the US 127 and the Airport Road interchanges was an estimated 43,400 vpd, decreasing to 40,700 vpd between the Airport Road and M-60 interchanges and 30,075 vpd west of M-60. The traffic volume on US-127 was estimated to be 30,438 vpd between the I-94 and Springport Road interchanges. US-127 traffic decreased to approximately 27,913 vpd between the Springport Road and Parnall Road interchanges. Traffic on US-127 decreased further to approximately 20,825 vpd north of the Parnall Road interchange. Traffic on M-60 was estimated to be 14,135 vpd.

Traffic volumes on other state trunkline tend to be lower than on the interstate and other freeways. Although MDOT estimated that traffic on M-106 (Cooper Road) was 14,783 vpd south of the I-94 interchange, it decreased to 7,805 vpd between the I-94 interchange and Parnall Road. M-106 traffic increased to approximately 9,139 vpd between Parnall Road and Cooper Road before decreasing to 3,344 vpd north of Cooper Road. Traffic on M-50 (Clinton Road) was estimated to be 6,094 vpd between the I-94 interchange and the border with Sandstone Township; traffic decreased to approximately 4,239 vpd further to the northwest. Traffic volume on Michigan Avenue, east of the City of Jackson, was estimated to be 13,888 vpd between Horton Street and Ganson Street, increasing to 19,153 vpd between Ganson Street and the US-127 South interchange in Leoni Township. Traffic on Michigan Avenue, west of the City of Jackson, was approximately 16,582 vpd between Brown Street and Main Street (@ 24th Street), decreasing to 15,794 vpd between Main Street and Laurence Avenue. Traffic between Laurence Avenue and the M-60 interchange decreased further to an estimated 11,895 vpd. Michigan Avenue west of the

Appendix A – Community Profile

M-60 interchange is no longer a state trunkline.

Commercial vehicle traffic is particularly heavy on I-94 which carries truck traffic between the Detroit Metropolitan area and points west. Between the Airport Road and US-127 South (Leoni Township) interchanges, approximately 9,887 commercial vehicles per day (vpd) traverse I-94. That volume decreases to an estimated 9,535 commercial vpd between the M-60 and Airport Road interchanges and 7,254 commercial vpd west of the M-60 interchange. US-127 sees fewer commercial vehicles with an estimated 1,951 commercial vpd. M-60 is used as a shortcut for commercial vehicles heading west and south toward I-69 and carries approximately 974 commercial vpd. East of the City of Jackson, Michigan Avenue carries an estimated 531 vpd; west of the City, the roadway carries approximately 260 vpd. M-106 (Cooper Road) carries an estimated 152 commercial vpd and M-50 (Clinton Road) carries approximately 129 commercial vpd.

Local Roadways

Table A4 displays the top twenty highest volume road segments in Blackman Township according to the latest traffic counts taken by the JCDOT. The table provides the street, road segment, and the volume per day.

Table A4 – 20 Highest Traffic Volume Road Segments

Road	Segment	Traffic Volume
Airport Road	Wayland Drive and I-94	21,339
Airport Road	County Farm Road and Scheele Drive	19,865
Airport Road	O'Neill Drive/Boardman Road and I-94	18,893
Airport Road	Scheele Drive and Boardman Road	18,684
Airport Road	O'Neil Drive/Boardman Road and Argyle Road	16,836
Parnall Road	Lansing Avenue and M-106	7,169 ²
Laurence Avenue	Argyle Road and Wildwood Ave.	13,685
Michigan Avenue	Blackman Road and M-60	12,574
Lansing Avenue	Parnall Road and Cunningham Road	11,359
Parnall Road	Shirley Drive and Lansing Avenue	11,202
Springport Road	Doney Road and Bondsteel Drive	11,043
Springport Road	County Farm Road and Doney Road	11,029
Lansing Avenue	Andrew Drive and the Jackson City Limit	10,455
Lansing Avenue	Shirley Drive and Andrew Drive	10,412
Wildwood Avenue	Laurence Avenue and Ganson Street	10,314
Parnall Road	M-106 and O'Leary Road	9,889
Laurence Avenue	Wildwood Avenue and Michigan Avenue	9,799
Boardman Road	Wisner Street and West Avenue	9,719
Elm Road	Rosehill Road/Seymour Road and I-94	9,450
Boardman Road	Maynard Avenue and Wisner Street	9,417

Source: Jackson County Department of Transportation traffic counts

Road Surface Conditions

The surface conditions of federal-aid eligible roads in Blackman Township are rated on a biennial (i.e., 2-year) basis as part of MDOT's transportation asset management program. A team representing MDOT, the Jackson County Department of Transportation, and the Region 2 Planning Commission assign surface condition ratings to federal-aid-eligible roadway segments in Jackson County. Roadway segments are rated for the quality of their surfaces from 1 (failed road) through 10 (newly-reconstructed road). Rat-

² A traffic count was only available for eastbound traffic on this segment of Parnall Road.

Appendix A – Community Profile

ings fall in three general categories: no maintenance needed (ratings of 8 through 10), preventive maintenance (5-7), and reconstruction needed (1-4). Map A11 shows the results of the assessment for 2016. No maintenance ratings were given to roadways including: US-127; M-106 (Bunkerhill Road), northeast of Cooper Road; Boardman Road, east of Maynard Avenue; West Michigan Avenue, west of Laurence Avenue; and Robinson Road. Reconstruction ratings were given to roadways including: Cooper Road, north of M-106; Springport Road, west of Rives Junction Road; Blackman Road; Boardman Road, west of Maynard Avenue; Parnall Road, west of Sherwood Lakes Boulevard; Chanter Road; Seymour Road; parts of Dettman Road; Clinton Way, East Michigan Avenue; Rosehill Road, and some I-94 ramps. The other federal-aid eligible roadways were rated as needing preventative maintenance.

Jackson County Airport-Reynolds Field

Blackman Township is home to Jackson County Airport-Reynolds Field, which is located at the M-60 interchange with I-94, and accessed by road via Wildwood Avenue (see Map A12). The airport is a public use facility and is approximately 769 acres in size. The airfield itself takes up the majority of the property in the layout of runways, taxiways, hangar areas, etc.

The airport has two paved runways served by a control tower and an instrument landing system (ILS). Runway 07-25 is 5,350 feet long and 100 feet wide and Runway 14-32 is 4,000 feet long and 100 feet wide (see Map A13). The airport served “over 100 general aviation aircraft ranging from single engine planes to business/corporate jet aircraft” in 2018.³ There was an average of 119 aircraft operations per day during 2014.⁴ “[T]he Jackson College Flight School, a full-service restaurant, a car rental company, the Aviation Heritage Park, and in June, the annual Jackson Bluesfest [are located] at the Jackson County Airport”.⁵

Jackson County Airport-Reynolds Field is both a sport/recreation and a corporate/business general aviation facility. The airport is considered critical to the competitive position of a number of local firms and plants, some of which might choose to locate elsewhere if the facility was not present. These organizations use the air taxi and general aviation services made possible by the airport. Much of the airport activity is business-oriented and many businesses have aircraft based at the airport. Consumers Energy, Henry Ford Allegiance Health, and the Michigan International Speedway are just a few of the area businesses that rely on the services provided by the Jackson County Airport. In addition to the firms with general aviation aircraft based at the airport, other companies depend on the airport for various services such as air taxi/charter service, air freight, etc. These services are important for sales, management and production activities by many firms based in the community.

Height of structures in the vicinity of the airport is governed by the Jackson County Airport-Reynolds Field Zoning Ordinance which was adopted in 2001 under the authority of the Airport Zoning Act (P.A. 23 of 1950) which governs structure height in a 10-mile radius. Blackman Township is represented on the Airport Zoning Board of Appeals which hears appeals from the requirements of the Airport Zoning Ordinance.

Rail Transportation

The Michigan Department of Transportation (MDOT) owns the railroad mainline which traverses the southwest edge of the Township, connecting Detroit with Chicago and destinations westward (see Map A12). AMTRAK operates its Wolverine route on the mainline and three daily passenger trains (each way)

³ <https://www.co.jackson.mi.us/232/Airport>

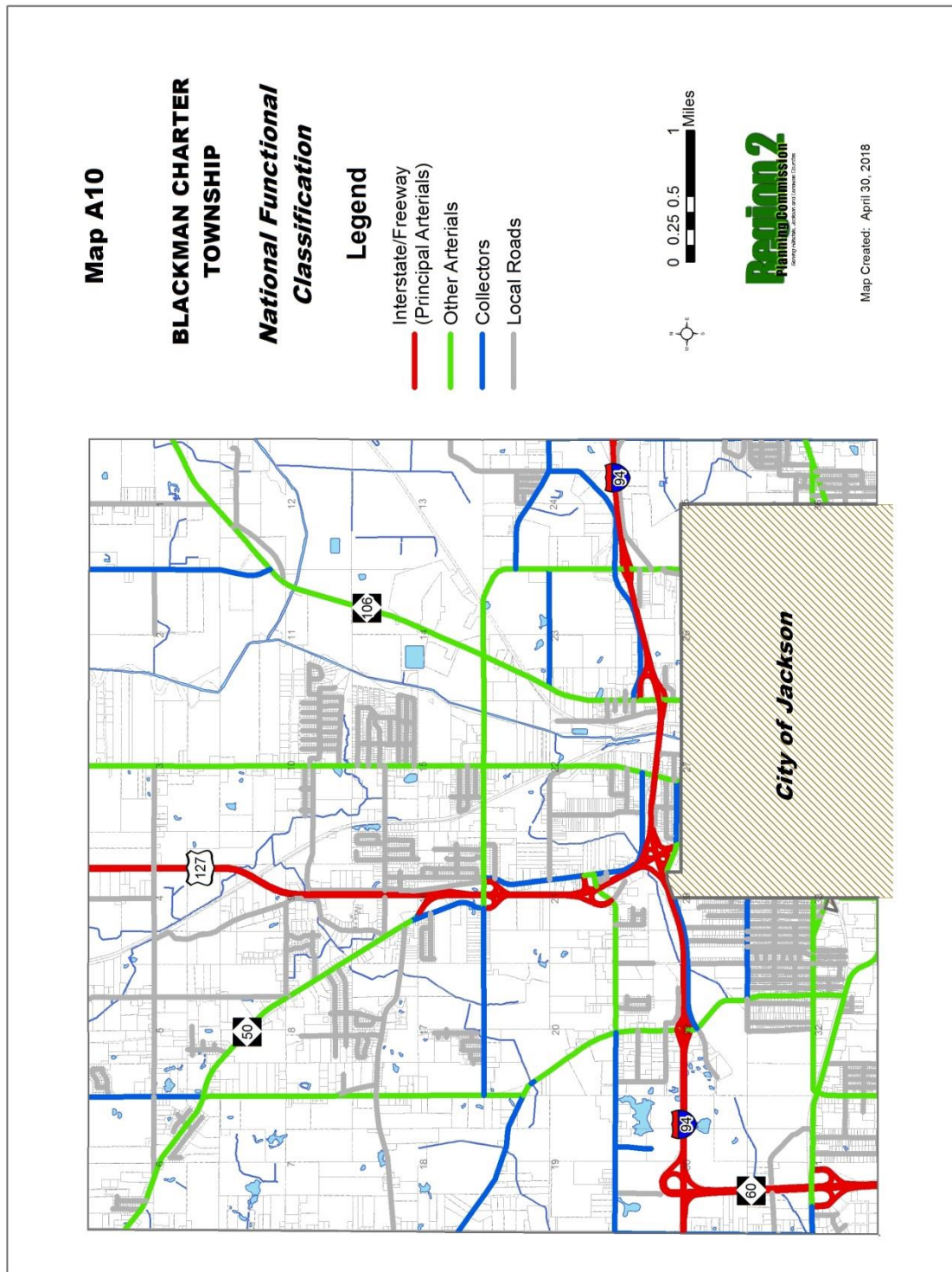
⁴ <https://www.airnav.com/airport/KJXN>

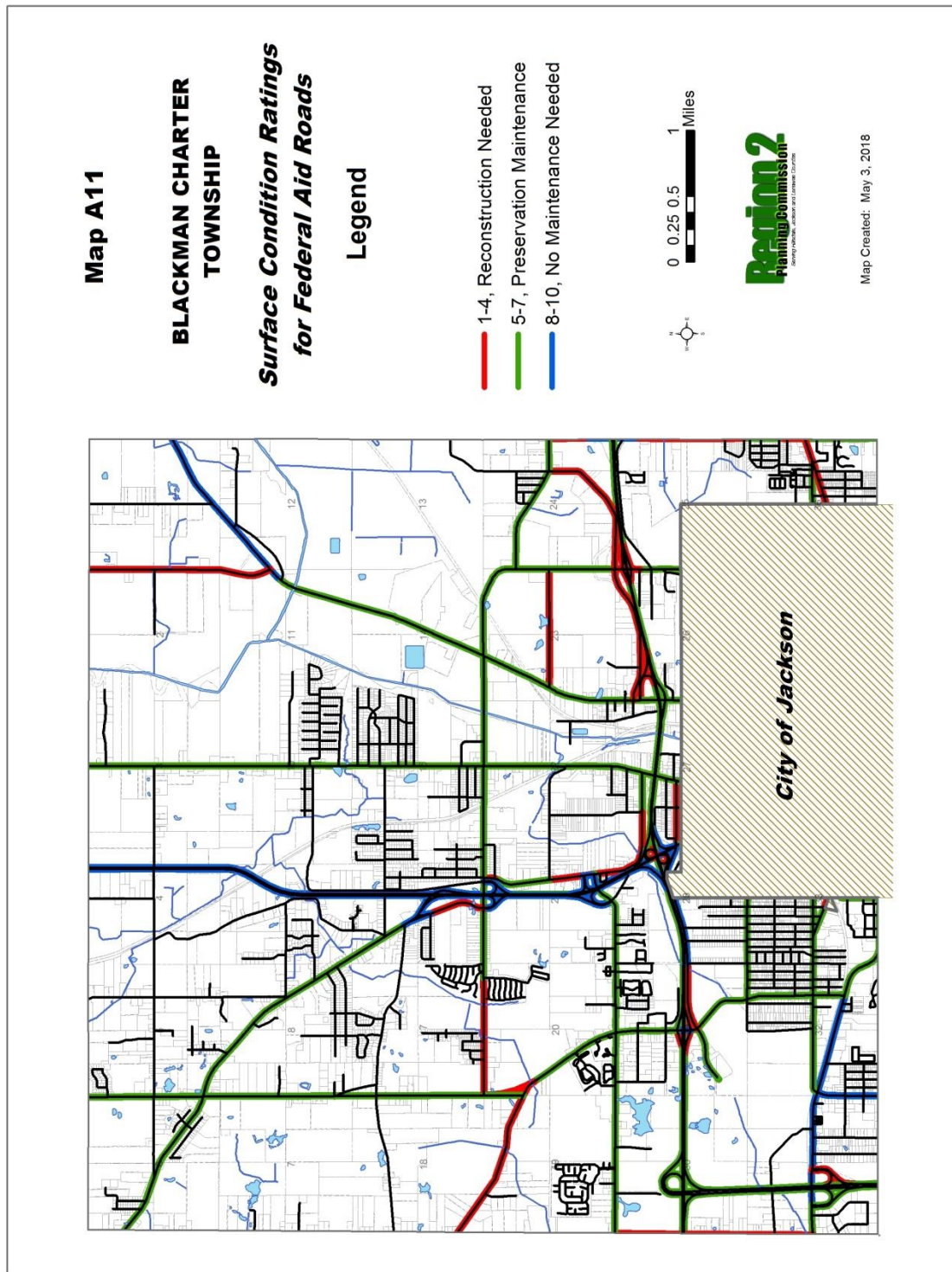
⁵ <http://www.experiencejackson.com/business/jackson-county-airport-reynolds-field>

Appendix A – Community Profile

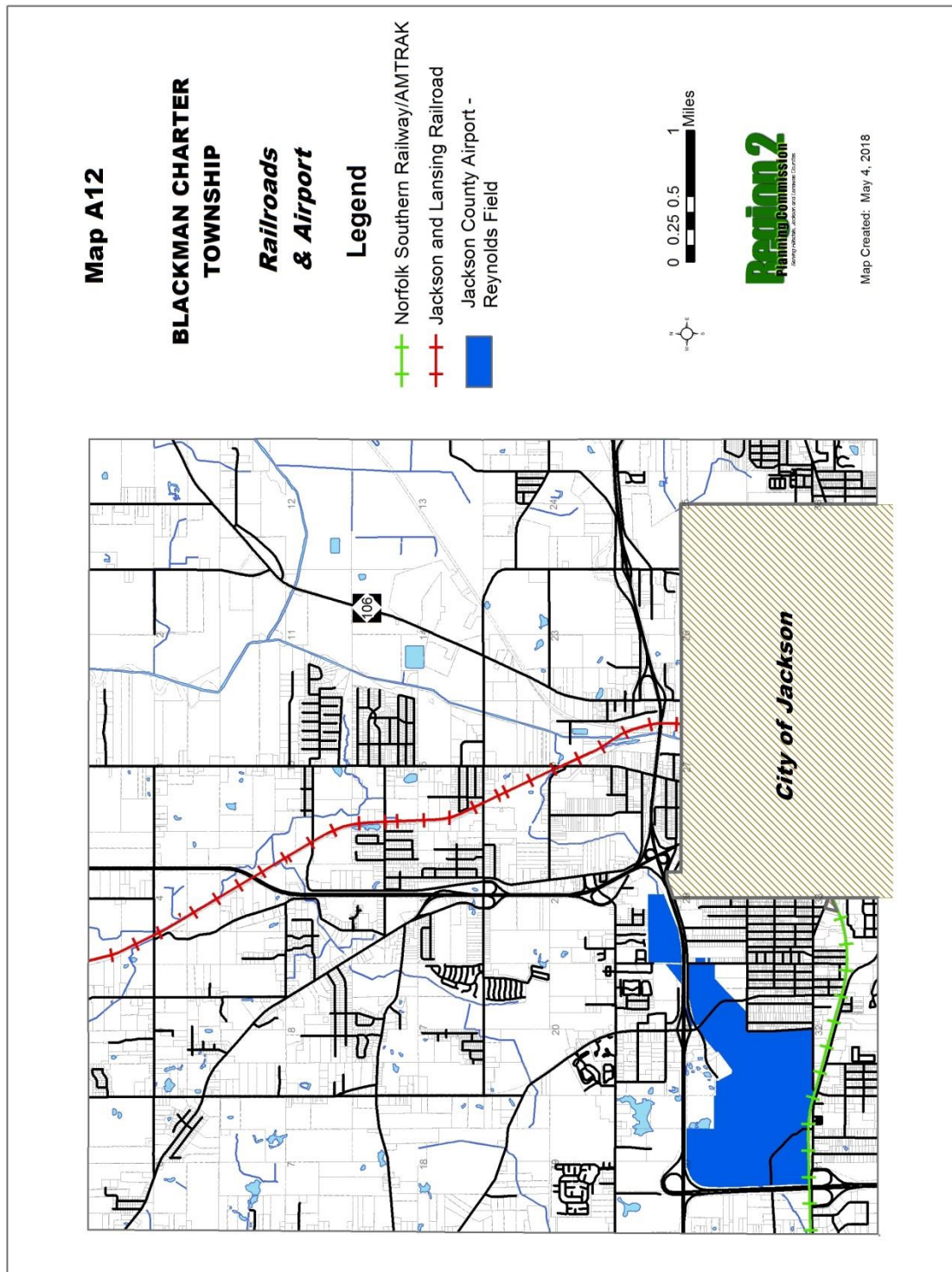
stop at the station in nearby downtown Jackson. The Wolverine route served 411,625 riders during FY 2016 (i.e., October 1, 2015, through September 30, 2016). The Norfolk Southern Railway also transports freight on the mainline. A secondary railroad mainline in Jackson County runs between Jackson and Lansing, providing freight only service. The Lansing and Jackson Railroad runs in a north-south direction through Blackman Township. Some of the industrial uses in the Township are located in areas convenient to both railroad mainlines.

Appendix A – Community Profile





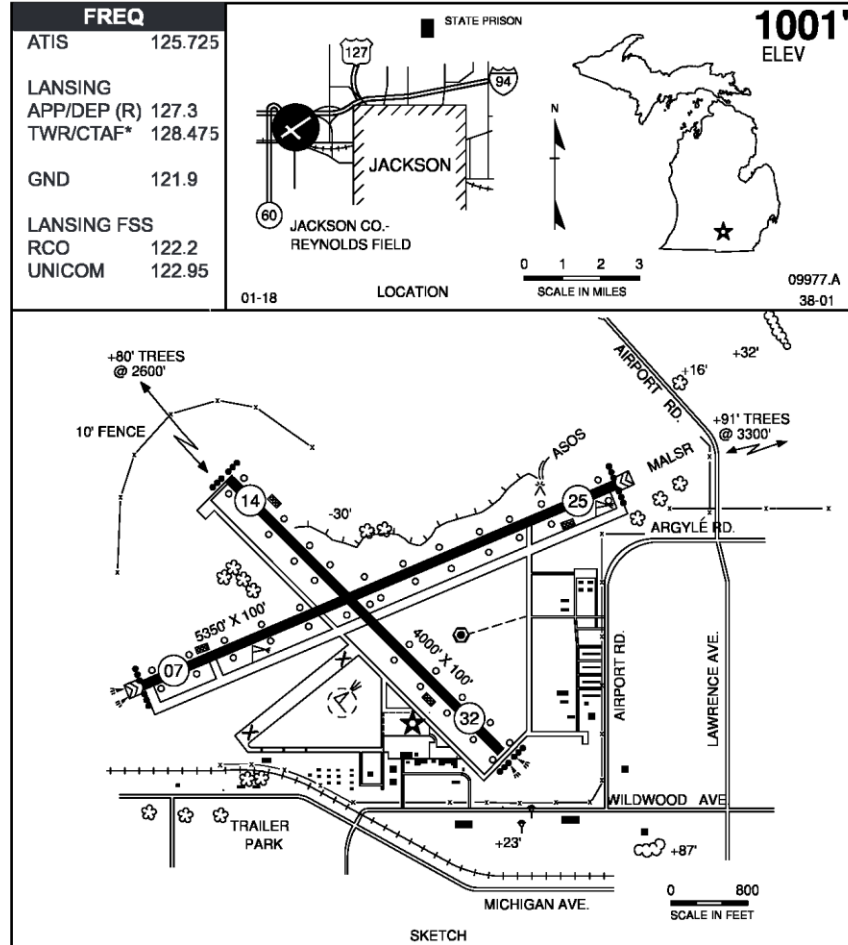
Appendix A – Community Profile



Appendix A – Community Profile

Map A13
Current Jackson County Airport Runway Layout

JACKSON COUNTY - REYNOLDS (JXN)



RWY LENGTH BEYOND DISPLACED THR
 07/ — * 14/ —
 25/ — * 32/ —

COORDINATES
 42° 15.63'N
 084° 27.73'W

License
 General Utility

FM CITY: 2.0 mi W
LGT: ROTG BCN. HIRL, MALSR, REIL, PAPI,
 TWR OPR DUSK-2100. AFT TWR HRS-
 STD PCL CTAF.
MGR: Juan Zapata
PH: 517-788-4225
FBO: Jackson Aero 517-780-0343
 Jackson College 517-787-7012
 Skyway 517-787-2460
ATND: Apr-Oct 0800-1800 Nov-Mar M-F
 0800-1800, S-S 0900-1800, aft hrs on req.

NAV AIDS: IAP, 109.6 (JXN) at fld, ILS.
FUEL: 100LL, JET A*
RPR: Major A&P
WX: ASOS 517-768-7506
SNW RMVL: Yes
TRNSP: Taxi, Rntl car (at arpt)
MEALS: At arpt
RON: Adj, 1.5 mi

- TWR hr 0700 -2100, FAA Class "D" Airspace. Aft rwr hrs class "E".
- Low level hel opns prohibited in vcnty of state prison, 4 mi NE.
- Terminal opn 0700 - 2000. Aft hrs 24-hour pilot lounge with restroom facilities. Code: 1284.
- Airfield conditions not monitored aft r twr hrs.
- Deer & birds on & invof arpt.
- * Self-fueling avbl 100LL & Jet A

Source: Michigan Airport Directory

Appendix A – Community Profile

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Chapter A6 Community Facilities

The public facilities and services offered by a community have an impact on the quality of life and security of its residents. The quality of public services contributes to the perceptions of the effectiveness of local government, and the proper establishment and maintenance of public buildings and infrastructure—including libraries, schools, and recreation facilities—can influence the perceptions formed by citizens, business patrons, and visitors. The location and capacity of a utility system has an important influence on the future development pattern. For these reasons, development of an inventory of Blackman Township community facilities is essential for the development of long-range planning recommendations that will influence the future of the Township.

Township Office

The Blackman Township administrative office is situated in the Blackman Charter Township Hall which is located on Parnall Road (see Map A14). The Township Office houses the planning/zoning, building, assessing, and utility departments and is the meeting location for the Township’s boards and commissions.

Blackman Charter Township Hall
1990 W. Parnall Road
Jackson, MI 49201
(517) 788-4345
www.blackmantwp.com

Blackman-Leoni Township Department of Public Safety (DPS)

Blackman Township and Leoni Township maintain a joint public safety department to serve their communities. The office of the Blackman-Leoni Township Department of Public Safety (DPS) is adjacent to the Blackman Township office (see Map A14). The DPS provides police, fire and emergency medical services to the estimated 37,754 residents (in 2015) living in the two townships, as well as local businesses and other institutions. Both Townships border each other, as well as the City of Jackson. The DPS is a fully-consolidated public safety agency; all officers are cross-trained as police officers, fire fighters and to at least the medical first responder level. The department had 33 sworn officers in 2017 and handled 24,320 calls for service that year. Police responses accounted for 82% to 85% of all incidents in Blackman Township each year between 2013 and 2017 (see Table A5). Fire responses accounted for 2% of all incidents each year. Rescue responses accounted for 13% to 16% of all incidents each year.

**Blackman-Leoni Township
Department of Public Safety**
1996 W. Parnall Road
Jackson, MI 49201
(517) 788-4223

TABLE A5 – BLACKMAN TOWNSHIP DPS INCIDENTS BY YEAR

	2013	2014	2015	2016	2017
Police	12,539	12,812	13,034	13,250	13,620
Fire	334	308	301	352	298
Rescue	1,954	2,184	2,390	2,517	2,584
Total	14,827	15,304	15,725	16,119	16,502

The Investigative Division participates in the Major Crimes Task Force, the Domestic Violence Coordinating Council, the Child Death Review Team, the Child Advocacy Center, and Recovery Court and conducted 3,055 investigations in 2017. The K-9 assists other departments, conduct school searches, and provide training demonstrations to the public. The Traffic Crash Reconstruction Team investigated 1,619 crashes in 2017, including 253 injuries and 8 fatalities. The Fire Inspections/Investigation Division is responsible for enforcement of the national fire code, building plan review, commercial and industrial fire inspections, and the determination of cause and origin at all structure fires. Blackman and Leoni Town-

Appendix A – Community Profile

ships share an automatic mutual aid agreement with the City of Jackson and Summit Township. The agreement involves the automatic dispatch of personnel and equipment in the event of a structural fire within any of the communities with dispatch handled through Jackson County Central Dispatch.

Emergency Dispatch System

In Jackson County, emergencies of all types; fire, medical and police are dispatched through a 911 Central Dispatching Service offered by the Jackson County Sheriff's Department. For fire emergencies, Central Dispatch dispatches fire companies based upon a protocol established by each unit of government.

For medical emergencies, the Blackman-Leoni Township Department of Public Safety (DPS) and the other Jackson Area governments provide first responder service based upon protocols approved by the local unit and the medical control board. An initial screening by 911 Dispatch is conducted to determine whether a rescue vehicle should be dispatched. The call is then forwarded to the Jackson Community Ambulance (JCA) a private firm which provides ambulance services in Jackson County. JCA further services the call and provides emergency medical services. Jackson Community Ambulance (JCA) responds with an ambulance and transports persons requiring emergency medical services to Henry Ford Allegiance Health. The DPS does not transport. This means, of course, that a minimum of two vehicles one responding from the DPS, and one from JCA, respond to medical emergencies dispatched through the 911 system.

Health Services

Health services are located in the City of Jackson for emergency and routine health care needs. Both are minutes away from the bulk of Township residents. The largest institution is Henry Ford Allegiance Health which offers an array of in-patient and out-patient health services including a heart unit. Regional medical facilities are also available within one hour in Ann Arbor and Lansing hospitals.

Utilities

Blackman Township is served by both private septic systems and public sanitary sewers. The sewer system primarily serves the dense residential and commercial areas of the Township. The wastewater system is part of the City of Jackson system with a wastewater treatment facility located in Blackman Township. The Township's generalized sewer service areas are shown on Map A15.

Blackman Township residents and businesses rely upon either private wells or municipal water depending on their location to existing municipal water lines. Located on Parnall Road near the Township Office, a water tower provides storage capacity. The City of Jackson is the source of the municipal water system. Map A16 shows the generalized water service areas of the Township.

Electricity and natural gas service in Blackman Township is provided by Consumers Energy which is headquartered in the City of Jackson; one of its major office buildings is also maintained in the Township. Comcast is a major provider of cable television and internet services. AT&T provides landline telephone service as well as access to cable television and the internet. Various other companies provide cellular telephone service and access to satellite television.

Parks and Recreation

Parks and recreation facilities within Blackman Township and the surrounding area are provided by various public and private institutions (e.g., schools, businesses, etc.) as well as the Township and other local governments. The Township provides the 91.5 acre Rod Mills Memorial Park—located at 3300 W. Parnall Road—which features hiking trails, picnic pavilions; picnic tables and grills; baseball diamonds; soccer fields; a playground area; horseshoes, and volleyball (see Map A14). A full listing of the parks and

Appendix A – Community Profile

recreation facilities located in the Township and surrounding area is included in the 2017-2021 edition of the *Blackman Charter Township Park and Recreation Plan*. A new edition of the recreation plan must be approved by Blackman Township in 2022 in order for the Township to maintain eligibility to apply for funding through the Michigan Department of Natural Resources (MDNR).

The designated hiking portion of Michigan's Iron Belle Trail (which connects Belle Isle in Detroit with Ironwood in the Upper Peninsula) traverses Blackman Township, as does Route #1 of the Great Lake-to-Lake Trails (which connects Lakes Huron and Michigan). The Falling Waters Trail (located to the southwest) and the Lakelands Trail State Park (located to the northeast) already form the backbone of both trails. The Township's recreation plan proposes the development of a trail through Blackman Township which will connect those statewide trail segments (see Map A14). The Jackson Area Comprehensive Transportation Study (JACTS) began work on a countywide non-motorized transportation plan in 2018 which may further refine this and other area trails initially proposed in the *Jackson County Regional Trailway Study* (2002).

The Upper Grand River Watershed Council developed the *Upper Grand River Water Trail Development Plan* which proposes the development of water trails on the Upper Grand River, the Chain of Lakes, and the Portage River. Portions of the proposed water trails on the Upper Grand River and the Portage River traverse Blackman Township (see Map A14). The plan includes the development of a Grand River access site on the northeast side of Parnall Road as well as at the R.A Greene Park/Jackson Wastewater Treatment Plant.

Schools

As shown on Map A1, portions of four school districts are contained within Blackman Township - the East Jackson Community Schools, Jackson Public Schools, Northwest Community Schools, and the Western School District. Northwest Community Schools maintain various school facilities in Blackman Township (see Map A14). The Northwest Early Elementary School and the Northwest Elementary School share a campus on Lansing Avenue, north of Parnall Road. R.W. Kidder Middle School and the Northwest High School share a campus at the intersection of Van Horn and Rives Junction Roads. The Northwest Alternative High School is adjacent to the main campus.

Other school facilities are also located in Blackman Township (see Map A14). The Jackson Seventh Day Adventist School is located on County Farm Road, east of Blackman Road. The Lyle Tarrant and Kit Young Centers, Jackson County Intermediate School District, are located at the intersection of Lansing Avenue and Parnall Road. Baker College of Jackson is located on Springport Road, east of Airport Road. The W.J. Maher Campus of Jackson College is located at the intersection of Blake and Dettman Roads.

Cemeteries

The Township maintains two cemeteries. These are Fifield Cemetery on Lansing Avenue (south of Northwest Elementary School) and Bond Cemetery on Van Horn Road (see Map A14). Hillcrest Memorial Park, a private cemetery, is located on Elm Road, just north of the City of Jackson.

Library

The Meijer Branch of the Jackson District Library (JDL) is located at 2699 Airport Road, adjacent to the Meijer store. An addition and renovation project was "finished in May 2014 and features an interactive family zone, 23 computers, two study rooms and a digital media studio that residents can use for graphic and audio projects. A major highlight of the

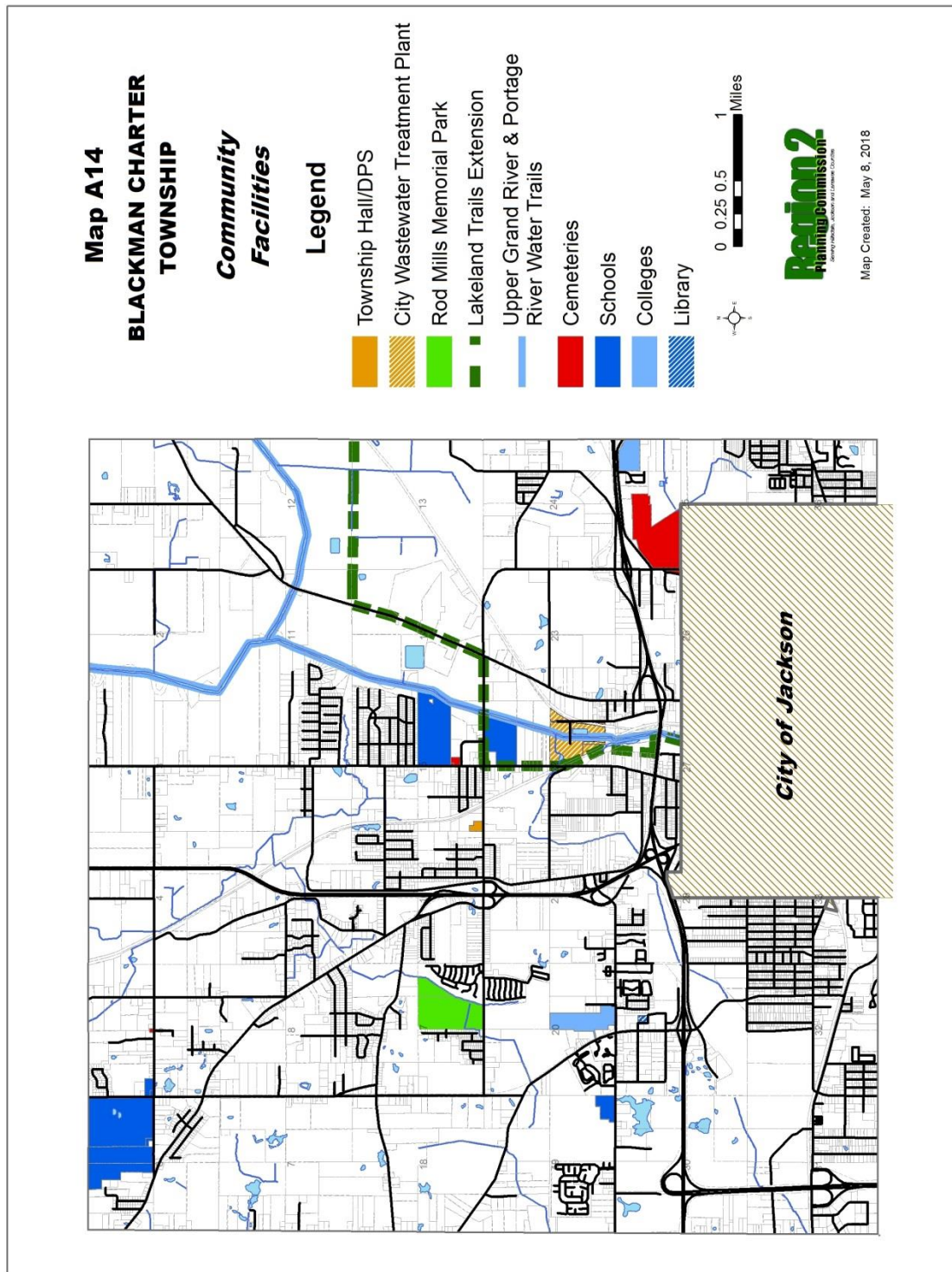
Meijer Branch
Jackson District Library
2699 Airport Rd.
Jackson, MI 49202

Appendix A – Community Profile

expanded library [branch] is a community room with an adjoining kitchenette that can seat up to 100 people, or partitioned into three spaces to host smaller groups. Numerous cozy amenities such as a fireplace, comfortable seating, and a vending area await visitors during open hours. When the branch is closed, patrons have access to pick up lockers, transforming the location into a 24/7 branch for residents to pick up or drop off materials. The entire library [branch] is a WiFi hot spot. The Friends of the Meijer Branch library also operate a used book store.”⁶ The JDL also provides 12 other library branches throughout Jackson County, including the main Carnegie Branch in Downtown Jackson.

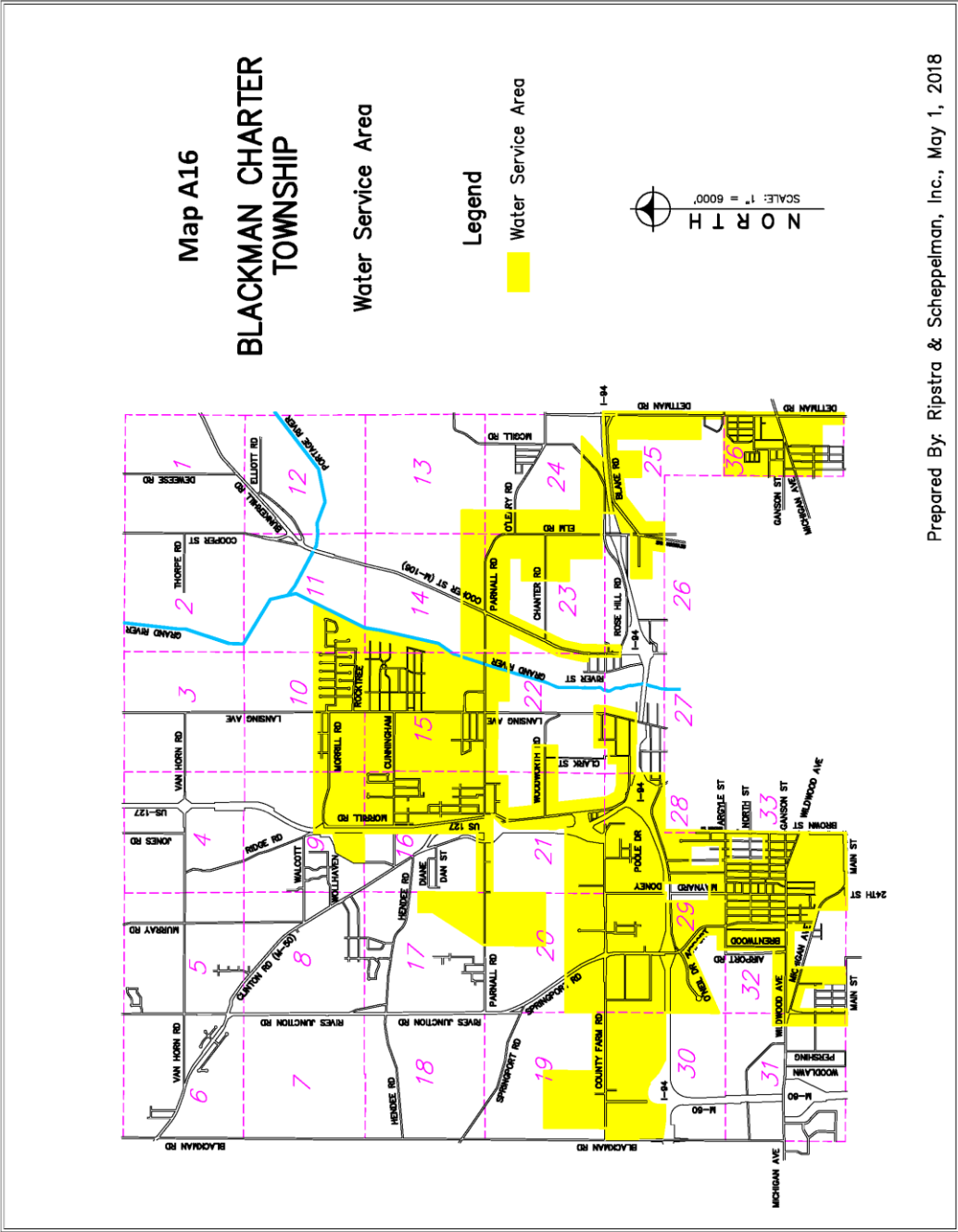
⁶ <http://myjdl.com/meijer/>

Appendix A – Community Profile



Blackman Charter Township Master Plan





Prepared By: Ripstra & Scheppelman, Inc., May 1, 2018

Appendix A – Community Profile

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