



# City of Boyne City

Founded 1856

319 N. Lake Street

Boyne City, Michigan 49712  
www.cityofboynecity.com

Phone 231-582-6597  
Fax 231-582-6506

## AGENDA

### BOYNE CITY PLANNING COMMISSION

Monday October 15, 2018 5:00 p.m.  
Boyne City Hall



Scan QR code or go to  
[www.cityofboynecity.com](http://www.cityofboynecity.com)  
click on Boards & Commissions for complete  
agenda packets & minutes for each board

1. Call to Order
2. Roll Call - Excused Absences
3. Consent Agenda  
*The purpose of the consent agenda is to expedite business by grouping non-controversial items together to be acted upon by one Commission motion without discussion. Any member of the Commission, staff, or the public may ask that any item(s) on the consent agenda be removed to be addressed immediately following action on the remaining consent agenda items. Such requests will be respected.*  
  
Approval of minutes from the August 20, 2018 Boyne City Planning Commission meeting.
4. Hearing Citizens Present (*Non-Agenda Items*)
5. Reports of Officers, Boards, Standing Committees
6. Unfinished Business
  - A. M-75 Corridor Plan Recommendation for Adoption
7. New Business
  - A. Development plan Review 437 N Boyne Ave
  - B. Citywide Goals
  - C. Parking Study Final Report
8. Staff Report
9. Good of the Order
10. Adjournment – Next Meeting November 19, 2018

*Individuals with disabilities requiring auxiliary aids or services in order to participate in municipal meetings may contact Boyne City Hall for assistance: Cindy Grice, City Clerk/Treasurer, 319 North Lake Street, Boyne City, MI 49712; phone (231) 582-0334*

An Equal Opportunity Provider and Employer  
**Hometown Feel, Small Town Appeal**

**Meeting of  
August 20, 2018**

Record of the proceedings of the Boyne City Planning Commission meeting held at Boyne City Hall, 319 North Lake Street, on Monday August 20, 2018 at 5:00 pm.

---

**Call to Order**

Chair Frasz called the meeting to order at 5:00 p.m.

---

**Roll Call**

Present: Chris Frasz, Ken Allen, Aaron Place, Jim Kozlowski, Tom Neidhamer, Jeff Ross and Joe St. Dennis  
Absent: Jason Biskner and George Ellwanger

---

**Excused Absences  
\*\*Motion**

**2018-08-20-11**  
**St. Dennis moved, Place seconded, PASSED UNANIMOUSLY**, a motion to excuse the absence of Biskner.

---

**Meeting Attendance**

City Officials/Staff: Planning and Zoning Administrator Scott McPherson  
Public Present: Two

---

**Consent Agenda  
\*\*Motion**

**2018-08-20-12**  
**Ross moved, Neidhamer seconded, PASSED UNANIMOUSLY**, a motion to approve the consent agenda, the Planning Commission minutes from July 16, 2018 as presented.

---

**Citizen comments on  
Non-Agenda Items**

None

---

**Reports of Officers,  
Boards and Standing  
Committees**

The newly formed Boyne Housing Solutions committee will be holding a meeting on August 29, 2018 at 1:30 at City Hall.

---

**Unfinished Business**

None

---

**New Business**

None

---

A preliminary site development plan for 437 Boyne Avenue was presented by Bay Area Management services. The building was purchased with the intent to develop small offices. There is currently a church using part of the building with a 30 day lease. The developer is looking at spaces being used as a business incubator. Electrical splits will be installed. Materials used will be high quality vinyl, stone with white corners. Place inquired if there will be workshop noise and was informed no. Discussion of lighting and parking took place. The developer indicated that he may also hold some space for developing future parking. Kozlowski inquired if there would be any production that would produce odors and was informed no.

---

**Staff Report  
Good of the Order**

The recent conditional rezoning request that was approved to move forward by the Planning Commission was denied by the City Commission due to the request not being consistent with the Master Plan

---

St. Dennis commented that we have a tremendous amount of TRD that is undeveloped.

---

**Adjournment**  
**\*\*Motion**

The next regular meeting of the Boyne City Planning Commission is scheduled for Monday, September 17, 2018 at 5:00 p.m.

**2018-07-16-13**

**Allen moved, Ross seconded, PASSED UNANIMOUSLY** a motion to adjourn the August 20, 2018 meeting at 5:53 p.m.

---

Chair Chris Frasz

# M-75 Corridor Improvement Plan

February 2018 Draft

## Table of Contents

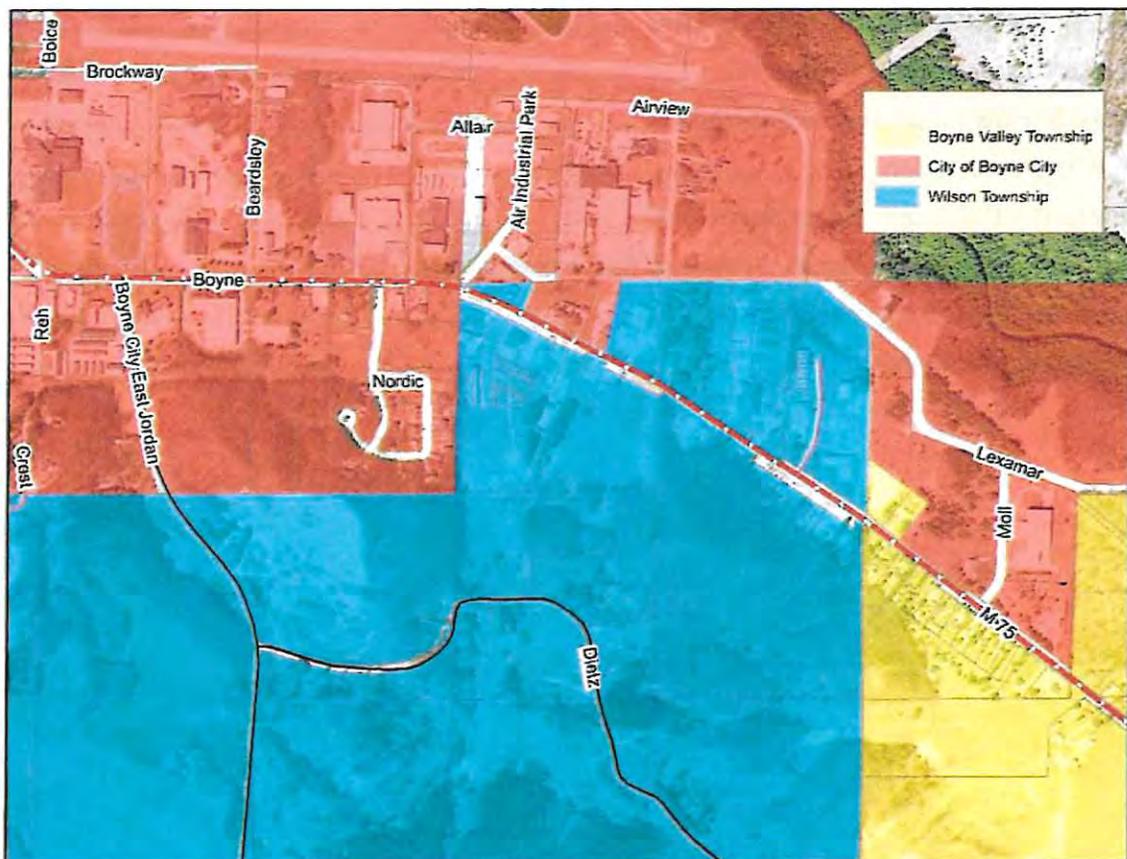
- Chapter 1: Introduction.....2
  - A. M-75 Corridor Vision and Goals.....2
  - B. Corridor Planning to Date .....3
  - C. Why this Plan was Prepared.....4
- Chapter 2: Site Design .....5
  - A. Physical Assessment.....5
  - B. Design Opportunities .....6
  - C. Zoning Amendments .....8
- Chapter 3: Street and Access Design.....9
  - A. Principles of Access Management .....9
  - B. Benefits of Access Management.....9
  - C. Existing Transportation-related Conditions .....10
  - D. Access Management Standards.....11
  - E. Access Management Recommendations .....12
- Chapter 4: Implementation.....15
  - A. How to Use the Access Management Plan .....15
  - B. Implementation of the Plan Standards and Recommendations.....15
  - C. Access Review and Approval Procedure .....17
  - D. Implementation Opportunities.....19

## Chapter 1: Introduction

As a Redevelopment Ready certified community, Boyne City continually seeks opportunities to put its best foot forward and project a positive place to live, visit, and do business. In order to ensure one of its “front doors” matches the quality design exemplified elsewhere in the city, especially its downtown, Boyne City sought the cooperation of Wilson and Boyne Valley Townships for an M-75 Corridor plan through the support of the Redevelopment Ready Communities (RRC) technical assistance program. This document summarizes their common goals and recommendations to ensure the M-75 gateway is safe, attractive, and welcoming.

### A. M-75 Corridor Vision and Goals

The following vision and goals were drafted for the entire M-75 corridor as part of the Partnerships for Change effort led by LIAA. They generally apply to the one-mile segment of the corridor that is the focus of this plan – from the High School on the west to the Boyne City limits on the east – serving more as a transition from rural to urban than the remainder of the corridor, which is predominantly rural.



---

*"M-75 is a beautiful, safe, prosperous, and environmentally-friendly corridor that respects the rural character of our community."*

---

#### *Beautification*

- Improve wayfinding, jurisdictional, and traffic signage
- Install gateway landscaping and signage at jurisdictional boundaries
- Work with property owners to improve and maintain properties

#### *Safety*

- Improve traffic safety along the corridor and reduce access-related crashes
- Limit the number of access points along the corridor to improve travel efficiency
- Develop a safer travel environment for non-motorized users

#### *Prosperity*

- Actively recruit new businesses that fit with the vision of the corridor and install the necessary infrastructure, such as broadband, that will support these businesses
- Pursue a variety of funding options to implement the vision of the corridor
- Develop a plan to recruit higher paying jobs

#### *Environmental*

- Explore and implement various storm water management techniques
- Explore and implement standards that reduce energy use, water use, and encourage the use of renewable or recycled materials for new developments
- Direct growth in a way that will protect and preserve the environmental resources of the Boyne River
- Concentrate growth to preserve rural areas of corridor

### **B. Corridor Planning to Date**

Preceding this plan, Boyne City took a number of steps to facilitate cooperation and promote safety along M-75:

### *Partnerships for Change*

Boyne City, Wilson Township, and Boyne Valley Township agreed upon the common vision and strategies for the M-75 corridor during a process coordinated by Land Information Access Association (LIAA).

### *Safe Routes to School*

Recently, Boyne City secured a Michigan Safe Routes to School grant to study the area surrounding the school complex. Sidewalks were added to connect the south side of M-75 to Beardsley St., Brockway St., and the elementary school. Continued safety for students is a priority for Boyne City.

### *Existing Access Management Regulations*

Boyne City already has a robust section on access management principles in its zoning ordinance. Recently, Wilson Township adopted a version of those standards. This plan provides recommendations to improve the Boyne City standards, which can then be adopted by the Townships.

### *425 Agreements*

In the past, the City and Townships have coordinated new development and access to utilities through 425 agreements where the sites in the Township utilize the City's utilities and zoning and agree upon sharing of future tax revenue for a period of time. As sites along M-75 redevelop and may enter into 425 agreements, it will be critical that the zoning for both the City and Townships complement one another.

## **C. Why this Plan was Prepared**

This access management plan was undertaken by Boyne City, Wilson Township, and Boyne Valley Township to coordinate access management improvements along the M-75 corridor by building upon previous and ongoing planning processes along the corridor and developing a mutually agreed upon process of coordination for future improvements to achieve the goals and vision for M-75 described above. The following sections of the plan give recommendations for site design (Chapter 2), street and access design (Chapter 3), a roadmap for implementation (Chapter 4), and a revised access management zoning ordinance article, specific to the needs of the corridor, that can be adopted by the three communities (Chapter 5). This would be amendments to Boyne City Zoning Ordinance, Article XXIV, Section 24.90 language for the two townships.

# Chapter 2: Site Design

## A. Physical Assessment

Overall, the district lacks cohesion and is home to a variety of ages and quality of buildings and inconsistent site design. Many of the buildings are dated and do not project the high-quality design desired by the communities. Often, the relationship between where the public realm ends and the private realm starts is ill-defined, with wide driveways, lack of sidewalks or pathways, and large parking lots that dominate front yards.



*Landscaping, sidewalks, crosswalk, and ground sign make this frontage one of the more successful along the corridor*



*Many sites have front yard parking that blends into the front greenbelt and driveway*

## B. Design Opportunities

Many sites can be redeveloped with better design to maximize their potential for new businesses, circulation, and site design. In order to promote the best possible corridor aesthetics, the following site design principles are suggested:

### *Parking and Access*

- 5-foot sidewalks are typical for an urban or residential area. Along this corridor, shifting to a shared pathway with a minimum of 7 feet or preferred 10 feet would allow for safe facilities for both bikes and pedestrians.
- The sidewalk environment should accommodate ample space for pedestrians, street furniture, prominent storefronts, and outdoor dining where feasible. Street trees and other elements that create a comfortable separation between parking and drive lanes and the pedestrian areas should also be included.
- Require direct connections to the public sidewalk from building entrances. Internal pedestrian walkways should be included from parking areas, clearly separated from vehicle aisles and parking spaces.
- Off-street parking should be located in the side and rear yards. Parking lots should be screened with a knee wall coupled with landscaping. There should be a maximum of one row of front-yard parking with an appropriate buffer from the sidewalk.
- Parking lot landscaping is especially important in minimizing the appearance of large parking lots. Parking lot islands can incorporate pedestrian access to building entrances.
- Bike racks should be provided near entrances to buildings.
- Service areas should be well screened: waste receptacles, delivery areas, mechanical equipment, and utilities. Loading and unloading areas should be located where they can be effectively screened from view.

### *Landscape and Streetscape*

- Streetscape treatments should be used to signify an entrance and contribute to a sense of place.
- Where required, detention areas should be designed to mimic natural environments with native species, and steep basins requiring safety fencing should be discouraged.

- Receptacles, planters, benches, pedestrian-scale lighting, and other such amenities should be strategically placed throughout the district.
- Development abutting single-family residential should be screened with a mixture of treatments such as landscaping, walls, and fences.
- Low-impact design: Bioretention (Rain Gardens) & bioswales manage stormwater runoff locally, providing natural filtration to protect lake water quality. Low-impact design can be applied on private sites and in the right-of-way and should be considered in areas between the new or existing sidewalk where driveways are removed and in areas where a road median is installed. Plant species should be salt tolerant, provide aesthetic benefits and be low maintenance. Sidewalks should be designed to direct runoff into these areas, and maintenance agreements should be included as part of any approval.
- Boyne City should adopt stormwater regulations that more appropriately fit the city's urban character than those adopted by the townships.
- Evaluate the possibility of extending storm sewers east along the corridor.

#### *Lighting and Signage*

- Lower-level ground signs are preferred over taller pole signs.
- Signs should be constructed of materials compatible with the architecture of the building.
- Site lighting should be regulated so it does not spill into non-commercial areas or the public road, except where needed to illuminate driveways.
- Fixtures should be chosen that shield light from projecting upward, thereby reducing light pollution into the night sky.
- Light poles should be located so they do not obstruct pedestrian movement.
- Fixtures may be outfitted with decorative banners that, in some cases highlight civic events and activities of community-wide appeal.

#### *Architecture*

- Welcoming storefronts should include active window displays, outdoor seating, and awnings to attract customers and contribute to a sense of place.

- Long or expansive building walls should include variations in the building wall, varied roof lines, archways, or other architectural features.
- Rear elevations visible from roadways (both public and internal drives) and/or residential areas should have a finished quality compatible with the front elevation of the building.

*Right-of-Way Design*

- Work with MDOT to evaluate the possibility of redesign of the corridor.
  - Center turn lane
  - Limited crosswalks with refuge islands
  - Curbs and gutters



*Recommended Site and Right-of-Way Design: three-lane road with center turn lane, curb, and gutter. The center turn lane with assist with easing traffic flow and turning movements along the corridor where there are many adjacent commercial driveways. In areas where a center turn lane is not needed, a green median can instead be used.*

**C. Zoning Amendments**

Suggested changes to Boyne City’s existing zoning ordinance are being provided to city staff for further evaluation by the planning commission based on the recommendations provided above.

## Chapter 3: Street and Access Design

### A. Principles of Access Management

Factors that influence the “front door” or gateway impression of entering a city include building and architectural design, landscaping, signage, and the travel experience, including traffic flows and ease of access. Traffic flow and ease of access are directly impacted by the number and location of driveways along a corridor. This section describes the principles of access management, a set of proven and beneficial techniques to manage the location, design, and type of access to property.

- *Design for efficient access.* Identify driveway design criteria that promote safe and efficient ingress and egress at driveways, while considering the interaction with pedestrians and bicyclists.
- *Separate the conflict areas.* Reduce the number of driveways, increase the spacing between driveways and between driveways and intersections, and reduce the number of poorly aligned “cross street” driveways.
- *Remove turning vehicles or queues from the through lanes.* Reduce both the frequency and severity of conflicts by providing separate paths and storage areas for turning vehicles and queues.
- *Limit the types of conflicts.* Reduce the frequency of conflicts or reduce the area of conflict at some or all driveways by limiting or preventing certain kinds of maneuvers.
- *Provide reasonable access.* Recognize that property owners have an inherent right to access public roadways, although reasonable access may be indirect in some instances.

### B. Benefits of Access Management

Access management practices provide multifold benefits to communities, motorists, businesses, land owners, developers, pedestrians, bicyclists, and the public. Based on research and studies on similar corridors, some of these benefits are as follows:

- Improved roadway safety for motorists, pedestrians, and bicyclists through reducing situations that contribute to crash potential;
- Decreased congestion through preservation of the capacity and useful life of M-75;

- Better access to, and among properties, which expands economic development potential and increases land values;
- More streamlined coordination between the three communities and MDOT.

Optimum driveway spacing simplifies driving by reducing the amount of information to which a driver must process and react. Adequate spacing between driveways and un-signalized roadways (or other driveways) can reduce confusion that otherwise requires drivers to watch for ingress and egress traffic at several points simultaneously while controlling their vehicle and monitoring other traffic ahead and behind them. Reducing the amount of information related to selecting an access point and avoiding conflicting turns and traffic provides greater opportunity to see and safely react to automobiles in the street and pedestrians and bicyclists on pathways and sidewalks.

### C. Existing Transportation-related Conditions

Within this section, discussion of existing conditions is broken down into three sections focused on Traffic and Roadway Characteristics, Pedestrian and Non-Motorized Transportation, Existing and Future Land Use, and Current Access Characteristics along the corridor.

#### *Traffic & Roadway Characteristics*

The corridor addressed in this plan is an approximately 1-mile stretch of M-75 that extends from the eastern part of Boyne City, Wilson, and Boyne Valley Townships (See map). M-75 is a two-lane undivided highway without curbs for the majority of the corridor. The most recent available data from MDOT is that traffic volumes average 3600 ADT along the corridor, which is about 1/3 of the capacity. However, seasonal volumes can be much higher on peak summer days. No plans by MDOT to widen M-75 within the study corridor have been announced.

#### *Pedestrian & Non-motorized Transportation*

Transportation use along M-75 is primarily vehicular. There are no sidewalks along the majority of the corridor. One exception is a sidewalk within the study corridor added to the south side of M-75 to connect the south side of M-75 to Beardsley St., Brockway St., and the elementary school. This sidewalk was completed by Boyne City through a Safe Routes to School grant. Under current conditions with no sidewalks, limited curbs, and no designated bicycle infrastructure, experienced bicyclists may feel comfortable riding along the shoulder of the road, but less experienced riders may feel less comfortable riding along the corridor.

*Existing & Future Land Use*

Land use along the corridor is a mixture of commercial, service, retail, residential, and light industrial uses typical to a rural northern Michigan community corridor.

*Current Access Characteristics*

Currently, there are 50 commercial access driveways along the 1-mile corridor. The eastern portion of the corridor has a posted speed limit of 55 MPH, while the western half of the corridor has a posted speed limit of 45 MPH. Seventeen of the commercial drives fall into the 55 MPH zone, with the remaining 33 commercial drives located in the 45 MPH stretch nearing downtown Boyne City. The drives exhibit a variety of geometries with some paved and some not. Few have curbs, but most do not so the access is not well defined. Many commercial businesses along the corridor have multiple driveways within close proximity to one another. Many are not well spaced from driveways across the street.

**D. Access Management Standards**

Access management is a shared responsibility of MDOT and the municipalities. MDOT has standards that must be met for a permit to be issued, mostly related to access design and safety. MDOT does have does have guidelines for the number and spacing of driveways but looks to the municipalities to help regulate those through the zoning ordinance and site plan review. Boyne City has a robust section on access management principles in its zoning ordinance. Recently, Wilson Township adopted a version of those standards. This plan provides recommendations to improve the Boyne City and Wilson Township standards by bringing them closer to MDOT recommendations, which can then be adopted by the City and Townships.

*Figure 2.1: Boyne City & MDOT Access Management Standards, Minimum Spacing between Driveways*

Posted Speed Limit (mph)	Boyne City Minimum Driveway Spacing	MDOT Preferred Minimum Driveway Spacing
35 mph	75 feet	245 feet
40 mph	75 feet	300 feet
45 mph	100 feet	350 feet
50 mph	125 feet	455 feet
55 mph	150 feet	455+ feet

Current commercial driveway spacing along the M-75 corridor compared with MDOT’s preferred standard for un-signalized driveways is summarized in the table below. These standards apply to commercial driveways and not existing single-family residential drives along the corridor. However, formerly residential properties that have been converted to commercial business uses may be regulated by the access management standards.

*Figure 2.2: Corridor Analysis based on Boyne City & MDOT Driveway Spacing Standards*

Segment	Approx. Length (ft)	Speed Limit (mph)	Boyne City Spacing Standard (ft)	MDOT Spacing Standard (ft)	Existing Commercial Driveways	Average Existing Spacing (ft)	Max Driveways per Boyne City Standard	Max Driveways per MDOT Standard	Closures to meet MDOT Standard
East Segment	2450	55	150	455	17	155	16	5	12
West Segment	4150	45	100	350	33	80	41	12	21

If this corridor were developed today, under current MDOT access management standards, there would be over 30 fewer driveways. Given existing lot sizes, topography, and the development on many of the sites, full compliance with those standards as new development or redevelopment occurs is not practical. The goal then is to try to strike a balance to gradually move closer to the MDOT spacing standards. In particular, to:

- Remove or relocate driveways that are poorly offset across the street;
- Close the driveways that are less than 200 feet apart;
- Consolidate to have one driveway for most businesses;
- Develop a shared access system.

### E. Access Management Recommendations

The M-75 Access Management Plan was developed based on the analysis of existing conditions and constraints, and consideration of MDOT access guidelines, and review of the city’s current zoning code.

Much of the corridor is already developed, so application of preferred standards for driveway spacing and design will be gradual as sites develop. Strict adherence to MDOT standards will often be impractical. Even in cases of larger scale development and redevelopment, the site and area transportation conditions may require flexibility in the application of standards, so they are effective and

equitable while meeting the intent of this plan. The following section discusses the key access design criteria that were used during the analysis of the M-75 Access Management Plan area.

- *Minimize the Number of Access Points:* The number of access points to a development should generally be limited to one per property. Additional access may be acceptable for sites with wide frontage that allows spacing and other standards to be met. Where practical, access should be shared, off side streets, or via service drives/frontage roads.
- *Driveway Alignment or Offset with Other Driveways Across the Road:* Generally, driveways should be aligned with those across the road or offset a sufficient distance to prevent left turning movement conflicts, commonly referred to as “left-turn lock ups.” If alignment is not possible, minimum offsets on the corridor should be determined by posted speeds and range from 630 feet for a 45-mile per hour zone to 750 feet in a 50+ mile per hour zone.
- *Shared Driveways:* Sharing or joint use of a driveway by two or more property owners should be encouraged. This will require a written easement from all affected property owners before or during the site plan approval process. Where a future shared access is desired, the developer should initiate an easement that will be completed to future adjacent uses and construct a physical connection up to the property line to facilitate an easy completion when opportunities arise on the adjacent property.
- *Driveway Spacing from Intersections:* Driveways need to be spaced far enough from intersections to ensure that traffic entering or exiting a driveway does not conflict with intersection traffic. This is especially true for intersections that have traffic signals or may in the future. Typical standards consider the type of roadways involved (trunk line, arterial, etc.), type of intersection control, and type of access requested. For a state trunk line roadway such as this corridor that has speed limits of 45 to 55 miles an hour, full movement driveways should typically be at least 460 feet away from a signalized intersection and 230 to 460 feet away from un-signalized intersections.
- *Driveway Spacing from Other Driveways:* Driveways also need to provide adequate spacing from other driveways to ensure that turning movement conflicts are minimized. Generally, the greater the speed along the roadway the greater the driveway spacing should be. The posted speed limits for the corridor are illustrated on the recommendations maps.
- *Design of Access Points:* The geometric design of access points, including the width, throat, radius, and pavement type, should meet current MDOT standards. Municipal review procedures should

include alerting MDOT any time a use changes, so that MDOT can determine if a new access permit is needed, and if so, if changes or updates to the driveway design are required.

- *Frontage Roads:* There are several segments where there are many tightly spaced driveways where a frontage road could be pursued. Frontage drives can minimize the number of driveways, while preserving the property owner's right to reasonable access. Such facilities provide customers with access to multiple shopping/commercial sites without re-entering the main roadway and experiencing conflicts and higher speeds.

In areas where frontage roads are desired, implementation may be gradual as individual sites develop or redevelop. When adjacent properties have not yet developed, the site should be designed to accommodate a future frontage drive, with access easements provided. The Townships, City, or MDOT may temporarily grant individual properties a direct connection until the frontage road is constructed. The direct access point to the main roadway should be closed when the frontage road is constructed.

Frontage roads are usually constructed and maintained by the property owner or an association of adjacent owners. The frontage road itself should be constructed to public roadway standards regarding cross section, materials, design, and alignment. Development of frontage roads is most easily pursued when properties are vacant and when topographic changes from lot-to-lot are minimal.

- *Connected Parking Lots: Frontage roads as described above may be ideal but are difficult to construct along a segment with narrow lots and significant existing development. Given the limited space to construct frontage roads, an alternative would be to connect parking lots. This can be accomplished on a site-by-site basis. When a new development or major change to an existing one is proposed, the community can work with the developer to provide a connection between parking lots. This design approach can also support the development of shared driveways.*
- *Internal Sidewalk Connections to Public System:* Where a public sidewalk exists or will be constructed in the future, sites should be designed to include internal sidewalks that are clearly marked and located at a prominent location to encourage use, but clearly separated or otherwise protected from driveway and internal circulation lanes.

## Chapter 4: Implementation

### A. How to Use the Access Management Plan

The preceding chapters and accompanying figures outline how the recommended access management recommendations are applied within the overall plan area. The average speed of traffic along a given corridor is one of several design parameters used to develop driveway spacing standards; others include sight distance (the ability to see traffic approaching from the east and west) that is affected by physical conditions such as road curves, topography, and poles or signs that may inhibit views.

While some of the recommendations can be directly implemented, many are long-term initiatives that will require an ongoing partnership and commitment between MDOT and Boyne City, Boyne Valley Township, and Wilson Township. This requires the township planning commissions, boards, and zoning boards of appeals to be aware of the benefits of access management and their role in the Plan's implementation.

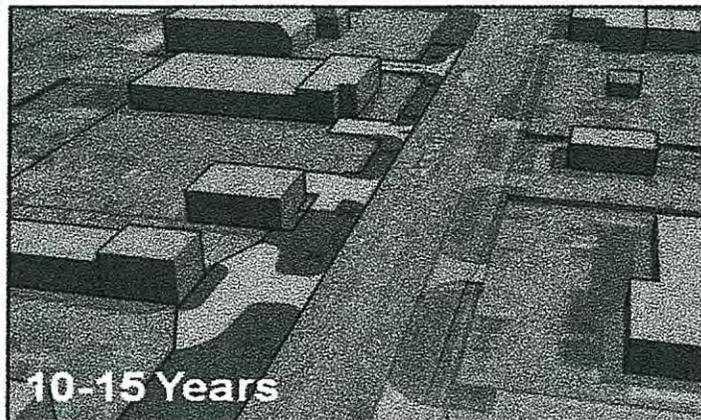
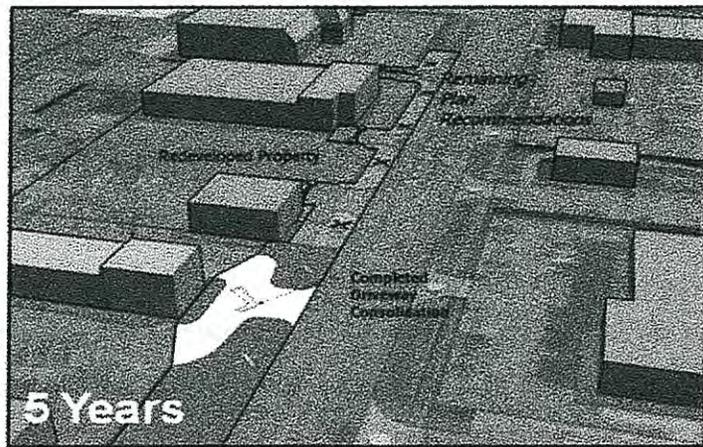
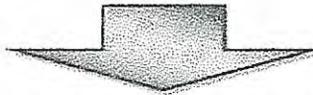
Benefits also need to be explained to property owners, so they can understand the important public purpose behind the regulations, and that they are assured reasonable access. This collaborative approach has been successful in many other northern Michigan communities.

### B. Implementation of the Plan Standards and Recommendations

One technique to help implement the Plan is to amend the local zoning ordinance to acknowledge the special standards and review procedures for the corridor. Amendments to the communities' zoning ordinance access management articles were prepared and revised to meet the needs of the communities and support MDOT's roadway goals.

As noted at the beginning of this document, access management is a set of proven techniques that can help reduce traffic congestion, preserve the flow of traffic, improve traffic safety, minimize crash frequencies, preserve existing roadway capacity and preserve investment in roads by managing the location, design and type of access to property. More than one technique is usually required to effectively address existing or anticipated traffic problems.

**Incremental Implementation**



The adopted zoning ordinance amendment is included in Chapter 5. As many of the existing sites along the corridor will not be able to meet the access management standards, the ordinances provide the authority to modify the standards on a case-by-case basis, with the guidance of the plan recommendations where applicable. Section B of the ordinance, "Access Management Hierarchy," offers guidance on how to prioritize access management improvements along the M-75 corridor, where much of the surrounding land is already developed. The ordinance provides the City and Township Planning Commissions with the authority to modify the standards and plan recommendations during site plan review, based on input from MDOT staff prior to the communities' approval of the site plan.

A coordinated and comprehensive access management approach is essential if future development and redevelopment in the plan area is to be accommodated and traffic safety and flow in the area is to be improved. Development decisions along the plan corridor are under the purview of several agencies.

The City and Townships have jurisdiction over land use planning, zoning, site plan and subdivision review outside of the M-75 corridor right-of-way. The Charlevoix County Road Commission has jurisdiction over all the public roads, except MDOT has control over improvements within the M-75 right-of-way. The existence of multiple governing agencies makes a formal, mutually agreed upon approval process an essential element to the future success and implementation of this plan. The following section establishes a formal access review procedure.

### C. Access Review and Approval Procedure

The flow chart illustrated below outlines the process to be followed in reviewing any development proposal or any project or situation that triggers access review along the plan corridor. It provides for a coordinated review by the City, Townships, and MDOT. The intent of the process is to ensure that the City's and Townships' review of the access design and the Charlevoix County Road Commission and/or MDOT's access permit processes are coordinated to implement the recommendations of this plan. The process provides feedback loops between the planning commissions and MDOT as modifications are made to access and circulation.

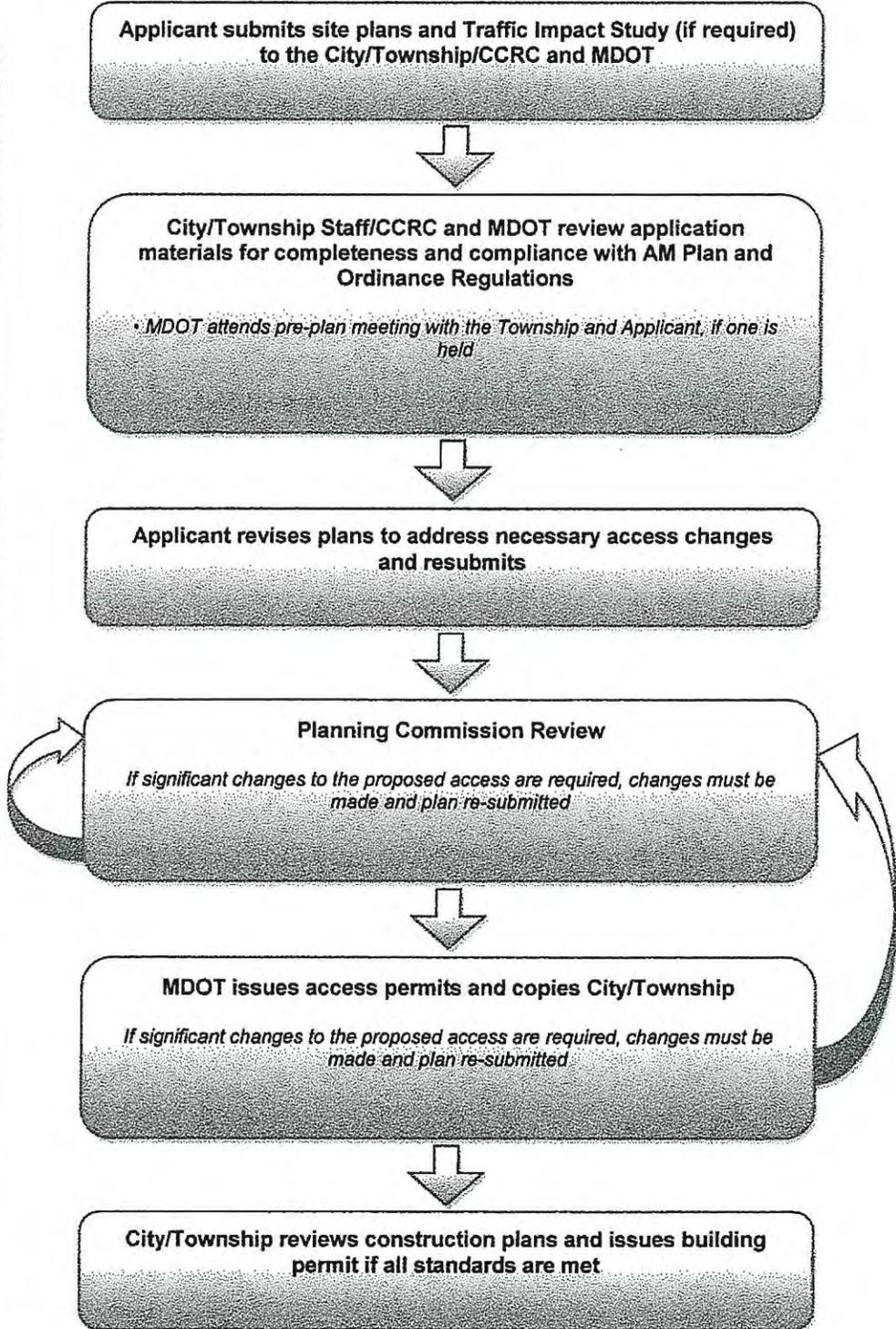
Access Review/Approval Procedure Flow Chart

**Legend**

**MDOT**  
Michigan  
Department of  
Transportation

**CCRC**  
Charlevoix County  
Road Commission

**Note:** This chart illustrates the preferred process to insure coordinated agency reviews on access-related issues. The site plan review process also involves other standards and agencies that will influence the approval.



## D. Implementation Opportunities

To continue the implementation of the M-75 Access Management Plan, a Steering Committee should continue to meet on a regular basis; this plan recommends a quarterly or bi-annual meeting. These meetings will provide a forum to discuss and coordinate major development proposals, traffic impact studies, right-of-way preservation and roadway cross-section designs, rezoning proposals, ordinance text amendments, master plan updates, roadway improvements or reconstruction, non-motorized transportation, streetscape enhancement, and other issues along the corridor.

There are several situations that may arise that each offer opportunities to implement recommendations of this plan, including:

- Road reconstruction (including resurfacing);
- Any intersection improvements or widening;
- New development;
- Redevelopment of a site with a new site plan;
- Changes in use to one that may increase the amount of traffic or trucks to the site, in which case MDOT can review the access permit and may require changes.
- Streetscape enhancement projects.
- Any project that requires a site plan review.

It should be noted that the recommendations outlined in this plan can be used on other roadways or corridors with existing or expected future access management issues. The underlying benefits obtained by maintaining good control of the number and location of commercial access points can be realized on all major roads.

*Typical Driveway Closure Costs*

<b>Closure Type</b>	<b>Estimated Cost*</b>
Close/Remove Existing Commercial Driveway	\$5,750 - \$11,500
Close/Remove Two Driveways and Construct a Shared Driveway	\$17,250 - \$28,750

*\*Costs typically borne by site owner if/when site redevelops/improves, unless planned MDOT roadway improvement project provides funds and/or local incentives are provided. Costs based on 2017 dollars.*

*Funding Possibilities*

Projects that are a partnership between MDOT and two or more cities tend to be prioritized for grants. Planning and Environmental Linkages (PEL) is a process used by MDOT to evaluate transportation conditions along a corridor or in a particular district. Typically MDOT PEL projects are larger scale (recently used on the Division Street project in Traverse City). A PEL might be eligible if the study area were extended further into Boyne City. While PEL is a program to fund study and design, Transportation Alternatives Program (TAP) is an MDOT program to provide funding for design and construction of right-of-way projects to improve safety with an emphasis to improve pedestrian and bicycle conditions.

In order to facilitate streetscape improvements and revitalization, the three communities could pursue a Corridor Improvement Authority (CIA) as a financing tool. A CIA, through a Tax Increment Financing Authority (TIFA), would capture state, county, and local tax increases resulting from the redevelopment of sites within the district. A CIA helps fund qualifying public infrastructure improvements, marketing initiatives, and economic growth projects.

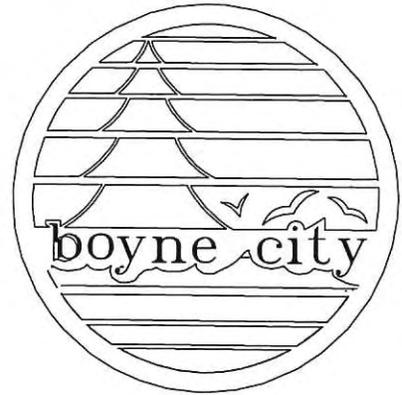
# CITY OF BOYNE CITY

**To:** Chair Chris Frasz, and fellow Planning Commissioners

**From:** Scott McPherson, Planning Director

**Date:** October 15, 2018

**Subject:** 437 Boyne Ave



---

## Background Information

The property located at 437 Boyne Ave, previously a consignment shop and Reys Acres, is owned by Boyne Ave Properties. The property is in the Central Business zoning district and is approximately .25 Acres. A renovation of the existing structure is being proposed which will create four office spaces which will be for rent. The renovation will include a change in the façade and roof of the building. The plan has been reviewed by the Mainstreet design committee and the owner has received a façade grant for the improvements.



## Discussion

The proposed renovation will create 4 office spaces ranging in size from 444 sqft to 922 sqft with total office space of 2,849 sqft. The façade will be significantly changed with the addition of new exterior walls with new doors and windows for each proposed office space. The flat roof will be replaced with a gable roof system and dormers will be added for each office space. The proposed design and of façade and roof appear to be a much better match of the style and character of the surrounding neighborhood. Additional parking of 7 spaces will be added to the

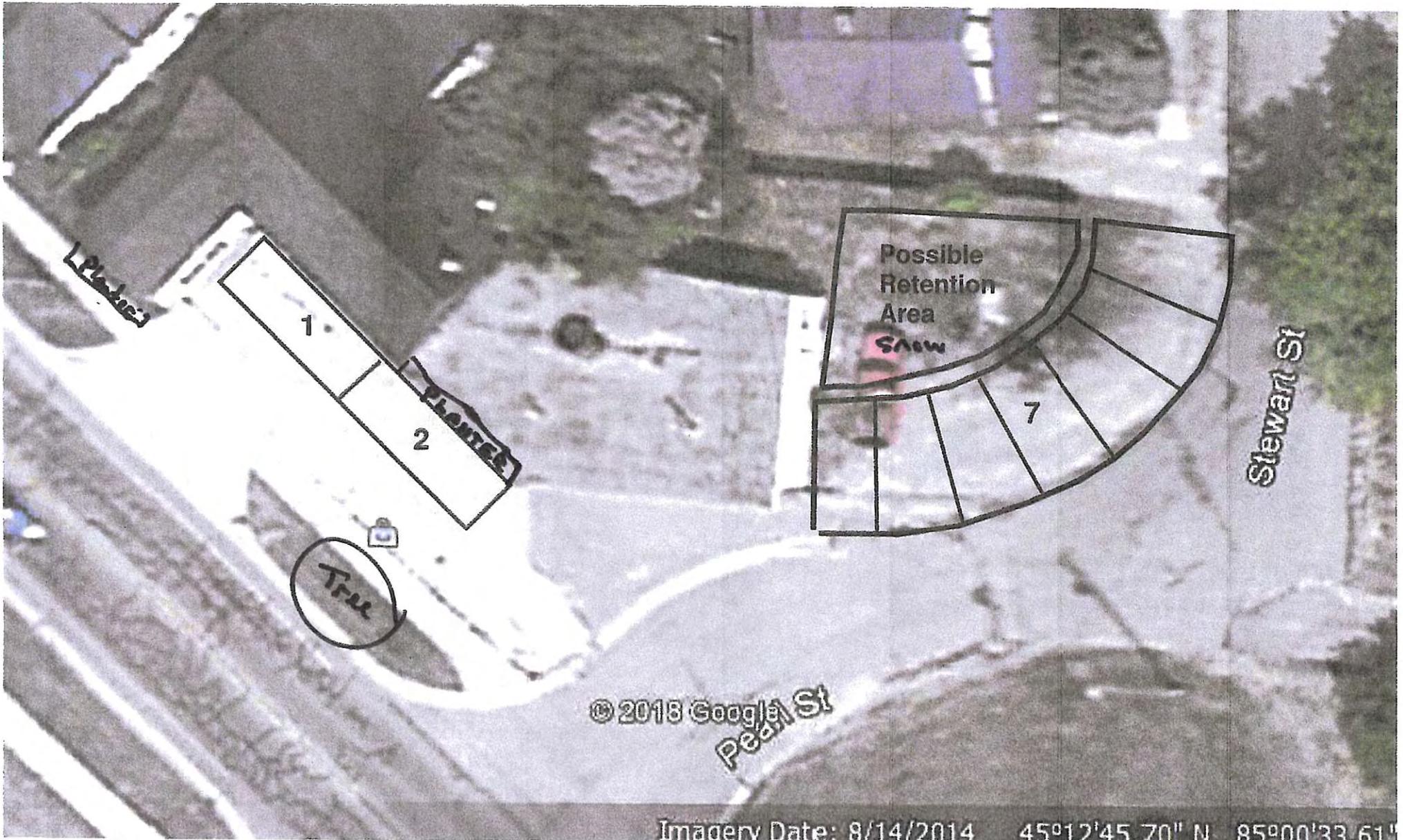
yard area on the east side of the building. Stormwater will be directed to on site retention basin and also directed onto Stewart Street which will be collected in catch basins on the corner of Pearl and Stewart streets. While the future uses of the new office spaces is unknown at this time, it can be reasonable anticipated the uses will be some type of professional office or personal service. Given this assumptions the required parking for the uses would range from 1 space per to 250 square feet of usable space to 1 space to 350 square feet of usable space. The proposed onsite parking being provided for the uses is 1 space per 317 square feet.

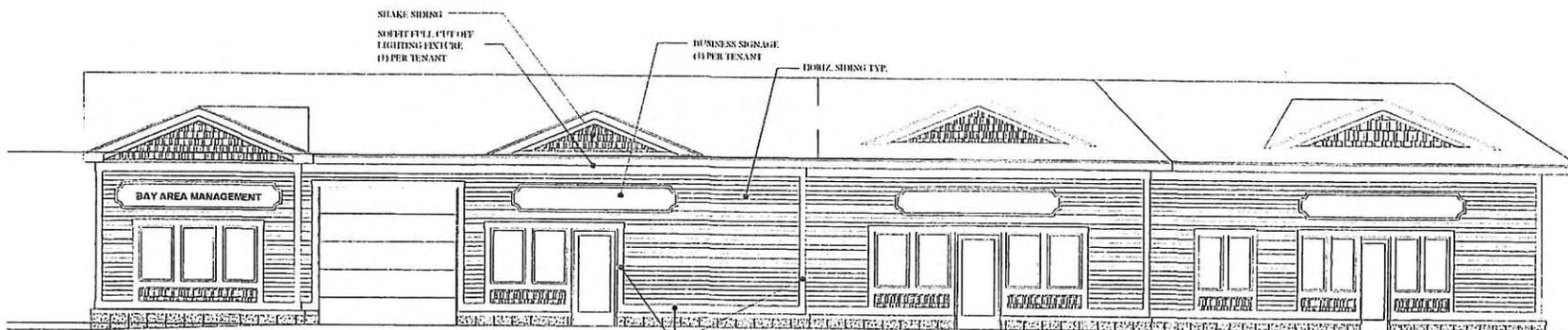
#### **PROCESS**

The application requires sketch plan review as per article 19 Development Plan Requirements, and a checklist of the requirements has been attached for your review and consideration.

#### **RECOMMENDATION**

The Planning Commission should then review the applicable development plan requirements and make a determination based on the relevant facts if the standard is met, not met or met with conditions. If approved with conditions the conditions must be listed, if denied the reasons for denial must be stated.





**RENOVATION BUILDING FRONT ELEVATION**  
 SCALE: 1/4" = 1'-0"  
 BUILDING AREA: 4,130 GROSS SQ FT

Project:

Renovation of Four Peaks  
 Office Building at  
 437 Boyne Ave.

BOYNE CITY, MICHIGAN

Sheet Title:

Proposed Renovation  
 Building Front  
 Elevation

Project Number: 18-026

Drawn: CI

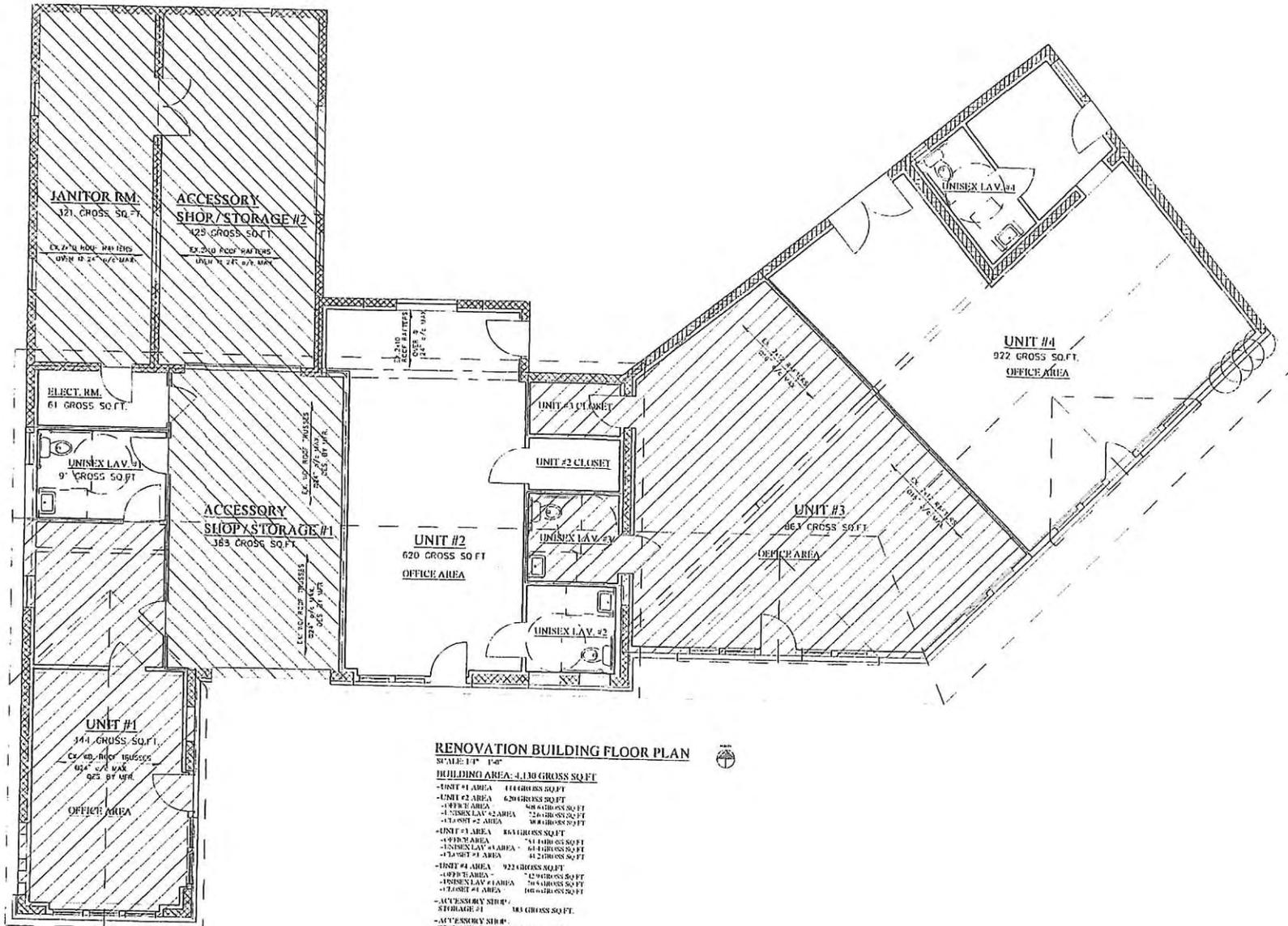
Checked: PN

Date: 07.30.18

Sheet Number:

**A3**

Issued For:	REVIEW
DATE:	08.11.18
ADDED GROSS SQ. FT. AREA:	65,701.18
REVIEW:	09.10.18
REMOVED / REVIEW:	09.11.18



**RENOVATION BUILDING FLOOR PLAN**

SCALE: 1/4" = 1'-0"

BUILDING AREA: 4,130 GROSS SQ. FT.

- UNIT #1 AREA 344 GROSS SQ. FT.
- UNIT #2 AREA 620 GROSS SQ. FT.
- OFFICE AREA 200 GROSS SQ. FT.
- UNISEX LAV #2 AREA 25 GROSS SQ. FT.
- UNISEX LAV #1 AREA 9 GROSS SQ. FT.
- UNIT #3 AREA 867 GROSS SQ. FT.
- OFFICE AREA 514 GROSS SQ. FT.
- UNISEX LAV #3 AREA 25 GROSS SQ. FT.
- UNISEX LAV #4 AREA 14 GROSS SQ. FT.
- UNIT #4 AREA 922 GROSS SQ. FT.
- OFFICE AREA 729 GROSS SQ. FT.
- UNISEX LAV #1 AREA 25 GROSS SQ. FT.
- UNISEX LAV #2 AREA 14 GROSS SQ. FT.
- ACCESSORY SHOP/STORAGE #1 383 GROSS SQ. FT.
- ACCESSORY SHOP/STORAGE #2 425 GROSS SQ. FT.
- JANITOR'S ROOM 121 GROSS SQ. FT.
- ELECTRICAL RSL 61 GROSS SQ. FT.
- UNISEX LAV #1 9 GROSS SQ. FT.

Project:  
 Renovation of Four Peaks  
 Office Building at  
 437 Boyne Ave.  
 HOYNE CITY, MICHIGAN

Sheet Title:  
 Proposed Renovation  
 Building Floor  
 Plan

Project Number: 18-026  
 Drawn: CI  
 Checked: PS  
 Date: 07.30.18  
 Sheet Number:

**DEVELOPMENT SITE PLAN REVIEW STANDARDS  
FINDINGS OF FACT  
437 BOYNE AVE**

**Section 19.40 Development Plan Approval Criteria.**  
In order that buildings, open space and landscaping will be in harmony with other structures and improvements in the area, and to ensure that no undesirable health, safety, noise and traffic conditions will result from the development, the Planning Commission shall determine whether or not the development plan meets the following criteria, unless the Planning Commission determines that one or more of such criteria are inapplicable:

ORDINANCE REQUIREMENT	STATUS	FINDINGS
<p><u>A. General.</u> All elements of the development plan shall be designed to take into account the site's topography, the size and type of plot, the character of adjoining property, and the traffic operations of adjacent streets. The site shall be developed so as not to impede the normal and orderly development or improvement of surrounding property for uses permitted in this Ordinance. The development plan shall conform with all requirements of this Ordinance, including those of the applicable zoning district(s).</p>	<p>The subject parcel is located at 437 Lake was the location of Reys Acres. The parcel is zoned CBD and is approximately .27 Acres. Site has an existing structure with no significant vegetation or topography. The proposed renovation will replace the existing roof and façade. The proposed renovation and use n conforms to all dimensional and use requirements of the zoning district.</p>	
<p><u>B. Building Design.</u> The building design shall relate to the surrounding environment in regard to texture, scale, mass, proportion, and color. High standards of construction and quality materials will be incorporated into the new development. In addition to following design guidelines adopted in specific district or sub-area plans, the building design shall meet the architectural and building material requirements of this Ordinance.</p>	<p>The proposed renovation will change the roof and façade architecture that will be more similar to character of the surrounding area. Façade improvement grant approved by Mainstreet design committee.</p>	
<p><u>C. Preservation of Significant Natural Features.</u> Judicious effort shall be used to preserve the integrity of the land, existing topography, and natural, historical, and architectural features as defined in this Ordinance, in particular wetlands designated /regulated by the Michigan Department of Environmental Quality, and, to a lesser extent, wetlands which are not regulated by the Department.</p>	<p>The proposal does not impact any significant natural features</p>	
<p><u>D. Streets.</u> All streets shall be developed in accordance with the City of Boyne City Subdivision Control Ordinance and City Municipal Standards, unless developed as a private road in accordance with the requirements of the City.</p>	<p>Not Applicable</p>	

**DEVELOPMENT SITE PLAN REVIEW STANDARDS  
FINDINGS OF FACT  
437 BOYNE AVE**

<p><u>E. Access, Driveways and Circulation.</u> Safe, convenient, uncongested, and well defined vehicular and pedestrian circulation within and to the site shall be provided. Drives, streets, parking and other elements shall be designed to discourage through traffic, while promoting safe and efficient traffic operations within the site and at its access points. All driveways shall meet the design and construction standards of the City. Access to the site shall be designed to minimize conflicts with traffic on adjacent streets, particularly left turns into and from the site. For uses having frontage and/or access on a major traffic route, as defined in the City of Boyne City Comprehensive Plan, the number, design, and location of access driveways and other provisions for vehicular circulation shall comply with the access management provisions of this Ordinance.</p>	<p style="text-align: center;">Existing driveway and circulation will be used.</p>	
<p><u>F. Emergency Vehicle Access.</u> All buildings or groups of buildings shall be arranged so as to permit necessary emergency vehicle access as required by the Fire Department, Ambulance Department and Police Department.</p>	<p style="text-align: center;">Emergency vehicle access is will not change.</p>	
<p><u>G. Sidewalks, Pedestrian and Bicycle Circulation.</u> The arrangement of public or common ways for vehicular and pedestrian circulation shall be connected to existing or planned streets and sidewalks/pedestrian or bicycle pathways in the area. There shall be provided a pedestrian circulation system which is separated from the vehicular circulation system. In order to ensure public safety, special pedestrian measures, such as crosswalks, crossing signals and other such facilities may be required in the vicinity of primary and secondary schools, playgrounds, local shopping areas, fast food/service restaurants and other uses which generate a considerable amount of pedestrian or bicycle traffic.</p>	<p style="text-align: center;">Existing sidewalk on Boyne Ave.</p>	
<p><u>H. Barrier-Free Access.</u> The site has been designed to provide barrier-free parking and pedestrian circulation.</p>	<p style="text-align: center;">Building has barrier free access.</p>	

**DEVELOPMENT SITE PLAN REVIEW STANDARDS  
FINDINGS OF FACT  
437 BOYNE AVE**

<p><u>L. Parking.</u> The number and dimensions of off-street parking [spaces] shall be sufficient to meet the minimum required by this Ordinance. However, where warranted by overlapping or shared parking arrangements, the Planning Commission may reduce the required number of parking spaces, as provided in this Ordinance.</p>	<p>Yard area on Stewart street will be improved for parking area. Total of 9 spaces provided. Total of 2,849 sqft of office space proposed. 1 space per 316 sqft, Required spaces for business or professional office use is 1 space per 350 sqft</p>	
<p><u>J. Loading.</u> All loading and unloading areas and outside storage areas, including refuse storage stations, shall be screened in accordance with this Ordinance.</p>	<p>No outdoor storage, no dumpster shown on plan.</p>	
<p><u>K. Landscaping, Screening, and Open Space.</u> The landscape shall be preserved in its natural state, insofar as practical, by removing only those areas of vegetation or making those alterations to the topography which are reasonably necessary to develop the site in accordance with the requirements of this Ordinance. Landscaping shall be preserved and/or provided to ensure that proposed uses will be adequately buffered from one another and from surrounding public and private property. Landscaping, landscape buffers, greenbelts, fencing, walls and other protective barriers shall be provided and designed in accordance with the landscaping provisions of this Ordinance. Recreation and open space areas shall be provided in all multiple-family residential and educational developments.</p>	<p>No additional screening is proposed</p>	
<p><u>L. Soil Erosion Control.</u> The site shall have adequate lateral support so as to ensure that there will be no erosion of soil or other material. The final determination as to adequacy of, or need for, lateral support shall be made by the Planning Director or City Engineer, and have a valid Charlevoix County Soil Erosion permit.</p>	<p>Not applicable</p>	

**DEVELOPMENT SITE PLAN REVIEW STANDARDS  
FINDINGS OF FACT  
437 BOYNE AVE**

<p><u>M. Stormwater Management.</u> Appropriate measures shall be taken to ensure that removal of surface waters will not adversely affect neighboring properties or the public storm drainage system. Provisions shall be made to accommodate stormwater which complements the natural drainage patterns and wetlands, prevent erosion and the formation of dust. Sharing of stormwater facilities with adjacent properties shall be encouraged. The use of detention/retention ponds may be required. Surface water on all paved areas shall be collected at intervals so that it will not obstruct the flow of vehicular or pedestrian traffic or create standing water. All such measures shall comply with the Charlevoix County Stormwater Ordinance.</p>	<p style="text-align: center;">Storm water to be directed towards storm sewer on Stewart St.</p>	
<p><u>O. Lighting.</u> Exterior lighting shall be arranged so that it is directed preferably downward onto the subject site and deflected away from adjacent properties. Lighting shall not impede the vision of traffic along adjacent streets. Flashing or intermittent lights shall not be permitted.</p>	<p style="text-align: center;">Additional lighting not shown on provided plan.</p>	
<p><u>P. Noise.</u> The site has been designed, buildings so arranged, and activities/equipment programmed to minimize the emission of noise, particularly for sites adjacent to residential districts.</p>	<p style="text-align: center;">Office space uses not anticipated to increase noise emissions.</p>	
<p><u>Q. Mechanical Equipment.</u> Mechanical equipment, both roof and ground mounted, shall be screened in accordance with the requirements of this Ordinance.</p>	<p style="text-align: center;">No exterior mechanical equipment proposed</p>	
<p><u>R. Signs.</u> The standards of the City of Boyne City's Sign Ordinance are met.</p>	<p style="text-align: center;">No additional signage proposed.</p>	

**DEVELOPMENT SITE PLAN REVIEW STANDARDS  
FINDINGS OF FACT  
437 BOYNE AVE**

<p><u>S Hazardous Materials or Waste.</u> For businesses utilizing, storing or handling hazardous material such as automobile service and automobile repair stations, dry cleaning plants, metal plating industries, and other industrial uses, documentation of compliance with state and federal requirements shall be provided.</p>	<p style="text-align: center;">No hazardous materials or waste</p>	
<p><u>T. Other Agency Reviews.</u> The applicant has provided documentation of compliance with other appropriate agency review standards, including, but not limited to, the Michigan Department of Natural Resources, Michigan Department of Environmental Quality, Michigan Department of Transportation, Charlevoix County Drain Commissioner, Northwest Michigan Community Health Agency, Charlevoix County Building Department, and other federal and state agencies, as applicable.</p>	<p style="text-align: center;">Other agency reviews as required</p>	
<p><u>U. Approval Process.</u> The development plan shall be reviewed by the Planning Commission. If disapproval is recommended, the Planning Commission shall cite reasons for such disapproval. If the Planning Commission finds a development plan not in conformity with this section, it may, at its discretion, return the development plan to the applicant with a written statement of the modifications necessary to obtain approval. Upon resubmission of the modified development plan, the Planning Commission shall review the plan. The Commission may approve, disapprove or approve subject to compliance with such modifications and conditions as may be deemed necessary to carry out the purpose of this Ordinance and other ordinances and resolutions of the City. If disapproved, the Planning Commission shall cite reasons for such disapproval.</p>		

**OCTOBER 2, 2018  
REGULAR MEETING**

RECORD OF THE PROCEEDINGS OF THE BOYNE CITY  
COMMISSION SPECIAL GOALS WORK SESSION MEETING  
DULY CALLED AND HELD AT BOYNE CITY HALL, 319 NORTH  
LAKE STREET, ON TUESDAY OCTOBER 2, 2018

**CALL TO ORDER**

Mayor Neidhamer called the meeting to order at 10:00 a.m.  
followed by the Pledge of Allegiance.

Present: Mayor Tom Neidhamer, Mayor Pro-Tem Ron Grunch,  
Commissioners Sally Page and Dean Solomon

Absent: Commissioner Hugh Conklin

Staff: Michael Cain, Cindy Grice, Scott McPherson,

Others: There were two citizens in attendance.

**GOALS**

City Commissioners further refined the goals as follows:

**Be excellent stewards of taxpayer funds.** Develop tools and processes to allocate City funds efficiently and better forecast future City financial needs and challenges

- Create a five year financial forecast model using internal and external sources with a 9 month to one year time frame
- Improve the City's Capital Improvement Plan process and product within two years.

**Engage our Community.** Get residents involved in Boyne City government more often. Make it easy for residents to learn about City policies, operations and actions.

- Update and upgrade City's website. Work on a social media strategy to Improve quality of email newsletter, social media communications, including processes to board and commission appointments.

**Increase housing availability.** Work with all segments of the community to develop and implement a common vision leading to a sustainable mix of housing options in and around Boyne City that maintains our community character. Align our City regulations and plans to support this vision.

- Inventory all available City properties for potential housing development
- Develop Property Maintenance Standards
- Review Planning & Zoning opportunities Master Plan to reduce barriers
- Examine short term rentals and community impact

**Protect Lake Charlevoix and Boyne River.** Protect and enhance lake and river water quality, especially impacts of storm water runoff.

- Engage regional partners and City engineer to :

1. Review already identified issues and recommended remedies
  2. Evaluate additional areas of concern
  3. Determine estimated costs for improvements and possible timeline
  4. Review City's practices along lakeshore and Boyne River
  5. Review development standards for both public and private
- Develop City storm water ordinance in cooperation with East Jordan, Charlevoix and other regional partners within one year.

**Keep Boyne City's economy strong and resilient.** Foster a strong local year-round economy that builds upon existing businesses and welcomes compatible ones. Focus efforts and resources to create family sustaining jobs. Enhance City plans and policies to further support business development.

- Determine a master plan creating community consensus.
- Develop and implement strategy for recruiting and retaining businesses creating family sustaining jobs

**Enhance recreational opportunities in Boyne City's parks and public spaces.** Complete current and planned recreation projects and develop a vision for future recreation programs.

- Catch up on maintenance backlog.
- Move forward with items that foster economic development as a priority.

## ADJOURNMENT

---

Motion by Mayor Neidhamer to adjourn the City Commission Goals Work Session of Tuesday, October 2, 2018 at 12:51 p.m.

---

Tom Neidhamer  
Mayor

---

Cindy Grice  
Clerk / Treasurer

Downtown Parking Study Implementation Plan		Time Frame				
		Immediate Action	As needed	0-3 Years	3-6 Years	6-10 Years
<b>Recommendations Summary</b>						
<b>1. Parking Management</b>						
1.1	Appoint a person to oversee the parking system.	✓				
<b>2. Parking Duration &amp; Allocation</b>						
2.1	Regular enforcement will need to be conducted to make sure that the vehicles are not parked beyond posted time limits.		✓			
2.2	Work with business owners to get employees to park in the recommended long-term parking during the summer months and special events to help provide additional customer spaces in the core area		✓			
2.3	Change the parking duration to three hours and add three hour duration signs to Block 7D (1st two spaces off Water Street), 11A, 10C, 9A and 8B.		✓			
2.4	Work to add loading zones for large truck deliveries that convert back to three-hour parking after a designated time period throughout the downtown.		✓			
2.5	Consider adding loading zone spaces (15 to 30 minute) at either the ends of the block or the middle stall on all blocks where these are not currently provided.		✓			
2.6	Lots need to be well lighted and well signed in order to encourage people to utilize off-street parking.		✓			
2.7	During the peak times work with business owners to encourage employees to not park in the lot on Block 10 along Ray Street, instead park in the on-street parking around Blocks 2, 4, 5 and 20.		✓			
2.8	Work with Boyne City Municipal Airport to see if a plan can be developed for Boyne Thunder to provide a parking area for the boats/boat trailers.		✓			
2.9	Consider using the overflow lot between City Hall and the baseball diamond for RV's and potentially overflow boat trailer parking					
<b>3. Residential Parking /Overnight Parking</b>						
3.1	Create a residential parking flyer clearly defining residential parking locations approved for overnight parking.	✓				
<b>4. Marketing</b>						
4.1	Develop flyers that can be distributed to all parking users, customers/visitors, employees, residents and special event attendees.	✓				
<b>5. Special Event Parking</b>						
5.1	Develop a flyer that can be distributed to businesses and purchase sandwich boards to be used as temporary wayfinding signs during special events.		✓			
<b>6. Parking Signs</b>						
6.1	Name all public lots and add introduction signs to all public lots. The text should be large enough to read while driving.	✓				
6.2	Rich & Associates recommends the addition of a family of parking wayfinding (three sign types Boyne City currently has vehicular wayfinding) in the downtown.			✓		
6.3	All duration parking signs on-street and off-street should be consistent in color and text. They should also be placed at a height that will not be obstructed by an SUV parking in front of the sign.			✓		
6.4	Unauthorized parking duration signs place on buildings degrade the system and create confusion and frustration. Work with business owners to stop the trend of placing parking duration signs in front of public parking.	✓				

Downtown Parking Study Implementation Plan		Time Frame				
		Immediate Action	As needed	0-3 Years	3-6 Years	6-10 Years
<b>Recommendations Summary</b>						
<b>7. Pedestrian Enhancements &amp; Activity</b>						
7.1	Follow landscaping criteria outlined in the land use ordinance for all parking lots in the downtown (public and private) in order to enhance pedestrian experience in well lighted and landscaped parking lots. This provides a perception of safety and provides clearly defined areas for cars and pedestrians.		✓			
7.2	Encourage shared dumpsters/compactors/grease bins in lots that have several businesses surrounding the lot.		✓			
<b>8. Bicycle Racks</b>						
8.1	Add additional bicycle racks to the downtown following the guidelines provided.		✓			
<b>9. Parking Enforcement</b>						
9.1	Consider conducting peak season enforcement of the short term parking spaces. Use Police staff until budgeting allows for a part-time PEO.			✓		
9.2	PEO's should use handheld parking ticket writers that track license plate numbers and print tickets, allowing the use of courtesy tickets.			✓		
9.3	PEO's should be dedicated to parking duties as an ambassador of the downtown, only being reassigned during emergencies or special circumstances that may arise.	✓				
<b>10. Parking Fines</b>						
10.1	Adopt the recommended fine schedule along with courtesy tickets.			✓		
10.2	It is recommended that all fines revenue go into the parking fund.	✓				
<b>11. Maintenance of Parking Spaces On-street and Off-street</b>						
11.1	Work with the Chamber and the Main Street program to develop a business text alert system that allows the City to share important information.	✓				
11.2	Develop a maintenance schedule for the lots to keep up with maintenance needs and help budget yearly costs.	✓				
<b>12. Create a Sinking Fund for Maintenance and Upgrades to the Parking System</b>						
12.1	Create a sinking fund for maintenance and upgrades to the parking system.	✓				
<b>13. Valet Parking</b>						
13.1	Develop a policy on Valet parking.		✓			
<b>14. Discourage the Development of Any New Private Parking Lots in the Downtown that are not Shared Use Parking</b>						
14.1	The City should continue to discourage the development of any new private parking lots in the downtown that are not for residential use or public parking and continue to encourage the use of the ordinance allowing shared use parking.	✓				
<b>15. Work with Private Parking Lot Owners in the Downtown to Create Shared Use Parking.</b>						
15.1	City should work with owners of private lots to allow for public shared use of the private parking areas where possible.		✓			



# Boyne City

# Parking Study

## Final Report



Submitted by



**Boyne City, Michigan**



**RICH & ASSOCIATES**  
PARKING CONSULTANTS  
[www.richassoc.com](http://www.richassoc.com)

September, 2018

## Table of Contents

### Executive Summary

### Introduction

Study Area.....	1
Map 1 – Study Area.....	2
Map 1.2 - Core Study Area.....	3

### Analysis.....

Parking Inventory.....	4
Table A – Existing Supply.....	5
Table B - Supply / Duration.....	5
Table C – Parking Supply.....	6
Map 2 – Parking Supply.....	7

### Turnover & Occupancy Analysis .....

Turnover.....	8
Table D – Parking Turnover Summary June 28, 2018.....	9
Map 3 – Parking Stays Beyond 2-Hours.....	10

### Occupancy.....

Table E - Occupancy Summary – June 28, 2018.....	11
Graph 1 – Occupancy Total.....	12
Graph 2 – Occupancy Counts On-Street vs. Off-Street.....	12
Table F – Occupancy Findings.....	13
Map 4 – Occupancy June 28, 2018 – 9AM -11AM.....	14
Map 4.1 - Occupancy June 28, 2018 – 11AM -1PM.....	15
Map 4.2 - Occupancy June 28, 2018 – 1PM -3PM.....	16
Map 4.3 - Occupancy June 28, 2018 – 3PM -5PM.....	17
Map 4.4 - Occupancy June 28, 2018 – 5PM -7PM.....	18
Map 4.5 - Occupancy June 28, 2018 – 7PM -9PM.....	19

### Core Occupancy.....

Graph 3 – Core Area Occupancy Totals.....	20
Graph 4 – Core Area Occupancy On-Street and Off-Street.....	21
Table G – Core Area Occupancy Summary.....	21

---

Occupancy Summary.....	22
Parking Demand Calculations.....	22
Parking Need.....	23
Table H - Parking Demand Matrix.....	26
Table I – Core Area Parking Demand.....	27
Map 5 – Surplus/Deficit Current.....	28
Future Demand.....	29
Map 5.1 –Surplus/Deficit Future 5 Year.....	30
Map 5.2 –Surplus/Deficit Future 10 Year.....	31
5-Year Scenario – Potential Development Sites.....	32
10-Year Scenario – Potential Development Sites.....	32
Map 6 – Potential Development Sites.....	33
Public Input.....	34
Preliminary Recommendations.....	35
Parking Recommendations Summary.....	36
Parking Management.....	38
Parking Duration & Allocation.....	38
Map 7 Walking Distance.....	42
Residential Parking / Overnight Parking.....	44
Marketing.....	45
Sample Brochure.....	46
Special Event Parking.....	48
Parking Signs.....	49
Pedestrian Enhancements & Activity.....	51
Bicycle Racks.....	52
Parking Enforcement.....	53
Parking Fines.....	55
Maintenance of Parking Spaces On-Street and Off-Street.....	56
Create a Sinking Fund for Maintenance and Upgrades to the Parking System.....	57
Valet Parking.....	57
Discourage the Development of any New Private Parking Lots Downtown.....	58

Work with Private Lot Owners in The Downtown to Create  
Shared Use Parking.....59

Map 8 – Parking Recommendations.....60

New Parking.....61

## EXECUTIVE SUMMARY

This parking study, serves to examine the downtown existing parking system from both a qualitative and quantitative standpoint. The study will be used as a tool in evaluation of strategic infill development sites. The purpose of this parking study is to assess the current and future parking conditions of downtown Boyne City within a defined study area. The results of this study include a parking demand model detailing current and future needs along with recommendations for improvements to the parking system including demand management strategies, allocation, time restrictions, signage and when and if new parking is needed.

## STUDY AREA

Rich & Associates evaluated the parking conditions, supply and activity in the study area along with blocks just outside the study boundaries to determine potential impacts and parking supply opportunities. There are a total of 21 blocks that make up this study area, though the focus of the study is in the core downtown area

## PARKING SUPPLY

The following table summarizes the existing parking supply in the study area. There are a total of 1,716 parking spaces in the study area. Of these spaces 526 are on-street spaces and 615 are off-street public spaces. There are 575 privately controlled spaces.

STUDY AREA			
<b>PUBLIC PARKING SUPPLY</b>			
	ON-STREET	526	31%
	OFF-STREET	615	36%
	<b>PUBLIC PARKING TOTALS</b>	<b>1,141</b>	<b>67%</b>
<b>PRIVATE PARKING SUPPLY</b>			
	<b>PRIVATE PARKING TOTALS</b>	<b>575</b>	<b>33%</b>
	<b>TOTAL PARKING SUPPLY</b>	<b>1,716</b>	

Boyne City manages and controls 67% of the parking in the study area. When we focus in on the core area the percentage of public parking increases to 69%. Based on Rich & Associates experience and best practices, we have found that to successfully manage municipal parking it is desirable for the municipality to have control of at least 50% of the supply. This allows the municipality to effectively manage parking in terms of allocation, changing demand, potential market pricing, and allows the parking to be enforced with greater efficiency. Boyne City exceeds this benchmark.

<b>CORE AREA</b>			
<b>PUBLIC PARKING SUPPLY</b>			
	ON-STREET	367	46%
	OFF-STREET	176	22%
<b>PUBLIC PARKING TOTALS</b>		<b>543</b>	<b>69%</b>
<b>PRIVATE PARKING SUPPLY</b>			
<b>PRIVATE PARKING TOTALS</b>		<b>249</b>	<b>31%</b>
<b>TOTAL PARKING SUPPLY</b>		<b>792</b>	

## TURNOVER & OCCUPANCY

Fieldwork for the study included a turnover and occupancy study conducted by Rich & Associates' staff. This study involved an examination of on-street and off-street parking occupancies and vehicle movements encompassing both daytime and evening hours. Parking was observed in both public and private areas. The goal of the turnover and occupancy analysis is to observe a large portion of the overall parking system, not necessarily the entire supply. The turnover and occupancy study occurred on Thursday, June 28, 2018 between the hours of 9:00AM and 9:00PM.

## TURNOVER

Turnover is an indicator of how often a parking stall is being used by different vehicles throughout the course of the day. Turnover is most relevant to the short-term customer trying to find parking for a quick errand. If this customer is unable to find a convenient space, they might not stop to patronize the business. The following table summarizes the results of the turnover findings.

<b>CORE PARKING TURNOVER SUMMARY JUNE 28, 2018</b>		
A SAMPLE OF ON STREET SPACES IN THE CORE AREA		
VEHICLES REMAINING LESS THAN 2 HOURS	604	88%
VEHICLES REMAINING BETWEEN 2 AND 4 HRS	44	6%
VEHICLES REMAINING BETWEEN 4 AND 6 HRS	14	2%
VEHICLES REMAINING BETWEEN 6 AND 8 HRS	20	3%
VEHICLES REMAINING BETWEEN 8 AND 10 HRS	5	<1%
VEHICLES REMAINING BETWEEN 10 AND 12 HRS	1	<1%
TOTAL NUMBER OF VEHICLES OBSERVED	688	
TOTAL NUMBER OF STALLS OBSERVED FOR TURNOVER	262	
Source: Rich & Associates Field Observations		

## OCCUPANCY

Occupancy is an important aspect of parking because it helps us to understand the dynamic of how demand fluctuates throughout the day.

PARKING TYPE	# SPACES	9:00AM-11:00AM	% OCC.	11:00AM-1:00PM	% OCC.	1:00PM-3:00PM	% OCC.	3:00PM-5:00PM	% OCC.	5:00PM-7:00PM	% OCC.	7:00PM-9:00PM	% OCC.
PUBLIC ON-STREET	554	192	35%	252	45%	263	47%	244	44%	201	36%	209	38%
PUBLIC OFF-STREET	523	101	19%	137	26%	160	31%	197	38%	165	32%	198	38%
PRIVATE OFF-STREET	585	186	32%	209	36%	223	38%	206	35%	171	29%	159	27%
<b>TOTALS</b>	<b>1,662</b>	<b>479</b>	<b>29%</b>	<b>598</b>	<b>36%</b>	<b>646</b>	<b>39%</b>	<b>647</b>	<b>39%</b>	<b>537</b>	<b>32%</b>	<b>566</b>	<b>34%</b>

Key observations from the occupancy counts:

- The peak occupancy was 39% which occurred during two consecutive circuits from 1:00PM -5:00PM, with the counts only being separated by one vehicle.
- The on-street parking had higher occupancies than the off-street throughout the day.
- There were areas that were at or near 100% occupancy, though there were areas nearby with available parking.

## CORE OCCUPANCY

When we look at the core area, on-street occupancies were higher during all of the six circuits. Within the core, on-street parking peaked at 58% during the lunch circuit (1:00PM) with a small dip until 7:00PM where the occupancy increased 56%. The 9:00AM and 5:00PM circuits were the only two circuits below 50% occupancy for the on-street parking.

CORE AREA	# SPACES	9:00AM-11:00AM	% OCC.	11:00AM-1:00PM	% OCC.	1:00PM-3:00PM	% OCC.	3:00PM-5:00PM	% OCC.	5:00PM-7:00PM	% OCC.	7:00PM-9:00PM	% OCC.
PUBLIC ON-STREET	395	139	35%	217	55%	230	58%	214	54%	184	47%	220	56%
PRIVATE OFF-STREET	147	55	37%	87	59%	96	65%	79	54%	77	52%	77	52%
PUBLIC OFF-STREET	240	64	27%	76	32%	82	34%	78	33%	93	39%	78	33%
<b>TOTALS</b>	<b>782</b>	<b>277</b>	<b>31%</b>	<b>395</b>	<b>44%</b>	<b>430</b>	<b>48%</b>	<b>406</b>	<b>45%</b>	<b>406</b>	<b>45%</b>	<b>425</b>	<b>47%</b>

## TURNOVER AND OCCUPANCY SUMMARY

The number of spaces occupied at peak time in downtown Boyne City are relatively low. The peak overall occupancy was 39% with 647 of the 1,622 spaces occupied. When we analyzed the results for the core area we see that the peak overall occupancy increases to 52%, with 408 of the 782 spaces occupied. This tells us that there is still sufficient parking in the downtown area available during peak hours, though all parking may not be available for all users. Additionally, the public parking may not be located as the most convenient spaces for all destinations.

## PARKING DEMAND

The current daytime parking situation in the entire study area as calculated showed an overall surplus of 765 spaces. When looking at the core area this surplus is only 302 spaces. Currently there is parking located within a couple of blocks of all areas to handle shortages. As development continues and additional businesses come to downtown Boyne City, there is the potential for an increase in the intensity (number of people visiting each land use) and of overall land use. Therefore, it is important to constantly monitor the parking system and update the demand model with any changes to the parking supply or land use. The updated model should then be compared to occupancy counts from the parking system.

Shared use is an important component of parking that allows municipalities to develop less parking for each land use due to the ability to park once and visit multiple locations. There is a higher concentration of private parking in the downtown that is not shared parking. Much of the private parking was underutilized during the occupancy analysis. This is why it is important that a municipality control at least 50% of the parking supply in a downtown, so it can adjust

allocation and durations to accommodate all users of the parking system. The other issue that should be noted is that the majority of permit spaces are leased specifically to a person or business and cannot be used by anyone else. This means that the majority of the off-street public parking supply is not available for shared use.

## CORE AREA FUTURE PARKING DEMAND

When projecting the future demand scenarios, we used a rate of 40% re-occupancy of vacant space in the five-year projections and 80% in the 10-year projections. With only 30,820 square feet of vacant space in the downtown, the future numbers do not change much. Along with showing the re-occupancy of the vacant space for the future projections, Rich & Associates was directed to examine potential scenarios with in-fill development occurring on current parking lots and other potential sites.

The Five-Year Scenario in the entire study area has a surplus of 499 spaces with the core area showing a surplus of only 187 spaces. While the 10-Year Scenario shows the entire study area surplus reduced to 275 spaces with the core area surplus turning into a deficit of -31 spaces.

These numbers are all speculative and will most likely not be the actual square footages proposed. With that being said, it is important to understand the potential impact of developments on these sites along with the impact of losing public parking lots.

The Five-Year Scenario is workable if parking is managed better and employees are parking where they should. It will be important to provide direction along with education on where employees can park. The 10 Year Scenario will take strategic planning with a well run parking system and providing employee parking close to the core. This level of activity in the downtown will need parking enforcement conducted on a regular basis in order to keep the most convenient parking available for customers and visitors of the downtown.

A	P	Q	R	S	T
TOTALS	DEMAND	PARKING	SURPLUS/ SURPLUS/ DEFICIT	PROJECTED SURPLUS/ DEFICIT	PROJECTED SURPLUS/ DEFICIT
	CURRENT	SUPPLY	CURRENT	5 YEAR (40%)	10 YEAR (80%)
PARKING GENERATION RATIOS					
2	0	11	11	11	11
6	74	122	48	48	-11
7	43	65	22	-3	-3
8	70	77	7	7	7
9	18	37	19	-15	-17
10	74	110	36	-14	-53
11	16	90	74	70	68
12	38	51	13	13	13
14	110	77	-33	-37	-38
15	22	37	15	15	15
16	19	73	54	54	-60
18	35	72	37	37	37
<b>TOTALS</b>	<b>520</b>	<b>822</b>	<b>302</b>	<b>187</b>	<b>(31)</b>
	(STALLS)	(STALLS)	(STALLS)	(STALLS)	(STALLS)

Future development scenarios (5 and 10 year) are detailed on pg. 32, loss and gain of parking and new square footage are calculated in 5 and 10 yr. column

## PUBLIC INPUT

Public input was solicited in the form of several meetings with stakeholders of the downtown. Discussions with stakeholders included questions specific to where they worked, businesses they owned, lived or had encounters with parking in the downtown. The Preliminary Report was also presented to Council, Staff and the general public. All comments given were taken into account for the final version of the report.

## RECOMMENDATIONS

The recommendations presented are intended to enhance the existing supply of parking through operational, management, parking pricing and allocation changes. While aimed primarily at increasing the efficiency of the parking system, the recommendations are

comprehensive and provide a holistic approach to improving parking in the downtown today and provide a plan for accommodating future infill and development of the downtown study area.

The recommendations provided in this report are a set of tools that Boyne City staff can use to manage the parking system. Boyne City will also be given the demand matrix chart to maintain and manage the parking surplus and deficit in the downtown. This chart can be updated with new development, vacancy or in-fill, and any changes to the parking inventory. The chart allows staff to understand the impacts of potential development and allocate parking and durations to meet the needs in the downtown.

A parking system is not just about parking vehicles, it also involves the walkability of a downtown, signage, enforcement, lighting as well as marketing parking to business owners, employees and customers/visitors. The utilization of lots can depend on any or all of these factors, as well as the overall condition of a lot. Fundamentally, these issues can impact a parking system and therefore downtown economics in general. A recommendation summary can be found on **pages 36-37**.

## NEW PARKING

Rich & Associates was asked to determine locations for new parking. There is currently a surplus of parking in the downtown and at this point additional parking would only be necessary when there are re-occupancies of vacant space and additional development occurs. When the time comes for additional parking it is recommended to look for on-street options first. There is the opportunity to add additional spaces along Lake Street following the pattern of the existing 90 degree spaces near the public restrooms. There was some discussion of moving Lake Street and developing the parking into the east side of the street in order to keep views for future development. Either option will work and it will be up to the City and residents to determine if the cost of moving the road will be necessary for development.

## DEFINITIONS

The following are definitions used for the analysis:

- **Parking Supply** – The number of parking spaces available for use by a specified group or groups of individuals (i.e. shoppers, employees, etc.).
- **Turnover** - Turnover is the number of vehicles that occupied a parking space in a particular period. For example, if a parking lot has 100 spaces and during the course of the day, 250 different vehicles occupied the lot, then the turnover is two and a half times (2.5).
- **Occupancy** - The number of vehicles observed in a specific lot or block face represented as a percentage of spaces occupied.
- **Occupancy Rate** – The percentage of all parking spaces with vehicles parked in them at a given time.
- **Circuit** - A circuit refers to the two-hour period between observances of any one particular parking space. For the turnover and occupancy study, a defined route was

developed for each survey vehicle. One circuit of the route took approximately two hours to complete and each space was observed once during that circuit.

- **Block Face** - A number was assigned to each block within the study area. Each block is then referenced by its block number and by a letter (A, B, C or D). The letter refers to the cardinal face of the block; with (A) being the north face, (B) the east face, (C) the south face and (D) the west face. Therefore, a block designated as 1A would refer to the north face of block 1.
- **Parking Demand** – The number of parking spaces generated by a single-purpose building, multi-purpose building, group of buildings or outdoor amenity.
- **Parking Need** – Represents the number of parkers who need to be accommodated in a given block after the use of alternative parking facilities is considered. Use is affected by price, location, accessibility and user restriction.

## INTRODUCTION

The Michigan Municipal League and the Michigan Economic Development Corporation contracted with Rich & Associates on behalf of the City of Boyne City to prepare a Downtown Parking Study. This parking study, serves to examine the downtown existing parking system from both a qualitative and quantitative standpoint. The study will be used as a tool in evaluation of strategic infill development sites.

The purpose of this parking study is to assess the current and future parking conditions of downtown Boyne City within a defined study area. The results of this study include a parking demand model detailing current and future needs along with recommendations for improvements to the parking system including demand management strategies, allocation, time restrictions, signage and when and if new parking is needed. The recommendations are intended for all users of the parking system including locals, visitors, employees and downtown residents.

## STUDY AREA

Rich & Associates evaluated the parking conditions, supply and activity in the study area along with blocks just outside the study boundaries to determine potential impacts and parking supply opportunities. There are a total of 21 blocks that make up this study area, though the focus of the study is in the core downtown area identified as blocks 6-12, 14-16 and 18 shown in on **page 3**.



**CITY OF BOYNE  
PARKING STUDY**

Boyne City, Michigan

**RICH & ASSOCIATES  
PARKING CONSULTANTS**

2677 Northwestern Hwy. Suite 208  
Southfield, Michigan 48033  
Southfield, MI 48033 248.263.5050  
Lutz, FL 813.949.9866

ARCHITECTS - ENGINEERS - PLANNERS



06-26-18 sar

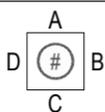


BLOCK  
NUMBER

**LEGEND:**

— STUDY AREA

**BLOCK FACE KEY PLAN:**



Sheet Title:

**STUDY  
AREA**

MAP Number:

**MAP 1**



**CITY OF BOYNE  
PARKING STUDY**

Boyne City, Michigan

**RICH & ASSOCIATES**  
PARKING CONSULTANTS

26677 Northwestern Hwy, Suite 206  
Southfield, Michigan 48033

Southfield, MI Lutz, FL  
748.353.9289 813.949.9860

**ARCHITECTS • ENGINEERS • PLANNERS**

**RICH**

#  
BLOCK NUMBER

00.14.1R car

**LEGEND:**

— CORE STUDY AREA

**BLOCK FACE KEY PLAN:**

A  
D # B  
C

Sheet Title:

**CORE STUDY  
AREA**

MAP Number:

**MAP 1.2**

Pg. 3

## ANALYSIS

This analysis provides an assessment of how the existing parking system is operating, the current conditions that affect the system and how potential new developments may affect the system in the future. A primary goal of this analysis is to determine if new parking may be required based on current and anticipated future developments. In completing this study, Rich & Associates compiled and reviewed turnover and occupancy data, parking inventories and land use inventories to develop a working demand model. The analysis was further refined based on our previous experience with similar communities.

The process consisted of two parts, the first part of the analysis included a determination of the current parking demand by block, based on the building inventory provided by Boyne City staff and parking generation factors calculated per 1,000 square feet of gross floor area. The demand was compared to the available supply and the resulting surplus or deficit determined on a block-by-block basis.

The second part of the analysis involved comparing the parking surplus and deficit patterns to the observed conditions as determined by the turnover and occupancy data. This comparison offered a benchmark for calibration of the surplus and deficit data. Additionally, this information provides an understanding of the problem areas and where the issues are occurring both on-street and off-street.

## PARKING INVENTORY

Initial field work for this study entailed a review of the parking supply within the study area. Within the downtown, the supply consists of a mix of on-street and off-street parking. The on-street spaces are free, with a mix of two hour and unlimited parking. The off-street parking supply consists of a mix of public and private surface lots, with the majority of the public parking available without a time constraint.

**Table A and B on page 5**, summarizes the existing parking supply in the study area along with the core area. **Table C on page 6** details the parking throughout the study area. There are a total of 1,716 parking spaces in the study area. Of these spaces 526 (31%) are on-street spaces and 615 (36%) are public off-street spaces. The remaining 575 (33%) spaces are private.

**Table A**

<b>STUDY AREA</b>			
<b>PUBLIC PARKING SUPPLY</b>			
	ON-STREET	526	31%
	OFF-STREET	615	36%
	<b>PUBLIC PARKING TOTALS</b>	<b>1,141</b>	<b>67%</b>
<b>PRIVATE PARKING SUPPLY</b>			
	<b>PRIVATE PARKING TOTALS</b>	<b>575</b>	<b>33%</b>
<b>TOTAL PARKING SUPPLY</b>		<b>1,716</b>	

Boyne City manages and controls 67% of the parking in the study area. When we focus in on the core area the percentage of public parking increases to 69%. Based on Rich & Associates experience and best practices, we have found that to successfully manage municipal parking it is desirable for the municipality to have control of at least 50% of the supply. This allows the municipality to effectively manage parking in terms of allocation, changing demand, potential market pricing, and allows the parking to be enforced with greater efficiency. Boyne City exceeds this benchmark.

**Table B**

<b>CORE AREA</b>			
<b>PUBLIC PARKING SUPPLY</b>			
	ON-STREET	367	46%
	OFF-STREET	176	22%
	<b>PUBLIC PARKING TOTALS</b>	<b>543</b>	<b>69%</b>
<b>PRIVATE PARKING SUPPLY</b>			
	<b>PRIVATE PARKING TOTALS</b>	<b>249</b>	<b>31%</b>
<b>TOTAL PARKING SUPPLY</b>		<b>792</b>	

**Table C** on **page 6** is a detailed supply inventory listing types and durations of parking by each block. **Map 2** is a spatial view of the parking supply. In cases where parking spaces were not marked (on-street and off-street), the number of spaces were estimated.

**Table C**

<b>BLOCK #</b>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
<b>PUBLIC ON-STREET</b>																						
15 MINUTE	0	0	0	0	0	8	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	11
2 HOUR	0	0	0	0	0	16	12	0	12	35	41	0	0	14	6	0	0	13	0	0	0	149
UNLIMITED	0	15	6	30	10	17	24	16	20	10	12	8	0	27	21	27	9	15	43	49	0	359
BARRIER FREE (HC)	0	0	0	0	0	1	4	0	0	1	0	0	0	1	0	0	0	0	0	0	0	7
																						<b>526</b>
<b>OFF-STREET</b>																						
2 HOUR	0	0	0	0	0	0	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	27
RESERVED	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	46
UNLIMITED	80	111	0	0	0	44	0	0	0	54	0	0	69	0	0	44	0	0	0	0	0	402
OVERFLOW (+/-)	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	60
BARRIER FREE (HC)	10	4	0	0	0	2	0	2	0	1	0	0	0	0	0	2	0	0	0	0	0	21
TRAILER	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	59
																						<b>615</b>
<b>PRIVATE</b>																						
OFF-STREET	0	0	116	40	18	34	25	30	5	9	37	43	64	35	10	0	20	51	22	16	0	575
																						<b>575</b>
<b>SUMMARY</b>																						
	176	136	122	70	28	122	65	77	37	110	90	51	133	77	37	73	29	80	65	65	73	<b>1716</b>
SOURCE: RICH & ASSOCIATES																						



<p><b>CITY OF BOYNE PARKING STUDY</b></p> <p>Boyne City, Michigan</p>	<p><b>RICH &amp; ASSOCIATES</b> PARKING CONSULTANTS</p> <p>26877 Northwestern Hwy, Suite 208 Southfield, Michigan 48033</p> <p>Southfield, MI 248.353.3060 Lutz, FL 813.949.9868</p> <p>ARCHITECTS • ENGINEERS • PLANNERS</p> <p>09-14-18 sar</p>	<p><b>LEGEND:</b></p> <ul style="list-style-type: none"> <li><span style="border-bottom: 2px solid orange; width: 20px; display: inline-block;"></span> STUDY AREA</li> <li><span style="border-bottom: 2px solid yellow; width: 20px; display: inline-block;"></span> CORE STUDY AREA</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: red; margin-right: 5px;"></span> PRIVATE / RESERVED LOTS</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: blue; margin-right: 5px;"></span> PUBLIC / RESERVED LOTS</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: green; margin-right: 5px;"></span> PUBLIC ON-STREET (UNLIMITED)</li> <li><span style="display: inline-block; width: 10px; height: 10px; background-color: pink; margin-right: 5px;"></span> 2 HOUR - ON STREET</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px dashed orange; margin-right: 5px;"></span> 15 MINUTE - ON STREET</li> <li><span style="display: inline-block; width: 10px; height: 10px; border: 1px dashed orange; border-radius: 50%; margin-right: 5px;"></span> BARRIER FREE</li> </ul> <p><b>BLOCK FACE KEY PLAN:</b></p> <div style="text-align: center;"> </div>	<p>Sheet Title:</p> <h1 style="text-align: center; margin: 0;">PARKING SUPPLY</h1>	<p>MAP Number:</p> <h2 style="text-align: center; margin: 0;">MAP 2</h2> <p style="text-align: right;">Pg. 7</p>
---------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------

## TURNOVER & OCCUPANCY ANALYSIS

As previously noted, Rich & Associates conducted a turnover and occupancy analysis in the study area. This study involved an examination of the on-street and off-street parking supply. Additionally, we observed vehicle movements throughout the day, from morning until early evening. Observations occurred in both public and private parking areas in order to understand how the system was working. The goal of the turnover and occupancy analysis is to observe a large portion of the overall parking system, not necessarily the entire supply.

The occupancy study occurred on Thursday, June 28, 2018 between the hours of 9:00AM and 9:00PM. Thursday was chosen to conduct the analysis because Thursdays are most often an overall average day to provide a typical benchmark of activity for the study.

### TURNOVER

The turnover portion of the analysis, where license plate numbers were recorded, applied mostly to on-street and a few off-street spaces in the downtown, with most of those spaces being two hour time limited spaces. These same spaces were observed during each two-hour circuit. This is done to determine how long specific vehicles were parked in the most convenient customer spaces. This also allows us to see if any vehicle was parked for a long period of time in a time limited space. At the same time, the turnover information also yields occupancy results for the parking area, and therefore, for each circuit a composite occupancy can be derived.

Turnover is an indicator of how often a parking stall is being used by different vehicles throughout the course of the day. Turnover is most relevant to the short-term customer trying to find parking for a quick errand. If this customer is unable to find a convenient space, they might not stop to patronize the business. **Table D** on the following page summarizes the results of the turnover findings.

There were 262 parking spaces observed for turnover between the hours of 9:00AM to 9:00PM. The turnover for this day was just over 2.6. Rich & Associates is of the opinion that this number is low. Turnover can be low for two reasons: 1) when vehicles are parking for extended periods in the same space, or 2) the overall on-street occupancy is low. We are of the opinion that the turnover is low because of low occupancy. There were areas with higher occupancy, though the overall occupancy for 262 observed spaces was not high.

Although vehicles stayed beyond two hours, not all stalls observed had a two-hour time limit and thus there is not a reason for all vehicles to move. **Map 3** details the locations where people are staying beyond two hours. The two-hour time limited spaces are color coded differently than the on-street spaces without time limits. The spaces that are not two-hour were observed because these spaces are close and convenient to customers and visitors and we wanted to see if and how many employees were parking in these spaces.

There were a total of 84 vehicles parked beyond two hours. There were 44 vehicles that stayed between two and four hours, 14 vehicles were observed in the same space between four and six hours and 26 additional vehicles were observed parked in the same space for over six hours. This means that during the course of the day approximately 12% of the 688 vehicles observed in on-street space stayed beyond two hours.

**Table D**

<b>CORE PARKING TURNOVER SUMMARY JUNE 28, 2018</b>		
A SAMPLE OF ON STREET SPACES IN THE CORE AREA		
VEHICLES REMAINING LESS THAN 2 HOURS	604	88%
VEHICLES REMAINING BETWEEN 2 AND 4 HRS	44	6%
VEHICLES REMAINING BETWEEN 4 AND 6 HRS	14	2%
VEHICLES REMAINING BETWEEN 6 AND 8 HRS	20	3%
VEHICLES REMAINING BETWEEN 8 AND 10 HRS	5	<1%
VEHICLES REMAINING BETWEEN 10 AND 12 HRS	1	<1%
TOTAL NUMBER OF VEHICLES OBSERVED	688	
TOTAL NUMBER OF STALLS OBSERVED FOR TURNOVER	262	
Source: Rich & Associates Field Observations		



**CITY OF BOYNE  
PARKING STUDY**

Boyne City, Michigan

**RICH & ASSOCIATES**  
PARKING CONSULTANTS

21977 Northland Drive, Suite 206  
Southfield, MI 48033  
248.253.5980

ARCHITECTS • ENGINEERS • PLANNERS

09-14-18 sar

**#**  
BLOCK  
NUMBER

**LEGEND:**

— STUDY AREA

**BLOCK FACE KEY PLAN:**

A  
D # B  
C

**#** VIOLATION OF  
2 HR TIME LIMIT

**#** BEYOND 2 HRS  
NOT POSTED 2 HRS.

Sheet Title:

**PARKING STAYS  
BEYOND 2 HRS**

MAP Number:

**MAP 3**

Pg. 10

## OCCUPANCY

Occupancy is an important aspect of parking because it helps us to understand the dynamic of how demand fluctuates throughout the day. The occupancy data is used by Rich & Associates to understand how the parking is operating and to calibrate the parking demand model. **Graph 1, 2, Table E** and **Maps 4, 4.1, 4.2, 4.3, 4.4 and 4.5** are the summary results of the occupancy study. The peak occupancy occurred between 1:00PM and 5:00PM, with both the 1:00PM – 3:00PM and 3:00PM – 5:00PM circuit at 39% occupancy. **Map 4.2** and **4.3** on **page 16** and **17** show the peak occupancies for both circuits. The full occupancy counts can be found in tabular form on **page 13**.

**Table E**  
**Occupancy Summary**  
**Thursday June 28, 2018**

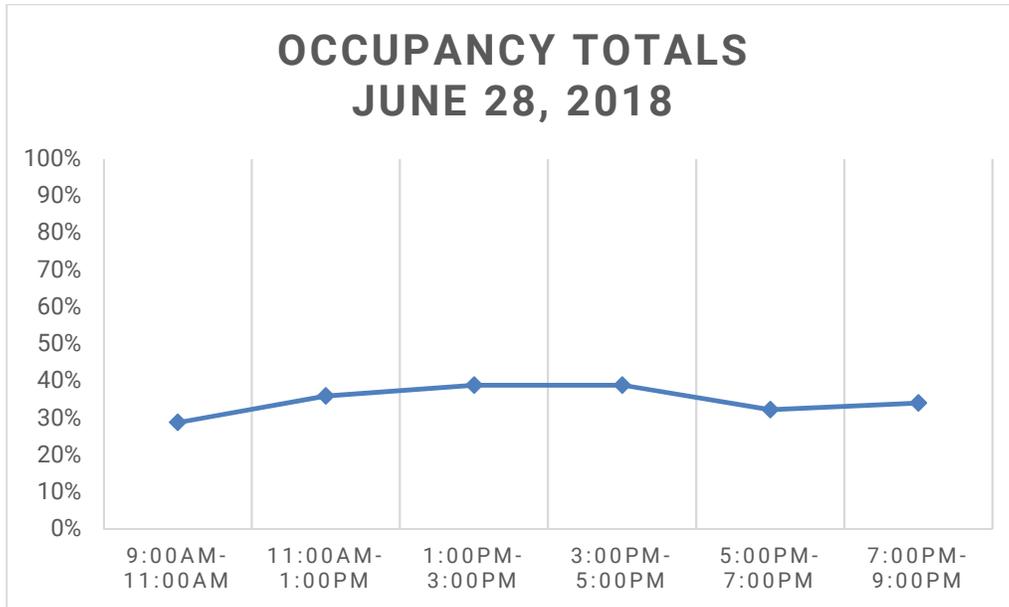
PARKING TYPE	# SPACES	9:00AM-11:00AM	% OCC.	11:00AM-1:00PM	% OCC.	1:00PM-3:00PM	% OCC.	3:00PM-5:00PM	% OCC.	5:00PM-7:00PM	% OCC.	7:00PM-9:00PM	% OCC.
PUBLIC ON-STREET	554	192	35%	252	45%	263	47%	244	44%	201	36%	209	38%
PUBLIC OFF-STREET	523	101	19%	137	26%	160	31%	197	38%	165	32%	198	38%
PRIVATE OFF-STREET	585	186	32%	209	36%	223	38%	206	35%	171	29%	159	27%
<b>TOTALS</b>	<b>1,662</b>	<b>479</b>	<b>29%</b>	<b>598</b>	<b>36%</b>	<b>646</b>	<b>39%</b>	<b>647</b>	<b>39%</b>	<b>537</b>	<b>32%</b>	<b>566</b>	<b>34%</b>

*\*Number of spaces includes areas outside the study area, on residential streets were counted to see if these areas were being abused by employees.*

Key observations from the occupancy counts:

- The peak occupancy was 39% which occurred during two consecutive circuits from 1:00PM -5:00PM, with the counts only being separated by one vehicle.
- The on-street parking had higher occupancies than the off-street throughout the day.
- The private off-street parking had higher occupancies than the public off-street parking during the first three circuits.
- The public off-street parking had higher occupancies than the private off-street parking for the last three circuits. This is most likely due to restaurant staff and patrons coming into town for dinner.
- There were areas that were at or near 100% occupancy, though there were areas nearby with available parking.

Graph 1



Graph 2

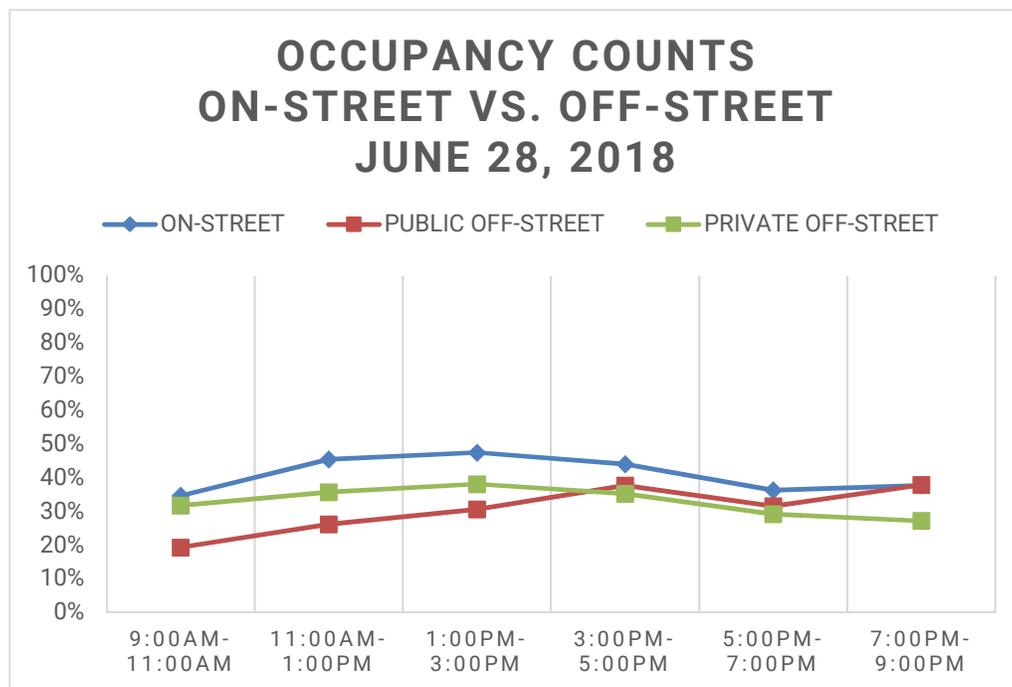


Table F Thursday June 28, 2018 Occupancy Results

Block #	Description	Type	# Spaces	9:00AM-11:00AM	% OCC.	11:00AM-1:00PM	% OCC.	1:00PM-3:00PM	% OCC.	3:00PM-5:00PM	% OCC.	5:00PM-7:00PM	% OCC.	7:00PM-9:00PM	% OCC.
1	CITYHALL	LOT	92	7	8%	10	11%	5	5%	42	46%	3	3%	30	33%
1	EMPLOYEES	LOT	21	15	71%	14	67%	14	67%	15	71%	5	24%	4	19%
2	LOOP	LOT	115	15	13%	18	16%	21	18%	22	19%	14	12%	20	17%
2	TRAILERS	LOT	6	2	33%	1	17%	2	33%	4	67%	4	67%	3	50%
2	2-B	ON-STREET	4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
2	2-BB	ON-STREET	11	3	27%	2	18%	1	9%	1	9%	3	27%	6	55%
3	CLINIC LOT	LOT	35	27	77%	28	80%	27	77%	23	66%	9	26%	0	0%
3	3-GRAVEL	LOT	3	3	100%	2	67%	2	67%	0	0%	1	33%	0	0%
3	3-34	LOT	34	16	47%	17	50%	22	65%	21	62%	3	9%	3	9%
3	3-8	LOT	8	6	75%	5	63%	6	75%	7	88%	0	0%	0	0%
3	3-36	LOT	36	11	31%	4	11%	6	17%	1	3%	0	0%	0	0%
3	3C	ON-STREET	6	6	100%	6	100%	5	83%	5	83%	2	33%	0	0%
4	4-2	LOT	3	2	67%	2	67%	2	67%	2	67%	2	67%	0	0%
4	4-22	LOT	22	7	32%	5	23%	7	32%	10	45%	1	5%	1	5%
4	4-7	LOT	7	3	43%	3	43%	2	29%	2	29%	1	14%	0	0%
4	4-4	LOT	4	0	0%	1	25%	1	25%	1	25%	1	25%	0	0%
4	4-ATT	LOT	4	0	0%	0	0%	0	0%	0	0%	3	75%	3	75%
4	4A	ON-STREET	6	2	33%	2	33%	3	50%	2	33%	1	17%	1	17%
4	4B	ON-STREET	15	5	33%	2	13%	2	13%	3	20%	6	40%	4	27%
4	4C	ON-STREET	9	3	33%	1	11%	0	0%	0	0%	2	22%	0	0%
5	5-18	LOT	18	3	17%	3	17%	3	17%	2	11%	0	0%	0	0%
5	5C	ON-STREET	10	3	30%	1	10%	2	20%	1	10%	0	0%	0	0%
6	6-34	LOT	34	2	6%	9	26%	9	26%	5	15%	22	65%	12	35%
6	6-46	LOT	46	16	35%	25	54%	28	61%	24	52%	30	65%	32	70%
6	6A	ON-STREET	12	1	8%	0	0%	0	0%	0	0%	3	25%	0	0%
6	6B	ON-STREET	5	1	20%	1	20%	3	60%	3	60%	2	40%	2	40%
6	6BB	ON-STREET	8	0	0%	2	25%	4	50%	2	25%	4	50%	3	38%
6	6C	2HR ON-STREET	12	5	42%	9	75%	6	50%	6	50%	10	83%	8	67%
6	6D	2HR ON-STREET	4	2	50%	0	0%	3	75%	4	100%	2	50%	3	75%
7	7-5	LOT	5	4	80%	4	80%	3	60%	4	80%	1	20%	2	40%
7	7-6	LOT	6	5	83%	6	100%	4	67%	4	67%	1	17%	0	0%
7	7-2	LOT	2	2	100%	2	100%	1	50%	2	100%	2	100%	1	50%
7	7-12	LOT	12	0	0%	0	0%	2	17%	0	0%	1	8%	0	0%
7	7A	ON-STREET	23	8	35%	7	30%	10	43%	7	30%	7	30%	3	13%
7	7C	2HR ON-STREET	10	0	0%	4	40%	8	80%	3	30%	4	40%	10	100%
7	7D	2HR ON-STREET	2	0	0%	1	50%	1	50%	1	50%	1	50%	1	50%
7	7DD	ON-STREET	5	0	0%	1	20%	0	0%	0	0%	1	20%	0	0%
8	8-29	2HR ON-STREET	29	5	17%	18	62%	19	66%	14	48%	14	48%	28	97%
8	8-30	LOT	30	12	40%	21	70%	24	80%	23	77%	28	93%	30	100%
8	8A	2HR ON-STREET	2	0	0%	1	50%	0	0%	0	0%	0	0%	0	0%
8	8B	ON-STREET	16	6	38%	10	63%	13	81%	11	69%	8	50%	13	81%
9	9-5	LOT	5	0	0%	1	20%	1	20%	0	0%	0	0%	1	20%
9	9B	2HR ON-STREET	12	10	83%	8	67%	12	100%	5	42%	7	58%	10	83%
9	9DD	ON-STREET	20	13	65%	14	70%	15	75%	14	70%	9	45%	16	80%
10	10-15	LOT	15	2	13%	4	27%	9	60%	9	60%	6	40%	7	47%
10	10-22	LOT	22	14	64%	18	82%	22	100%	22	100%	16	73%	22	100%
10	10-18	LOT	18	6	33%	13	72%	14	78%	13	72%	11	61%	9	50%
10	10A	2HR ON-STREET	21	1	5%	14	67%	12	57%	19	90%	19	90%	19	90%
10	10B	2HR ON-STREET	8	2	25%	6	75%	6	75%	4	50%	2	25%	6	75%
10	10C	ON-STREET	10	2	20%	8	80%	10	100%	8	80%	5	50%	6	60%
10	10D	2HR ON-STREET	7	3	43%	3	43%	4	57%	6	86%	4	57%	3	43%
11	11-6	LOT	6	0	0%	1	17%	0	0%	0	0%	1	17%	2	33%
11	11-31	LOT	31	14	45%	16	52%	15	48%	16	52%	11	35%	12	39%
11	11A	2HR ON-STREET	17	5	29%	13	76%	8	47%	10	59%	4	24%	16	94%
11	11B	2HR ON-STREET	10	2	20%	3	30%	4	40%	4	40%	2	20%	6	60%
11	11C	ON-STREET	12	5	42%	8	67%	10	83%	7	58%	4	33%	0	0%
11	11D	2HR ON-STREET	14	8	57%	9	64%	10	71%	8	57%	8	57%	9	64%
12	12-27	LOT	27	1	4%	1	4%	1	4%	1	4%	0	0%	0	0%
12	12-16	LOT	16	11	69%	11	69%	11	69%	11	69%	11	69%	11	69%
12	12D	ON-STREET	8	2	25%	5	63%	3	38%	4	50%	3	38%	5	63%
13	13-64	LOT	64	17	27%	14	22%	12	19%	10	16%	15	23%	16	25%
13	13-40	LOT	40	1	3%	2	5%	9	23%	21	53%	33	83%	36	90%
13	13-29	LOT	29	4	14%	1	3%	2	7%	5	17%	7	24%	4	14%
14	14-12	LOT	12	0	0%	0	0%	4	33%	3	25%	3	25%	5	42%
14	14-23	LOT	23	3	13%	2	9%	7	30%	9	39%	8	35%	7	30%
14	14B	ON-STREET	15	9	60%	13	87%	12	80%	15	100%	12	80%	14	93%
14	14C	2HR ON-STREET	4	0	0%	0	0%	0	0%	2	50%	3	75%	1	25%
14	14D	ON-STREET	23	16	70%	19	83%	19	83%	20	87%	16	70%	13	57%
15	15-10	LOT	10	8	80%	9	90%	10	100%	8	80%	11	110%	7	70%
15	15A	ON-STREET	2	0	0%	0	0%	1	50%	0	0%	1	50%	2	100%
15	15B	ON-STREET	10	5	50%	6	60%	5	50%	4	40%	6	60%	1	10%
15	15C	ON-STREET	9	9	100%	9	100%	9	100%	8	89%	4	44%	2	22%
15	15D	ON-STREET	6	3	50%	4	67%	5	83%	3	50%	4	67%	4	67%
16	16-46	LOT	46	17	37%	27	59%	23	50%	11	24%	14	30%	7	15%
16	16B	ON-STREET	9	0	0%	2	22%	0	0%	0	0%	0	0%	0	0%
16	16C	ON-STREET	10	0	0%	4	40%	3	30%	1	10%	1	10%	0	0%
16	16D	ON-STREET	8	6	75%	4	50%	3	38%	5	63%	5	63%	2	25%
17	17 LOT	LOT	20	8	40%	9	45%	7	35%	10	50%	0	0%	0	0%
17	17D	ON-STREET	9	2	22%	0	0%	6	67%	3	33%	0	0%	0	0%
18	18-31	LOT	31	7	23%	6	19%	8	26%	8	26%	9	29%	6	19%
18	18-20	LOT	20	7	35%	8	40%	6	30%	7	35%	12	60%	12	60%
18	18A	ON-STREET	7	3	43%	3	43%	2	29%	6	86%	1	14%	3	43%
18	18B	ON-STREET	14	4	29%	6	43%	9	64%	9	64%	5	36%	5	36%
18	18C	ON-STREET	8	2	25%	4	50%	3	38%	4	50%	5	63%	3	38%
19	19-12	LOT	12	1	8%	0	0%	0	0%	0	0%	0	0%	0	0%
19	19A	ON-STREET	13	4	31%	5	38%	8	62%	7	54%	2	15%	1	8%
19	19B	ON-STREET	9	1	11%	2	22%	0	0%	0	0%	0	0%	0	0%
19	19C	ON-STREET	9	5	56%	4	44%	3	33%	1	11%	3	33%	5	56%
19	19D	ON-STREET	12	6	50%	6	50%	6	50%	6	50%	5	42%	3	25%
20	20-14 SCHOOL	LOT	16	1	6%	1	6%	1	6%	2	13%	0	0%	0	0%
20	20A	ON-STREET	13	3	23%	5	38%	2	15%	3	23%	0	0%	0	0%
20	20B	ON-STREET	11	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
20	20C	ON-STREET	14	4	29%	3	21%	2	14%	3	21%	2	14%	0	0%
20	20CC	ON-STREET	29	7	24%	7	24%	6	21%	3	10%	1	3%	0	0%
20	20D	ON-STREET	11	5	45%	5	45%	4	36%	3	27%	2	18%	0	0%
21	21-BOAT LAUNCH	LOT	53	2	4%	4	8%	11	21%	9	17%	22	42%	20	38%
21	21-OVERFLOW	LOT	20	0	0%	0	0%	0	0%	0	0%	0	0%	4	20%
	<b>TOTAL OCCUPANCY</b>		<b>1,662</b>	<b>479</b>	<b>29%</b>	<b>598</b>	<b>36%</b>	<b>646</b>	<b>39%</b>	<b>647</b>	<b>39%</b>	<b>537</b>	<b>32%</b>	<b>566</b>	<b>34%</b>



**CITY OF BOYNE  
PARKING STUDY**

Boyne City, Michigan

**RICH & ASSOCIATES**  
PARKING CONSULTANTS

56977 Northwestern Hwy, Suite 208  
Southfield, Michigan 48033

Southfield, MI 48033  
Lutz, FL 813.949.9860

ARCHITECTS • ENGINEERS • PLANNERS

09-14-18 sar

**BLOCK NUMBER**

**LEGEND:**

- STUDY AREA
- CORE STUDY AREA

**BLOCK FACE KEY PLAN:**

**PARKING OCCUPANCY**

- 85% through 100%
- 75% through 84%
- 50% through 74%
- 0 through 49%

Sheet Title:

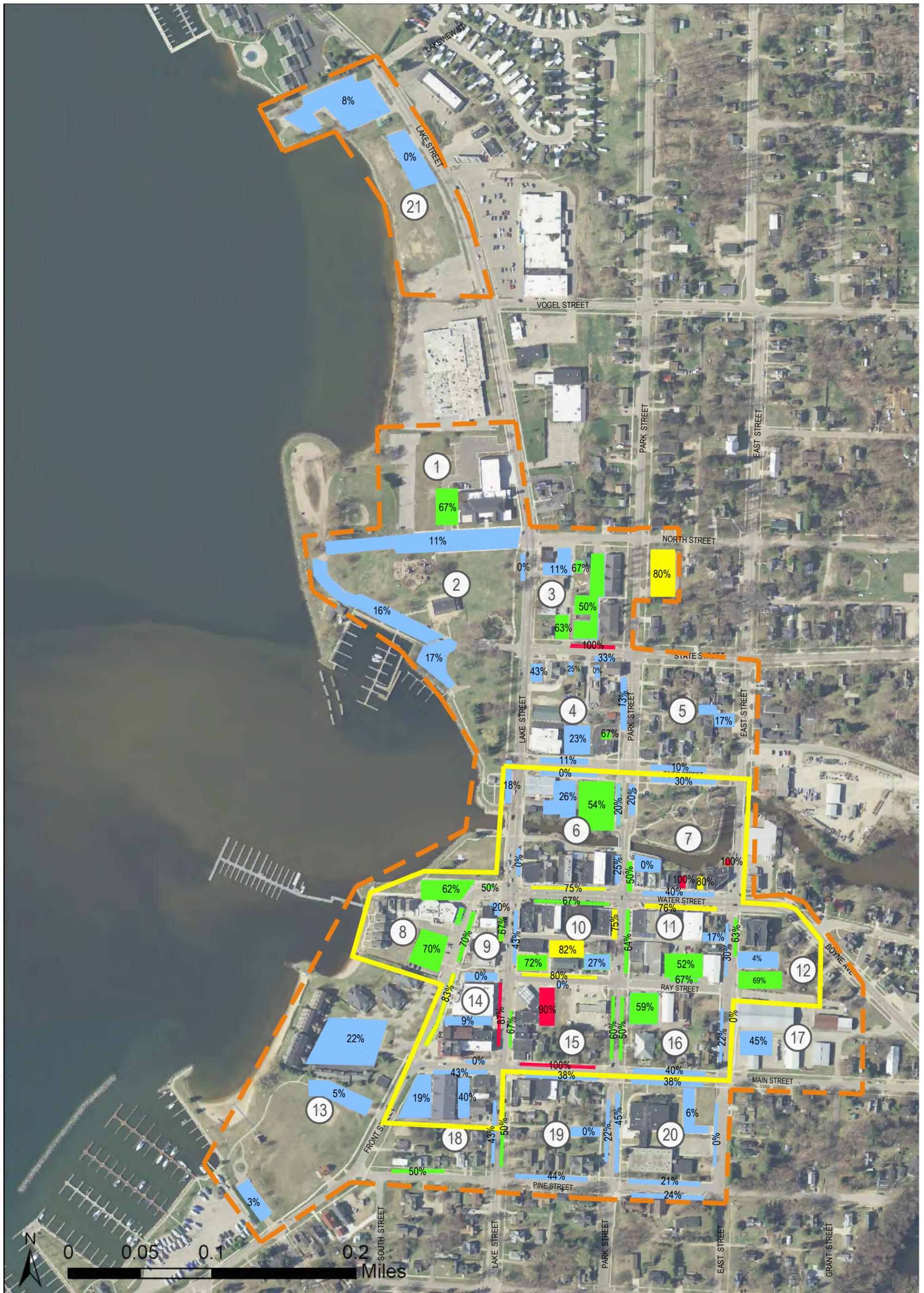
# OCCUPANCY

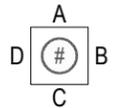
Thursday June 28, 2018  
9 AM - 11 AM

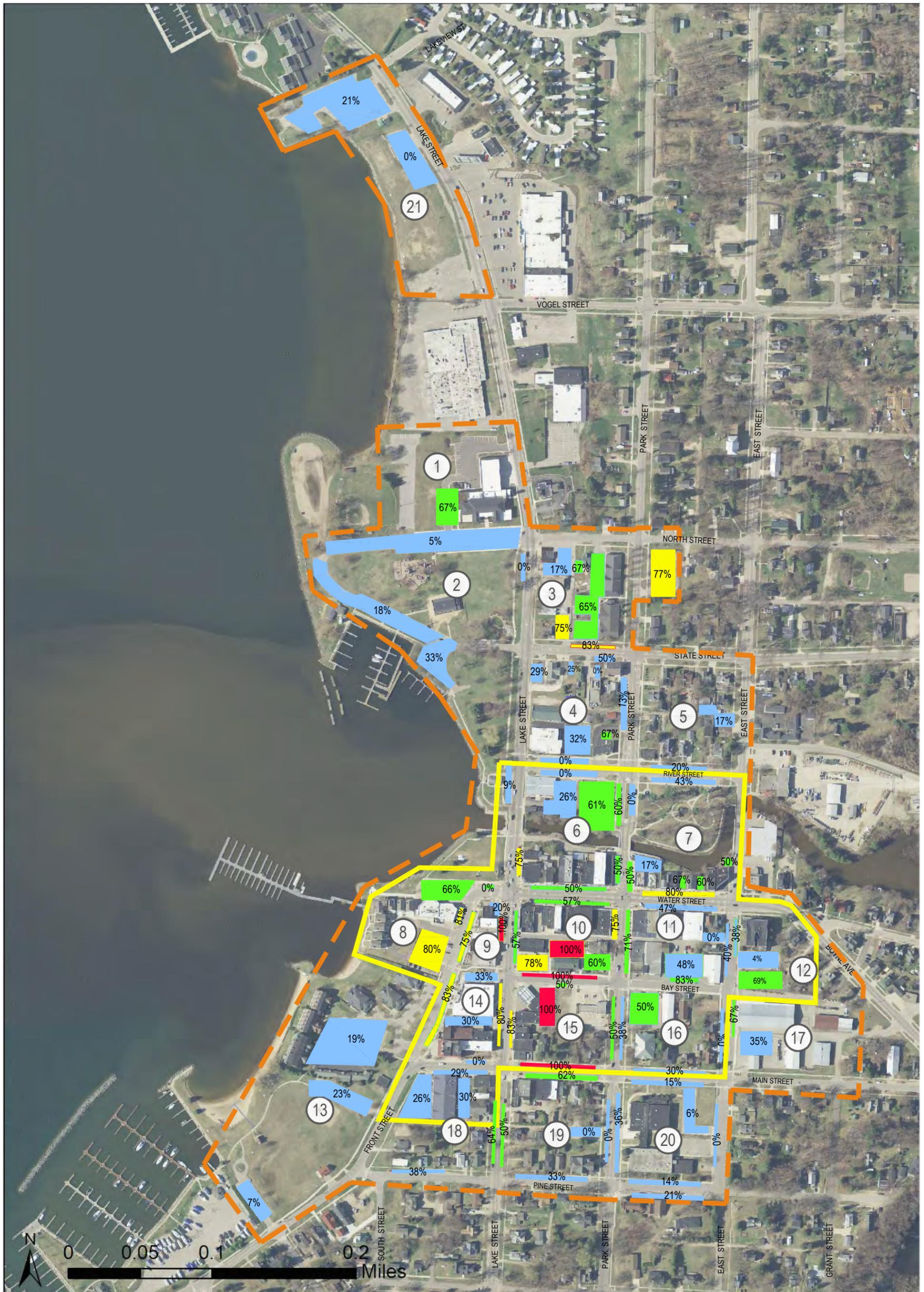
MAP Number:

## MAP 4

Pg. 14



<p><b>CITY OF BOYNE PARKING STUDY</b></p> <p>Boyne City, Michigan</p>	<p><b>RICH &amp; ASSOCIATES</b> PARKING CONSULTANTS</p> <p>26877 Northwestern Hwy. Suite 208 Southfield, Michigan 48033</p> <p>Southfield, MI Lutz, FL 748.353.5280 813.648.9666</p> <p>ARCHITECTS • ENGINEERS • PLANNERS</p>  <p>09-14-18 sar</p>	<p><b>LEGEND:</b></p> <p>STUDY AREA (orange dashed line)</p> <p>CORE STUDY AREA (yellow dashed line)</p> <p><b>BLOCK FACE KEY PLAN:</b></p>  <p><b>PARKING OCCUPANCY</b></p> <ul style="list-style-type: none"> <li>85% through 100% (red)</li> <li>75% through 84% (yellow)</li> <li>50% through 74% (green)</li> <li>0 through 49% (blue)</li> </ul>	<p>Sheet Title:</p> <p><b>OCCUPANCY</b></p> <p>Thursday June 28, 2018 11 AM - 1 PM</p>	<p>MAP Number:</p> <p><b>MAP 4.1</b></p> <p>Pg. 15</p>
---------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------	--------------------------------------------------------

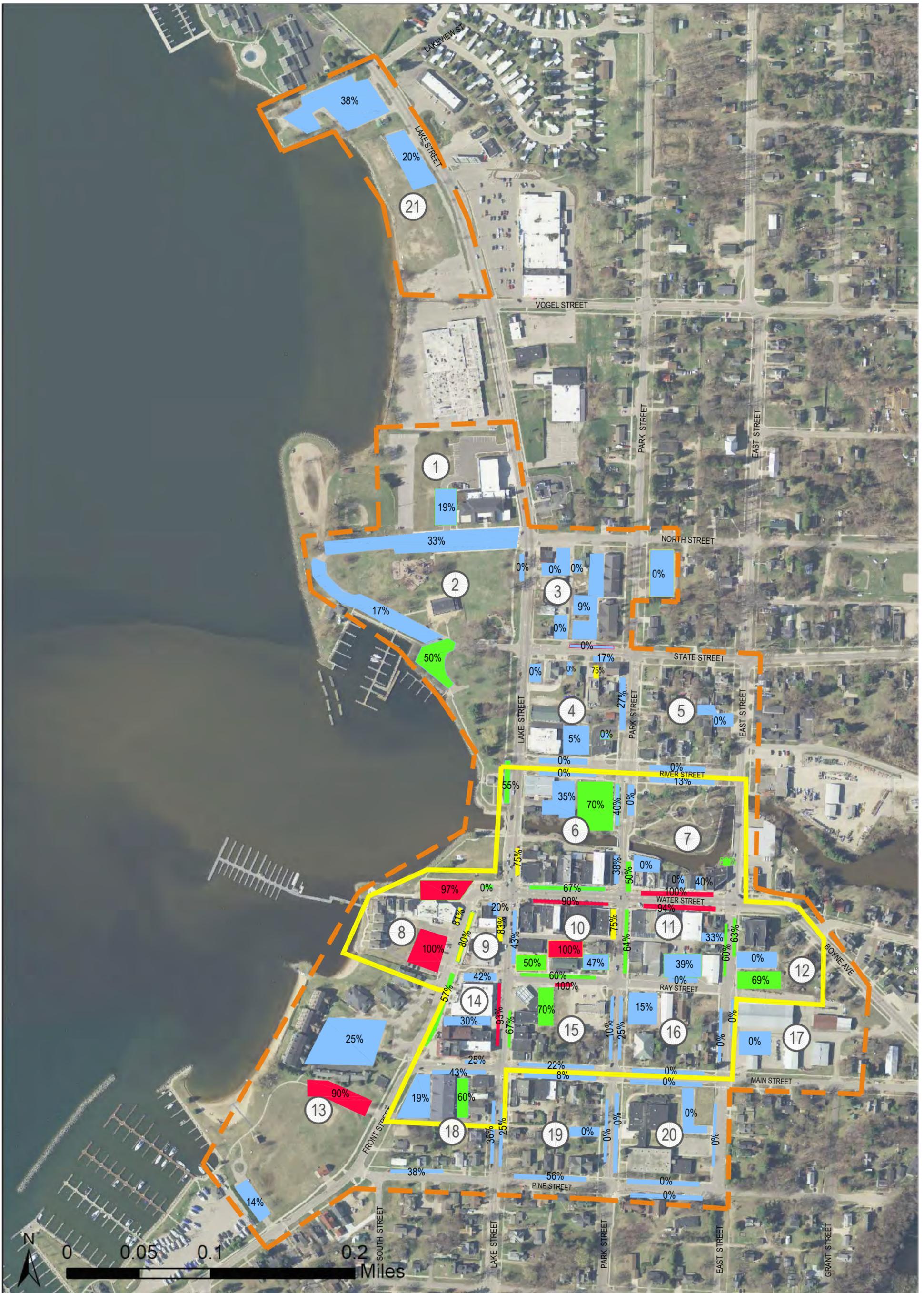


<p><b>CITY OF BOYNE PARKING STUDY</b></p> <p>Boyne City, Michigan</p>	<p><b>RICH &amp; ASSOCIATES</b> PARKING CONSULTANTS</p> <p>2677 Northwestern Hwy, Suite 209 Southfield, Michigan 48033</p> <p>Southfield, MI Lutz, FL 248.353.9580 813.949.9868</p> <p>ARCHITECTS • ENGINEERS • PLANNERS</p> <p>09-14-18 sar</p>	<p><b>LEGEND:</b></p> <p>— STUDY AREA — CORE STUDY AREA</p> <p><b>BLOCK FACE KEY PLAN:</b></p>	<p><b>PARKING OCCUPANCY</b></p> <p>■ 85% through 100% ■ 75% through 84% ■ 50% through 74% ■ 0 through 49%</p>	<p>Sheet Title:</p> <p style="text-align: center;"><b>OCCUPANCY</b></p> <p style="text-align: center;">Thursday June 28, 2018 1 PM - 3 PM</p>	<p>MAP Number:</p> <p style="text-align: center;"><b>MAP 4.2</b></p> <p style="text-align: right;">Pg. 16</p>
---------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------





<p><b>CITY OF BOYNE PARKING STUDY</b></p> <p>Boyne City, Michigan</p>	<p><b>RICH &amp; ASSOCIATES</b> PARKING CONSULTANTS</p> <p>25877 Northwestern Hwy, Suite 206 Southfield, Michigan 48033</p> <p>Southfield, MI Lutz, FL 248.953.5280 813.949.5866</p> <p>ARCHITECTS - ENGINEERS - PLANNERS</p> <p>09-14-18 sar</p>	<p><b>LEGEND:</b></p> <p>— STUDY AREA</p> <p>— CORE STUDY AREA</p> <p><b>BLOCK FACE KEY PLAN:</b></p>	<p><b>PARKING OCCUPANCY</b></p> <ul style="list-style-type: none"> <li><span style="color: red;">■</span> 85% through 100%</li> <li><span style="color: yellow;">■</span> 75% through 84%</li> <li><span style="color: green;">■</span> 50% through 74%</li> <li><span style="color: blue;">■</span> 0 through 49%</li> </ul>	<p>Sheet Title:</p> <p style="font-size: 24pt; font-weight: bold; text-align: center;">OCCUPANCY</p> <p style="text-align: center;">Thursday June 28, 2018 5 PM - 7 PM</p>	<p>MAP Number:</p> <p style="font-size: 24pt; font-weight: bold; text-align: center;">MAP 4.4</p> <p style="text-align: right;">Pg. 18</p>
---------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------



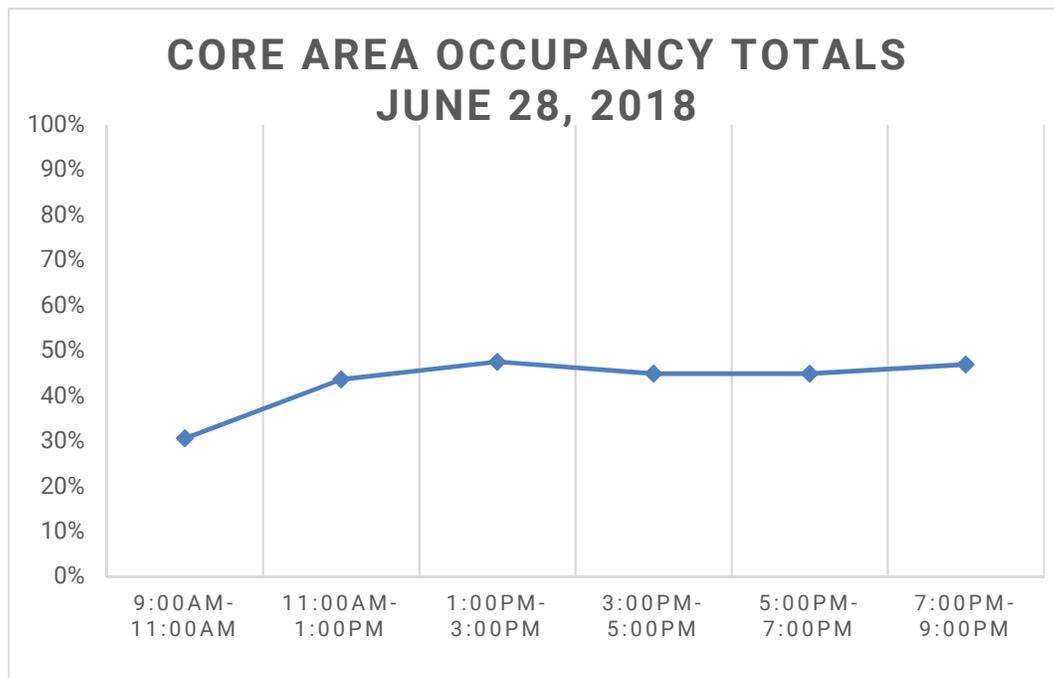
<p><b>CITY OF BOYNE PARKING STUDY</b></p> <p>Boyne City, Michigan</p>	<p><b>RICH &amp; ASSOCIATES</b> PARKING CONSULTANTS</p> <p>23677 Northland Drive, Suite 209 Southfield, MI 48033</p> <p>Southfield, MI 48033 Lutz, FL 33549 248.253.5080 813.949.9860</p> <p>ARCHITECTS • ENGINEERS • PLANNERS</p>	<p><b>LEGEND:</b></p> <p>— STUDY AREA — CORE STUDY AREA</p> <p><b>BLOCK FACE KEY PLAN:</b></p> <p><b>PARKING OCCUPANCY</b></p> <ul style="list-style-type: none"> <li><span style="color: red;">■</span> 85% through 100%</li> <li><span style="color: yellow;">■</span> 75% through 84%</li> <li><span style="color: green;">■</span> 50% through 74%</li> <li><span style="color: blue;">■</span> 0% through 49%</li> </ul>	<p>Sheet Title:</p> <h1 style="text-align: center;">OCCUPANCY</h1> <p style="text-align: center;">Thursday June 28, 2018 7 PM - 9 PM</p>	<p>MAP Number:</p> <h2 style="text-align: center;">MAP 4.5</h2> <p style="text-align: right;">Pg. 19</p>
---------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------

## CORE OCCUPANCY

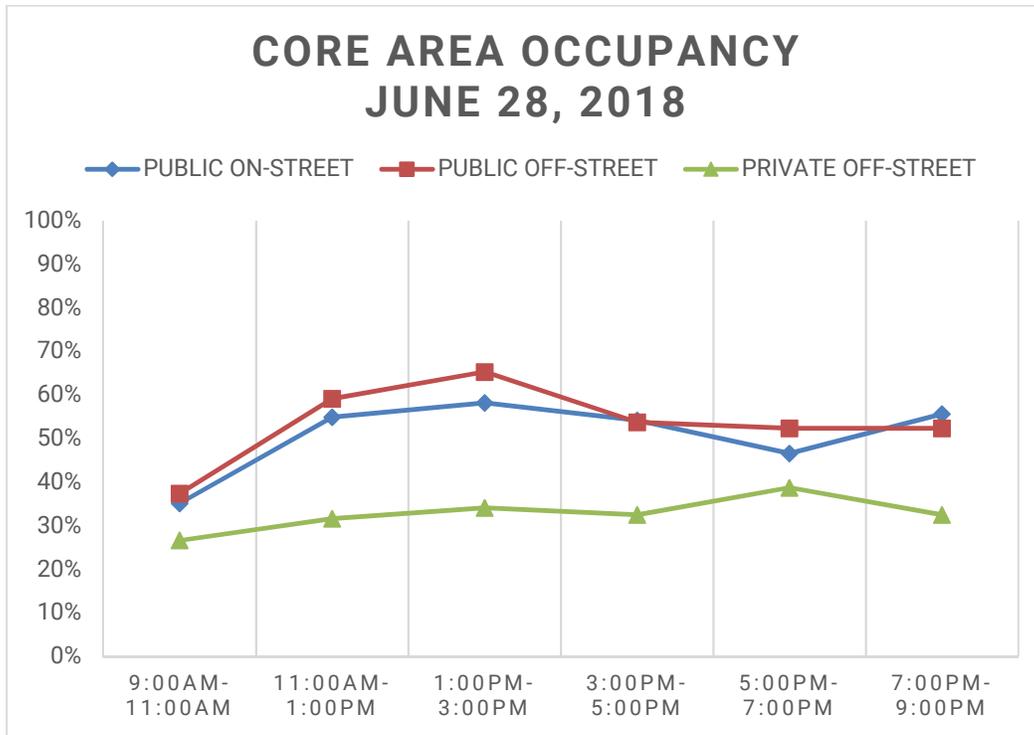
When considering the downtown core area (Blocks 6-12, 14-16 and 18) the proportion of spaces occupied is higher during all circuits compared to the total study area. The peak time within the core remains at the 1:00PM to 3:00PM circuit, though the proportion of spaces occupied is increased from 39% (total study area) occupancy to 48% (core area) occupancy of the available and observed spaces. This equals 430 vehicles observed in the 782 parking spaces in the downtown core area.

When we look at the core area, on-street occupancies were higher during all of the six circuits. Within the core, on-street parking peaked at 58% during the lunch circuit (1:00PM) with a small dip until 7:00PM where the occupancy increased 56%. The 9:00AM and 5:00PM circuits were the only two circuits below 50% occupancy for the on-street parking. **Graphs 3 and 4 and Table G** are a summary of findings for the core occupancy.

Graph 3



Graph 4



**Table G  
 Core Area Occupancy Summary  
 Thursday June 28, 2018**

CORE AREA	# SPACES	9:00AM-11:00AM	% OCC.	11:00AM-1:00PM	% OCC.	1:00PM-3:00PM	% OCC.	3:00PM-5:00PM	% OCC.	5:00PM-7:00PM	% OCC.	7:00PM-9:00PM	% OCC.
PUBLIC ON-STREET	395	139	35%	217	55%	230	58%	214	54%	184	47%	220	56%
PRIVATE OFF-STREET	147	55	37%	87	59%	96	65%	79	54%	77	52%	77	52%
PUBLIC OFF-STREET	240	64	27%	76	32%	82	34%	78	33%	93	39%	78	33%
<b>TOTALS</b>	<b>782</b>	<b>277</b>	<b>31%</b>	<b>395</b>	<b>44%</b>	<b>430</b>	<b>48%</b>	<b>406</b>	<b>45%</b>	<b>406</b>	<b>45%</b>	<b>425</b>	<b>47%</b>

## OCCUPANCY SUMMARY

The number of spaces occupied at peak time in downtown Boyne City are relatively low. When the parking demand is higher, best practices are to manage the parking such that between 85% and 90% of the parking is occupied. Parking policy and management recommendations are provided in this study to help better manage the parking system.

The peak overall occupancy was 39% with 647 of the 1,622 spaces occupied. When we analyzed the results for the core area we see that the peak overall occupancy increases to 52%, with 408 of the 782 spaces occupied. This tells us that there is still sufficient parking in the downtown area available during peak hours, though all parking may not be available for all users. Additionally, the public parking may not be located as the most convenient spaces for all destinations.

## PARKING DEMAND CALCULATION

Analyses were performed to determine the current and future parking demands and needs for the study area. The data collected and compiled by Rich & Associates to calculate the parking demand included:

- An inventory of the study area on-street and off-street parking supplies.
- Turnover and occupancy studies for public and private on-street and off-street parking areas.
- Block-by-block analysis of square footage and type of land use in the study area. (Building inventory was provided by Boyne City staff)
- This demand analysis contains two levels of parking analyses to determine the number of parking spaces needed. First is a mathematical or hypothetical model of parking demand based on the building gross square footage. The mathematical model multiplies a parking generation ratio (PGR) by the gross area of specific land uses to derive the number of spaces needed. The second is a method of using field observations and data to calibrate the mathematical model and help to establish projected spaces needed.
- The demand model is based on a weekday peak between 9:00AM and 9:00PM.

A point to consider regarding the parking supply and demand is that motorists in general perceive off-street spaces with occupancies greater than 85% to be at capacity. The greater the capacity of the parking area, the less this perception is valid. When this occurs, motorists will begin to re-circulate to seek more parking, adding to traffic congestion and the drivers' perception that there is no parking available in the downtown.

The PGR's were established from Rich & Associates field work and previous experience with work in similar communities. The demand factor for each land use type includes an estimate for employees and patrons to that particular land use and reflect a daytime peak. Once parking demand has been calculated for both current and future conditions, a comparison with the existing supply of parking is made. The resulting figures are parking surplus or deficit figures for each block.

The PGR's are used in conjunction with information from the Institute of Transportation Engineers (ITE) and the Urban Land Institute (ULI). These two sources are the generally accepted standards for parking generation. Rich & Associates uses experience along with these sources to modify or customize the parking generation ratios specifically to the study area.

Once a parking demand model is developed that illustrates the surpluses and deficits numerically and graphically, we then compare the model with the actual field observations, specifically the turnover and occupancy counts. The comparison serves as a test of the demand model and allows Rich & Associates staff to make further revisions or adjustments where necessary, thus ensuring accuracy to the overall parking dynamic in the downtown area. It is important to note that the demand calculations are slightly higher than the observed observations due to changes in land use, intensity in demand and allowance for some growth of current businesses.

The assumptions used in developing the PGR's and the parking demand calculations are:

- Assumption 1:** It was assumed that parking demand per block was dependent on the gross floor area contained in the block. Demand computed for one block was not affected by the amount of gross floor area available on surrounding blocks. Therefore, a block with surplus parking supply is not used to offset calculated shortfalls on adjacent blocks.
- Assumption 2:** The projected parking demand for the future was derived under the assumption that currently occupied properties would remain occupied at existing or higher than existing levels into the future.
- Assumption 3:** The projected vacant space is shown reoccupied at a rate of 40% in five years and 80% in 10 years.

## PARKING NEED

Once we have determined the base parking demand calculation we then need to adjust the parking generation factors to demonstrate the actual parking need for the downtown. Rich & Associates factors in the reality of parking to the demand such as walking distances to public parking locations, conditions of parking lots and the conditions of the path to and from the lots. We increased the demand model by approximately 10% to account for changes in intensity and

the reality that a Saturday will have a higher demand (even with many office land uses being closed).

Parking need will fluctuate based on several factors such as use changes and intensity of land use. A restaurant or retail spaces could become a destination in the region increasing the overall demand for that specific land use or an office space could go from selling insurance to a call center which requires a much larger staff and will have an evening shift. The following are issues that are considered when developing the number of parking spaces needed:

- Building size, purpose and special use conditions.
- Alternative modes of transportation, including availability, level of use, attractiveness and policy impacts.
- Proportion of the downtown trips that are multiple-use or linked (available shared use parking).
- Vehicle traffic.
- Cost of parking.
- The intensity of developments in the downtown.
  - The overall number of businesses in a downtown drawing customers.

The gross square footage of the sorted land use categories by block was provided by Boyne City staff. The different land uses for each block are in general multiplied by a parking generation ratio (PGR) of spaces required per 1,000 square feet. The resulting demand number is deducted from the available parking supply on each block to determine a surplus or deficit condition for each block. The Dilworth Hotel (22 rooms and restaurant) is currently under renovation so this is included in the current demand scenario.

**Table H on page 26** is the Parking Demand Matrix, followed by a summary of the parking demand represented spatially in **Map 5 on page 28**. This model is intended to be used as a tool to determine the current parking demand and help project the future parking demand. The parking generation ratios are not for zoning purposes. They are to be used along with the demand matrix as a tool to determine the parking impact of existing and new development coming into the study area. The results from the parking demand matrix are compared to the turnover and occupancy results to make sure that there is a reasonable correlation with the observed needs of the downtown.

In our opinion, one of the biggest reasons that people perceive a parking shortage in the downtown is because some employees and business owners are parking on-street, taking prime customer and visitor spaces. When an employee parks on-street due to greater convenience when their business has a private parking space available for their use, the employee is actually taking two spaces out of the parking supply. This is because the private space is not a shared parking space, instead it is reserved only for the business, whereas the public on-street spaces

are intended to be available for anyone visiting the downtown. Shared use is an important component of parking that allows municipalities to develop less parking for each land use due to the ability to park once and visit multiple locations.

The current daytime parking situation in the entire study area as calculated showed an overall surplus of 765 spaces. When looking at the core area this surplus is only 302 spaces. Currently there is parking located within a couple of blocks of all areas to handle shortages. As development continues and additional businesses come to downtown Boyne City, there is the potential for an increase in the intensity (number of people visiting each land use) and of overall land use. Therefore, it is important to constantly monitor the parking system and update the demand model with any changes to the parking supply or land use. The updated model should then be compared to occupancy counts from the parking system.

**Table H**

Daytime Parking Demand Matrix																			
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
TOTALS	OFFICE	MEDICAL OFFICE	RETAIL	SERVICE	MIXED USE	RESTAURANT/ BAR	HOTEL	RESIDENTIAL	LIBRARY	PARK	MARINA	WAREHOUSE	CHURCH	VACANT	DEMAND	PARKING	SURPLUS/ DEFICIT	PROJECTED SURPLUS/ DEFICIT	PROJECTED SURPLUS/ DEFICIT
							(PER ROOM)	(PER UNIT)		(PER ACRE)	(PER BERTH)				CURRENT	SUPPLY	DEFICIT	DEFICIT	DEFICIT
PARKING GENERATION RATIOS	1.85	2.15	1.65	1.75	2.00	4.00	1.15	1.00	1.50	1.50	0.59	0.75	0.35	2.25			CURRENT	5 YEAR (40%)	10 YEAR (80%)
1	71,400	-	-	-	-	-	-	-	-	-	-	-	-	-	132	178	46	46	46
2	-	-	-	-	-	-	-	-	-	7	42	-	-	-	35	136	101	101	101
3	-	14,503	-	-	-	2,160	-	-	-	-	-	-	-	6,232	40	122	82	77	74
4	11,882	-	2,604	-	-	-	-	3	-	-	-	5,000	-	1,102	33	70	37	-103	-104
5	-	1,500	-	-	-	-	-	-	-	-	-	3,700	-	-	6	28	22	22	22
6	2,000	-	20,472	4,952	-	6,060	-	2	-	-	-	-	6,000	-	74	122	48	48	-11
7	5,510	-	3,609	-	-	6,371	-	1	-	-	-	-	-	-	43	65	22	-3	-3
8	-	-	-	-	-	15,000	-	10	-	-	-	-	-	-	70	77	7	7	7
9	1,355	1,116	3,176	4,192	-	-	-	1	-	-	-	-	-	5,064	18	37	19	-15	-17
10	1,139	-	21,711	-	6,708	5,200	-	2	-	-	-	-	-	5,250	74	110	36	-14	-53
11	-	-	3,000	1,200	-	-	-	-	-	-	-	12,502	-	4,297	16	90	74	70	68
12	-	-	-	-	-	-	33	-	-	-	-	-	-	-	38	51	13	13	13
13*	-	-	-	-	-	-	-	-	-	6	-	-	-	-	9	69	60	60	60
14	-	-	-	7,000	-	20,540	-	16	-	-	-	-	-	3,751	110	77	-33	-37	-38
15	5,948	-	2,424	956	-	-	-	5	-	-	-	-	-	-	22	37	15	15	15
16	-	-	-	-	-	-	-	-	10,000	-	-	2,804	4,000	-	19	73	54	54	-60
17	-	-	1,000	-	-	-	-	-	-	-	-	-	-	-	2	29	27	27	27
18	-	-	1,452	-	14,000	-	-	3	-	-	-	-	4,000	-	35	80	45	45	45
19	1,024	3,546	1,056	-	-	-	-	9	-	-	-	750	10,000	5,124	24	65	41	36	34
20	-	-	-	-	-	-	-	-	-	-	-	-	45,000	-	16	65	49	49	49
<b>TOTALS</b>	<b>100,258</b>	<b>20,665</b>	<b>60,504</b>	<b>18,300</b>	<b>20,708</b>	<b>55,331</b>	<b>33</b>	<b>52</b>	<b>10,000</b>	<b>13</b>	<b>42</b>	<b>24,756</b>	<b>69,000</b>	<b>30,820</b>	<b>816</b>	<b>1,581</b>	<b>765</b>	<b>499</b>	<b>275</b>
															(STALLS)	(STALLS)	(STALLS)	(STALLS)	(STALLS)

\*Block 13 Residential units and associated parking have been removed from the parking demand.

\*Block 21 Is not included in the parking demand

Future development scenarios (5 and 10 year) are detailed on pg. 32, loss and gain of parking and new square footage are calculated in column S and T

**Table I**  
**Core Area Parking Demand**

A	P	Q	R	S	T
TOTALS	DEMAND	PARKING	SURPLUS/ DEFICIT	PROJECTED SURPLUS/ DEFICIT	PROJECTED SURPLUS/ DEFICIT
	CURRENT	SUPPLY	CURRENT	5 YEAR (40%)	10 YEAR (80%)
2	0	11	11	11	11
6	74	122	48	48	-11
7	43	65	22	-3	-3
8	70	77	7	7	7
9	18	37	19	-15	-17
10	74	110	36	-14	-53
11	16	90	74	70	68
12	38	51	13	13	13
14	110	77	-33	-37	-38
15	22	37	15	15	15
16	19	73	54	54	-60
18	35	72	37	37	37
<b>TOTALS</b>	<b>520</b>	<b>822</b>	<b>302</b>	<b>187</b>	<b>(31)</b>
	(STALLS)	(STALLS)	(STALLS)	(STALLS)	(STALLS)

Future development scenarios (5 and 10 year) are detailed on pg. 32, loss and gain of parking and new square footage are calculated in 5 and 10 yr. column



**TOTAL SURPLUS/DEFICIT**  
**+765**

**TOTAL CORE AREA SURPLUS/DEFICIT**  
**+302**

Residential  
not included in  
demand

<p><b>CITY OF BOYNE PARKING STUDY</b></p> <p>Boyne City, Michigan</p>	<p><b>RICH &amp; ASSOCIATES</b> PARKING CONSULTANTS</p> <p>21607 Northway Dr. Suite 200 Southfield, Michigan 48033</p> <p>Southfield MI 248.353.5080 Lutz FL 813.949.9868</p> <p>ARCHITECTS - ENGINEERS - PLANNERS</p> <p>09-14-18 sar</p>	<p><b>LEGEND:</b></p> <p>STUDY AREA</p> <p>CORE STUDY AREA</p> <p><b>BLOCK FACE KEY PLAN:</b></p> <p>A D # B C</p>	<p><b>SURPLUS OF PARKING</b></p> <p>+100</p> <p>0 through 99</p> <p><b>DEFICIT OF PARKING</b></p> <p>-99 through -1</p> <p>-100 +</p>	<p>Sheet Title:</p> <p><b>SURPLUS/DEFICIT</b></p> <p><b>CURRENT</b></p>	<p>MAP Number:</p> <p><b>MAP 5</b></p> <p>Pg. 28</p>
-----------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------	------------------------------------------------------

## FUTURE

When projecting the future demand scenarios, we used a rate of 40% re-occupancy of vacant space in the five-year projections and 80% in the 10-year projections. With only 30,820 square feet of vacant space in the downtown, the future numbers do not change much. Along with showing the re-occupancy of the vacant space for the future projections, Rich & Associates was directed to examine potential scenarios with in-fill development occurring on current parking lots and other potential sites. These five and 10-year scenarios are detailed on **page 32** with the locations shown on **Map 6**.

The Five-Year Scenario (**Map 5.1**) in the entire study area has a surplus of 499 spaces with the core area showing a surplus of only 187 spaces. While the 10-Year Scenario (**Map 5.2**) shows the entire study area surplus reduced to 275 spaces with the core area surplus turning into a deficit of -31 spaces. These numbers are all speculative and will most likely not be the actual square footages proposed. With that being said, it is important to understand the potential impact of developments on these sites along with the impact of losing public parking lots.

The Five-Year Scenario is workable if parking is managed better and employees are parking where they should. It will be important to provide direction along with education on where employees can park. The 10 Year Scenario will take strategic planning with a well run parking system and providing employee parking close to the core. This level of activity in the downtown will need parking enforcement conducted on a regular basis in order to keep the most convenient parking available for customers and visitors of the downtown.



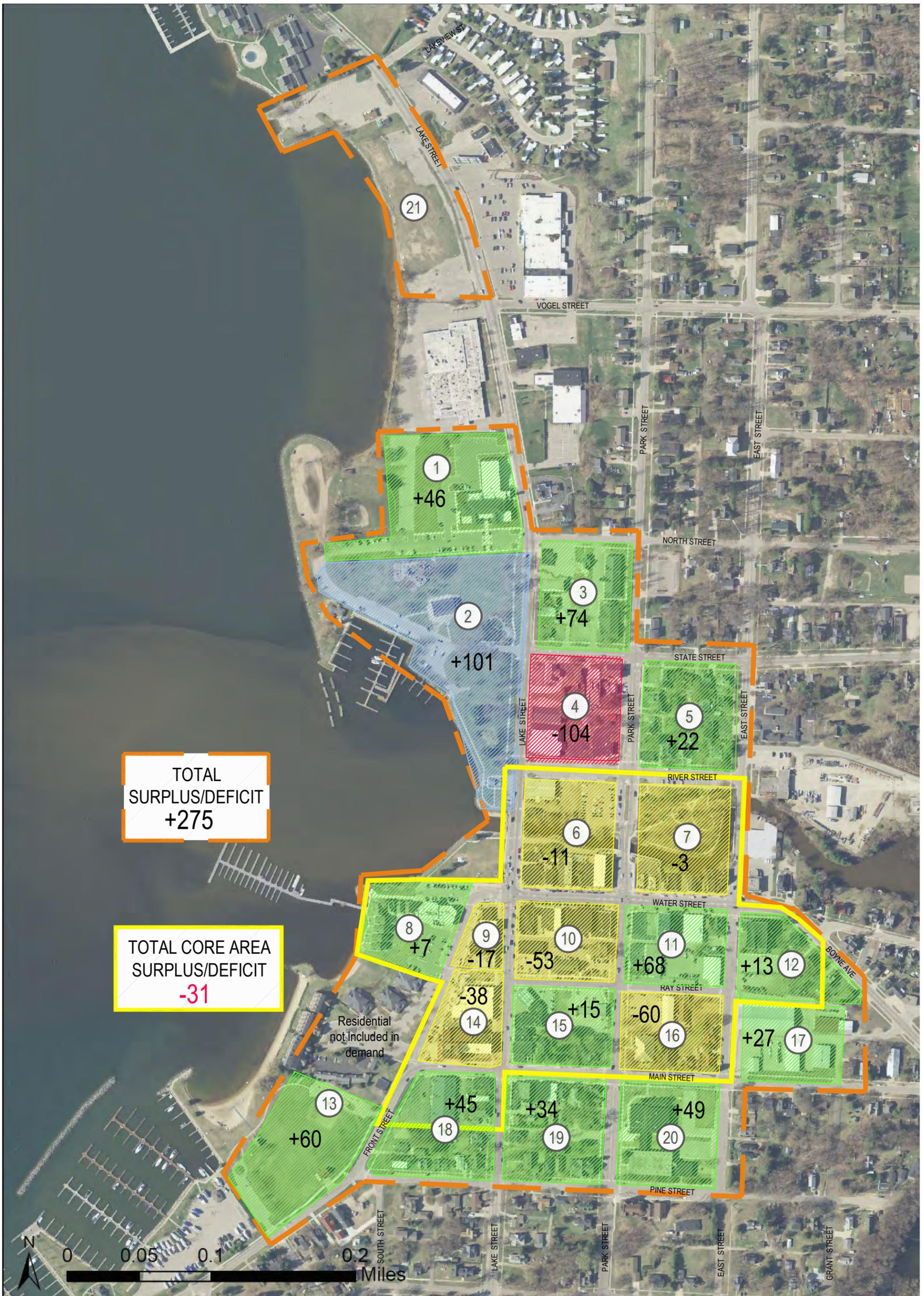
**TOTAL SURPLUS/DEFICIT**  
**+499**

**TOTAL CORE AREA SURPLUS/DEFICIT**  
**+187**

Residential  
not included in  
demand



<p><b>CITY OF BOYNE PARKING STUDY</b></p> <p>Boyne City, Michigan</p>	<p><b>RICH &amp; ASSOCIATES</b> PARKING CONSULTANTS</p> <p>25677 Northwestern Hwy., Suite 206 Southfield, MI 48034 248.255.6590</p> <p>ARCHITECTS • ENGINEERS • PLANNERS</p>	<p><b>LEGEND:</b></p> <p>STUDY AREA</p> <p>CORE STUDY AREA</p>	<p><b>SURPLUS OF PARKING</b></p> <p>+100</p> <p>0 through 99</p>	<p>Sheet Title:</p> <p><b>SURPLUS/ DEFICIT</b></p> <p>FUTURE 5 YEARS</p>	<p>MAP Number:</p> <p><b>MAP 5.1</b></p>
		<p><b>BLOCK FACE KEY PLAN:</b></p> <p>A</p> <p>D # B</p> <p>C</p>	<p><b>DEFICIT OF PARKING</b></p> <p>-99 through -1</p> <p>-100 +</p>	<p>09-14-18 sar</p> <p># BLOCK NUMBER</p>	<p>Pg. 30</p>



### 5 Year Scenario - Potential Development Sites:

- **Site 1** - Potential development (2-3 sty mixed use) on a privately owned site on block 4.
  - 3 floors = 69,960sf (23,320sf per floor) of mixed use and 22 parking spaces.
- **Site 3** - Potential development (1-2 sty mixed use) on privately owned parking lot on block 7.
  - 2 floors = 3,000sf (1,500sf per floor) of mixed use (west site).
- **Site 4** - Potential development (1-2 sty mixed use) on privately owned parking lot on block 7.
  - 2 floors = 3,000sf (1,500sf per floor) of mixed use (east site).
- **Site 5** - Potential development (1-2 sty mixed use) on the site of 1 portion of the public lot on block 10 with frontage on Lake Street.
  - 2 floors = 11,700sf (5,850sf per floor) of mixed use (Lake Street).
- **Site 7** - Potential development (2-3 sty mixed use) on privately owned site on block 9 (116-118 Lake Street).
  - 3 floors = 12,555sf (4,185sf per floor) of mixed use.

### 10 Year Scenario - Potential Development Sites:

- **Site 2** - Potential development (2-3 sty mixed use) on the site of the public lot on block 6.
  - 3 floors = 11,700sf (35,856sf per floor) of mixed use, leaving 14 parking spaces.
- **Site 6** - Potential development (1-2 sty mixed use) on the site of 1 portion of the public lot on block 10 with frontage on Park Street.
  - 2 floors = 9,600sf (4,800sf per floor) of mixed use (Park Street).
- **Site 8** - Potential development (1-2 sty mixed use) on a privately owned site on block 16.
  - 2 floors = 30,140sf (15,070sf per floor) of mixed use.

**\*Sites were provided by the City with approximate building levels, square footage was estimated by the size of the site. This is a potential scenario with proposed numbers and maximum number of floors, they are only to be used for predicting potential future parking impacts. The demand matrix should be updated with actual proposed development plans and land uses when available.**



<p><b>CITY OF BOYNE PARKING STUDY</b></p> <p>Boyne City, Michigan</p>	<p><b>RICH &amp; ASSOCIATES</b> PARKING CONSULTANTS</p> <p>26077 Northwestern Hwy. Suite 208 Southfield, Michigan 48033</p> <p>Southfield, MI 48033 Lutz, FL 32750 748.353.5280 813.649.9860</p> <p>ARCHITECTS • ENGINEERS • PLANNERS</p> <p></p> <p>09-14-18 sar</p>	<p><b>LEGEND:</b></p> <p> STUDY AREA</p> <p><b>#</b> SITE NUMBER</p> <p> 5-YEARS</p> <p> 10-YEARS</p> <p><b>BLOCK FACE KEY PLAN:</b></p> <p>A D # B C</p>	<p>Sheet Title:</p> <p><b>POTENTIAL DEVELOPMENT SITES</b></p>	<p>MAP Number:</p> <p><b>MAP 6</b></p> <p>Pg. 33</p>
---------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------	------------------------------------------------------

## **PUBLIC INPUT**

Public input was solicited in the form of several meetings with stakeholders of the downtown. Discussions with stakeholders included questions specific to where they worked, businesses they owned, lived or had encounters with parking in the downtown. The Preliminary Report was also presented to Council, Staff and the general public. All comments given were taken into account for the final version of the report.

Many stakeholders stated that there is only a parking shortage during a few weeks of the year and during special events. It was also stated that it is sometimes difficult to find parking on street, though additional parking is available within a reasonable walking distance. Other discussions that came out of the stakeholder meetings included discussions of how parking shortages will become an issue for future developments.

Other Stakeholder comments:

- Many employers and employees are parking on the street and should park in the lots or farther away.
- Employees are not willing to walk more than 2 blocks in the downtown.
- Signage.
- Not enough boat trailer parking.
- Need RV parking.
- Snow removal or lack of snow removal.
- People will not walk in the winter.
- Wayfinding signs.
- Not enough parking for employees.
- Some felt that there is not enough parking while others felt that there was sufficient parking.
- Do not want paid parking.
- Do not want parking enforced/Parking needs to be enforced.

## PRELIMINARY RECOMMENDATIONS

### Introduction

The recommendations presented here are intended to enhance the use of the existing supply of parking through operational and management changes. While aimed primarily at increasing the efficiency of the system, the recommendations are comprehensive and provide a holistic approach to improving parking in the downtown today as well as provide a plan for accommodating future growth of the downtown.

The recommendations in this section are a set of tools that Boyne City can use to manage and develop a parking system. Boyne City will also be given the demand matrix chart (**Table H**) to use as a tool to manage land use and parking in the City. This chart can be updated with new development, vacancy or in-fill data, along with any changes to the parking inventory. The chart allows Boyne City to understand the impacts of potential development and will assist in quantifying the future parking needs of the City.

Managing a parking system is not just about parking vehicles, it also involves the walkability of a downtown. Elements such as signage, enforcement, lighting and marketing parking to business owners, employees and visitors effect the overall usage of the parking system. The utilization of individual lots can depend on any or all of these factors, as well as the overall condition of the lot. Fundamentally, these issues can impact a parking system and therefore the downtown economics in general.

Rich & Associates believes that it is most important to first provide recommendations on how to better manage the existing parking supply in the downtown, or in this case, set up a system of parking management. Overall management of the parking system will need to be conducted in order to make the system equitable for all users.

There are several recommendations that will make the parking in the downtown easier to use. Some of these recommendations can be implemented easily with little or no cost to the City while others may require significant budgeting and time to complete. The Recommendations section of the report focuses on policy and actions to address the current parking condition while providing a direction to develop an efficient system for the future. With a unified approach, Boyne City will be best prepared to address parking related issues and handle new development now and in the future. A recommendations summary matrix is provided and followed by detailed parking recommendations.

Downtown Parking Study Implementation Plan		Time Frame				
		Immediate Action	As needed	0-3 Years	3-6 Years	6-10 Years
<b>Recommendations Summary</b>						
<b>1. Parking Management</b>						
1.1	Appoint a person to oversee the parking system.	✓				
<b>2. Parking Duration &amp; Allocation</b>						
2.1	Regular enforcement will need to be conducted to make sure that the vehicles are not parked beyond posted time limits.		✓			
2.2	Work with business owners to get employees to park in the recommended long-term parking during the summer months and special events to help provide additional customer spaces in the core area		✓			
2.3	Change the parking duration to three hours and add three hour duration signs to Block 7D (1st two spaces off Water Street), 11A, 10C, 9A and 8B.		✓			
2.4	Work to add loading zones for large truck deliveries that convert back to three-hour parking after a designated time period throughout the downtown.		✓			
2.5	Consider adding loading zone spaces (15 to 30 minute) at either the ends of the block or the middle stall on all blocks where these are not currently provided.		✓			
2.6	Lots need to be well lighted and well signed in order to encourage people to utilize off-street parking.		✓			
2.7	During the peak times work with business owners to encourage employees to not park in the lot on Block 10 along Ray Street, instead park in the on-street parking around Blocks 2, 4, 5 and 20.		✓			
2.8	Work with Boyne City Municipal Airport to see if a plan can be developed for Boyne Thunder to provide a parking area for the boats/boat trailers.		✓			
2.9	Consider using the overflow lot between City Hall and the baseball diamond for RV's and potentially overflow boat trailer parking					
<b>3. Residential Parking /Overnight Parking</b>						
3.1	Create a residential parking flyer clearly defining residential parking locations approved for overnight parking.	✓				
<b>4. Marketing</b>						
4.1	Develop flyers that can be distributed to all parking users, customers/visitors, employees, residents and special event attendees.	✓				
<b>5. Special Event Parking</b>						
5.1	Develop a flyer that can be distributed to businesses and purchase sandwich boards to be used as temporary wayfinding signs during special events.		✓			
<b>6. Parking Signs</b>						
6.1	Name all public lots and add introduction signs to all public lots. The text should be large enough to read while driving.	✓				
6.2	Rich & Associates recommends the addition of a family of parking wayfinding (three sign types Boyne City currently has vehicular wayfinding) in the downtown.			✓		
6.3	All duration parking signs on-street and off-street should be consistent in color and text. They should also be placed at a height that will not be obstructed by an SUV parking in front of the sign.			✓		
6.4	Unauthorized parking duration signs place on buildings degrade the system and create confusion and frustration. Work with business owners to stop the trend of placing parking duration signs in front of public parking.	✓				

Downtown Parking Study Implementation Plan		Time Frame				
		Immediate Action	As needed	0-3 Years	3-6 Years	6-10 Years
<b>Recommendations Summary</b>						
<b>7. Pedestrian Enhancements &amp; Activity</b>						
7.1	Follow landscaping criteria outlined in the land use ordinance for all parking lots in the downtown (public and private) in order to enhance pedestrian experience in well lighted and landscaped parking lots. This provides a perception of safety and provides clearly defined areas for cars and pedestrians.			✓		
7.2	Encourage shared dumpsters/compactors/grease bins in lots that have several businesses surrounding the lot.			✓		
<b>8. Bicycle Racks</b>						
8.1	Add additional bicycle racks to the downtown following the guidelines provided.			✓		
<b>9. Parking Enforcement</b>						
9.1	Consider conducting peak season enforcement of the short term parking spaces. Use Police staff until budgeting allows for a part-time PEO.				✓	
9.2	PEO's should use handheld parking ticket writers that track license plate numbers and print tickets, allowing the use of courtesy tickets.				✓	
9.3	PEO's should be dedicated to parking duties as an ambassador of the downtown, only being reassigned during emergencies or special circumstances that may arise.	✓				
<b>10. Parking Fines</b>						
10.1	Adopt the recommended fine schedule along with courtesy tickets.				✓	
10.2	It is recommended that all fines revenue go into the parking fund.	✓				
<b>11. Maintenance of Parking Spaces On-street and Off-street</b>						
11.1	Work with the Chamber and the Main Street program to develop a business text alert system that allows the City to share important information.	✓				
11.2	Develop a maintenance schedule for the lots to keep up with maintenance needs and help budget yearly costs.	✓				
<b>12. Create a Sinking Fund for Maintenance and Upgrades to the Parking System</b>						
12.1	Create a sinking fund for maintenance and upgrades to the parking system.	✓				
<b>13. Valet Parking</b>						
13.1	Develop a policy on Valet parking.			✓		
<b>14. Discourage the Development of Any New Private Parking Lots in the Downtown that are not Shared Use Parking</b>						
14.1	The City should continue to discourage the development of any new private parking lots in the downtown that are not for residential use or public parking and continue to encourage the use of the ordinance allowing shared use parking.	✓				
<b>15. Work with Private Parking Lot Owners in the Downtown to Create Shared Use Parking.</b>						
15.1	City should work with owners of private lots to allow for public shared use of the private parking areas where possible.			✓		

## 1. Parking Management

As the City grows it should consider having one person overseeing the overall parking system. There is currently not a person who oversees the parking system as a whole. This person would act as a liaison between the City Council, City departments, the public and enforcement. A managed parking system is able to adapt to changes that are brought on by new development, businesses moving in and or out, along with land use changes.

Having a single parking point of contact expedites decision making and allows for better integration of the various aspects of parking. The administration of the parking system under the direction of one person will benefit the parking system allowing it to adapt to changes. If possible, it is helpful to have all parking related expenditures and enforcement under one budget, allowing for an efficient way to track the system and create checks and balances.

### Actions, Time Frame and Cost:

#### 1.1 Action – Appoint a person to oversee the parking system

Time Frame – As needed

Cost – N/A

## 2. Parking Duration & Allocation

### On-Street

Two-hour on-street parking is often the predominant duration for on-street parking as it suits the needs of the majority of customers and visitors. Based on parking Best Practices, it is generally agreed that on-street parking should be reserved for customers and visitors. Due to the tourist nature of the downtown it is recommended that the on-street parking duration in the downtown core area be extended to three hour parking. The goal being to let the customer visit multiple locations without having to move their vehicle. It should be noted that a strong marketing effort will need to be conducted (see **Recommendation 4**) in order to keep employees from parking on-street.

Moving to three-hour on-street parking would cut down on the need for parking enforcement staff and would help Boyne City market the area as a customer friendly downtown. This change allows the customer to stay longer and potentially visit more restaurants and stores on their visit.

Individuals requiring more than three hours should be directed to off-street parking areas. The other duration that should be found on-street is 15 or 30-minute parking for use as pick-up and drop off and loading spaces. The 15 or 30-minute spaces and loading zones should be located as either the first or last space on the block face where needed. These spaces do not belong to a specific use, rather the space is for anyone who has a short-term errand or quick pick up.

Long term (beyond three hours) parking is acceptable in areas where turnover is not the desired effect. This parking can be used for additional employee or customer/visitor parking. The customer/visitor parking is often set at three hours to discourage employees from parking in these spaces. Three-hour parking requires most employees to move their vehicle two times in a workday discouraging this action.

Unrestricted on-street parking where turnover is not required is typically used for employee parking. It is important that the employees are not pushed into residential areas. This will only create a new parking issue causing the residents to not have available parking.

#### **Recommendations for On-Street Parking:**

- Work with business owners to get employees to park around block 20, 19B and on 16C during the summer months and special events. There are 97 on-street spaces in this area to provide long term parking less than a five-minute walk from most businesses in the downtown.
- The lot around the park is just at a five minute walk and can be a great place for employees to park in the summer peak season as well. This lot peaked at 19% occupancy.
- The on-street parking along River Street is not well utilized and would be another good employee parking location. There are 54 spaces along this street.
- Change the duration to three-hour parking on-street in the core area and add three-hour duration signs to block 7D (1<sup>st</sup> two spaces off Water Street), 11C, 10C, 9D and 8B.
- Work to add loading zones for large truck deliveries that convert back to two-hour parking after a designated time period throughout the downtown. These spaces do not have to be on each block face, if located properly several block faces can share one space. In order for the time restrictions to work it is vital to provide consistent enforcement.
- Spread out the 15-30 minute on-street spaces. There are 8, 15-30 minute spaces along Park Street on block 6. There should be one to two spaces per block face where needed. These spaces are not intended to belong to one business, they are for all businesses on the block. The highest observed occupancy in these spaces during the study was 50%.

- Marketing will be vital to a successful transition of adding time limited durations to the downtown.
  - Employees will need to understand the importance of leaving the most convenient spaces for customers/visitors of the downtown along with the impact this will have in helping businesses to be successful.
  - Customers/visitors will need to easily see signs posting duration limits and what parking is public.

### **Off-Street**

The majority of the off-street parking should be long term for customers and visitors who plan on spending longer periods of time in City. Public off-street parking is where most employees of City businesses that do not have their own parking should park. It is important that long term parking be differentiated from the short-term parking with signs that are easy to understand. Currently there are no time restrictions in the public lots. There needs to be a clear definition of where employees should park and where customers wanting long term parking can park.

### **Recommendations for Off-Street Parking:**

- Lots need to be well lighted and well signed in order to encourage people to utilize off-street parking. People will not park in a lot that feels unsafe.
- During the peak times work with business owners to encourage employees to not park in the lot on block 10 along Ray Street, instead parking in the on-street parking around blocks 2, 4, 5, and 20. This lot is a prime location for customers and visitors.
- Stakeholders brought up the need for additional boat trailer and RV parking. It appears that the majority of the issue with boat trailer parking is during Boyne Thunder. Work with the Boyne City Municipal Airport to see if a plan can be developed for this event to provide a parking area for the boats/boat trailers.
- The overflow lot between City Hall and the baseball diamond could potentially be used for RV's along with overflow boat trailer parking.

### **Walking Considerations for locating parking in a downtown**

Customer and visitor parking should remain close and convenient, while it is generally expected that employees walk farther in downtown settings. Educating business owners, managers and employees on appropriate parking behaviors is important. There should be a clear understanding with business owners and employees that leaving on-street parking and the close, convenient off-street spaces for customers is vital to the success of businesses in the downtown.

The intent of a City parking program, is to provide an equitable parking system that works for all businesses in the downtown. As discussed earlier, education and marketing are a key component to a successful parking system. **Table L** details people’s tolerance for walking depending on the environment. We understand that every community is different and that individual’s tolerance for walking will vary depending on the weather, vibrancy, density and age of the downtown. Following the chart is **Map 7** detailing the walking distances from the center of the study area.

**Table L**  
 CHART TO ILLUSTRATE INDIVIDUAL’S TOLERANCE FOR WALKING

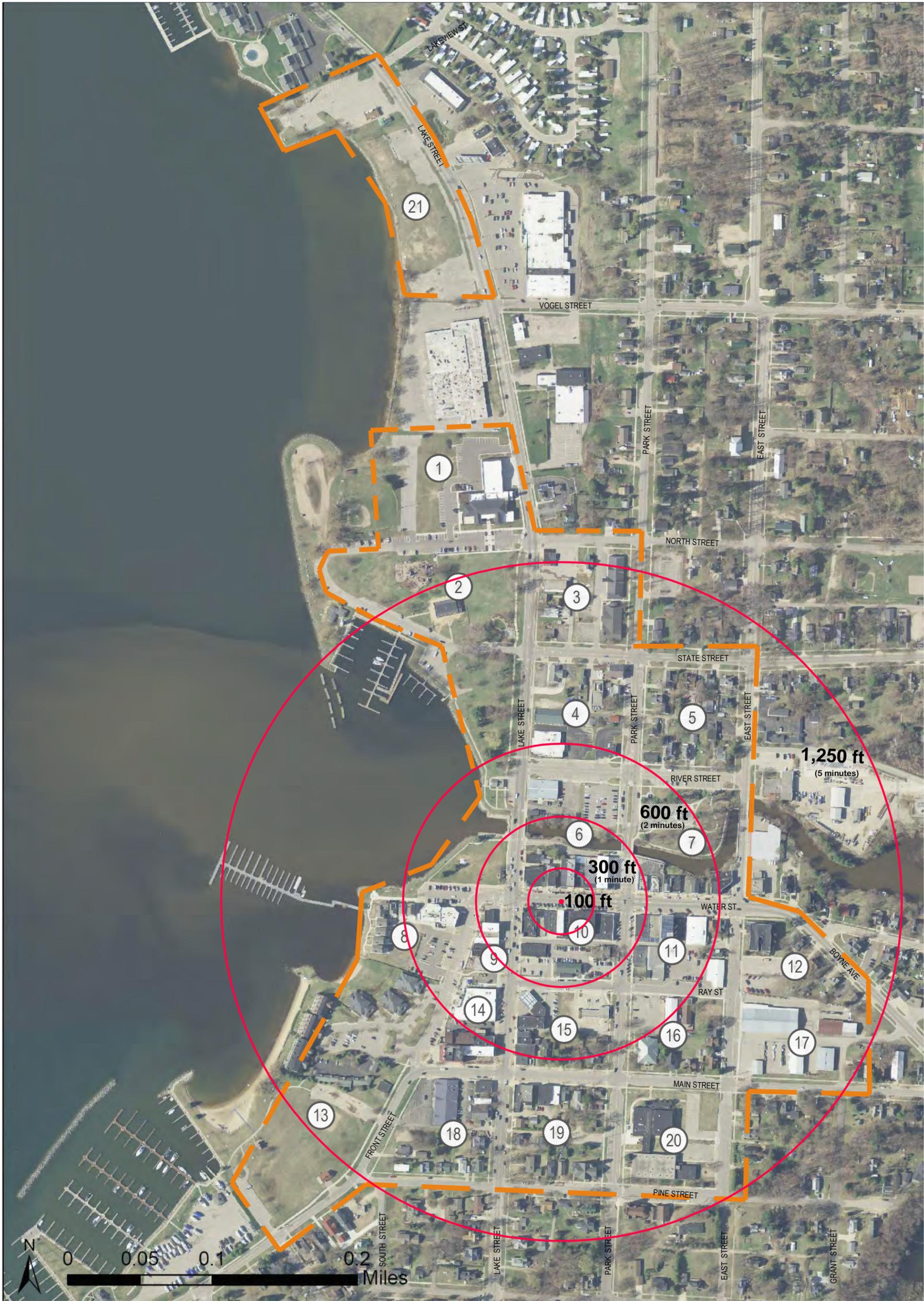
	Minutes	Feet
In a highly attractive, completely weather protected and artificially acclimatized environment	20	5,000
In a highly attractive environment in which sidewalks are protected from sunshine and rain	10	2,500
In an attractive but not weather-protected area during periods of inclement weather	5	1,250
In an unattractive environment (parking lot, garage, traffic-congested streets)	2	600

*Gruen, Victor, The Heart of Our Cities. The Urban Crisis: Diagnosis and Cure. Simon and Schuster 1964, New York, p. 250:*

“An average walk is at a speed of 2.5 miles per hour. This converts to 13,200 feet per hour or 220 feet per minute. On this basis, a 5-minute walk would be 1,100 feet and a 10- minute walk would be at 2,200 feet.”

*Pushkarev and Zupan. Public Transportation and Land Use Policy. Indiana University Press from a study by Regional Plan Association of New York (RPA).*

During the turnover and occupancy surveys, 12% of the vehicles observed were overstaying the posted time durations in on-street spaces in front of and near retail businesses. It is difficult for a retail business to survive in an area when there is no convenient on-street parking available. If a customer wanting to visit a retail store to run a specific errand cannot find convenient parking they may go elsewhere. When a customer is planning on visiting more than one retail location they will be willing to park a bit further away and when a customer is planning on spending longer periods of time in a downtown they may be more willing to park off-street and even further away. It is important to move the employees to further away on-street spaces where turnover is not needed and or into the off-street parking.



**CITY OF BOYNE  
PARKING STUDY**

Boyne City, Michigan

**RICH & ASSOCIATES**  
PARKING CONSULTANTS

25877 Northwestern Hwy., Suite 200  
Southfield, MI 48034  
248.353.8280 Fax: 248.353.8280  
Lansing, MI 48226  
313.949.9598

ARCHITECTS • ENGINEERS • PLANNERS



09-14-18 sar

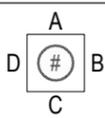


BLOCK  
NUMBER

**LEGEND:**

— STUDY AREA

**BLOCK FACE KEY PLAN:**



WALKING DISTANCES  
IN MILES

Sheet Title:

**WALKING  
DISTANCE**

MAP Number:

**MAP 7**

**Action, Time Frame and Cost:**

- 2.1** Action- Regular enforcement will need to be conducted to make sure that the vehicles are not parked beyond posted time limits.

Time Frame – 0-3 years

Cost – Minimal (signs)

- 2.2** Action- Work with business owners to get employees to park in the recommended long term parking during summer months and special events to help provide additional customer spaces in the core area.

Time Frame – 0-3 years

Cost – N/A

- 2.3** Action- Change the parking duration to three hours and add three-hour duration signs to block 7D (1<sup>st</sup> two spaces off Water Street), 11A, 10C, 9A and 8B.

Time Frame – 0-3 years

Cost – Minimal, cost of signs and enforcement.

- 2.4** Action- Work to add loading zones for large truck deliveries that convert back to three-hour parking after a designated time period throughout the downtown.

Time Frame – 0-3 years

Cost – Minimal, cost of signs and enforcement.

- 2.5** Action- Consider adding loading zone spaces (15 to 30-minute) at either the ends of the block or the middle stall on all blocks where these are not currently provided.

Time Frame – 0-3 years

Cost – Minimal (signs)

- 2.6** Action- Lots need to be well lighted and well signed in order to encourage people to utilize off-street parking.

Time Frame – 0-3 years

Cost – Cost to be determined.

- 2.7** Action- During the peak times work with business owners to encourage employees to not park in the lot on block 10 along Ray Street, instead parking in the on-street parking around blocks 2, 4, 5, and 20.

Time Frame – 0-3 years

Cost – Minimal (signs)

- 2.8** Action- Work with the Boyne City Municipal Airport to see if a plan can be developed for Boyne Thunder to provide a parking area for the boats/boat trailers.

Time Frame – 0-3 years

Cost – Minimal (signs)

- 2.9** Action- Consider using the overflow lot between City Hall and the baseball diamond for RV's and potentially overflow boat trailer parking.

Time Frame – 0-3 years

Cost – Minimal (signs)

### **3. Residential Parking/Overnight Parking**

Downtown residents are an important component of downtown revitalization. With a desire to increase the number of residential developments in the downtown it will be important to develop regulations on when, where and how long residents are allowed to park. It will be beneficial to create an ordinance and downtown residential parking permit to meet this need.

The City should track who purchases the parking permits for each vehicle. As the parking system grows and more permits are sold it may become necessary to track permits using permit software and a comprehensive application form. The form would ask for the parkers name, home and business address, phone numbers, vehicle type(s), and license plate numbers(s) of those vehicles. Additionally, the application should list the rules and penalties possible if they do not park in the appropriate locations and do not pay on time. This contact information will assist in contacting the owner of the vehicle if there is any damage in a lot or a vehicle is inappropriately parked. It may also be necessary to change to a permit that is difficult to reproduce using holograms or plastic permits.

At this time, it will be important to work with landlords to create a flyer for locations of permitted overnight parking. The flyer should include a map identifying locations to park overnight without the worry of a parking citation, the ordinance relating to overnight parking and the fine for parking in the parking spaces that are not identified as overnight parking. This flyer would be provided to new downtown residents when signing leases.

**Action, Time Frame and Cost:**

**3.1** Action- Create a residential parking flyer clearly defining residential parking locations approved for overnight parking.

Time Frame – As soon as possible.

Cost – Minimal

**4. Marketing**

Marketing is a key aspect of a successful parking system. Marketing should be done every time there is a change to the parking system and should be directed towards the entire community. It is important to encourage downtown employees to park in the long term parking areas, leaving the most valuable on-street parking for customers and visitors. Additionally, an individual's perception of Boyne City is greatly enhanced if they know ahead of time where they can park and what, if any, restrictions are on parking.

Marketing materials can include direct mailings, brochures, maps, kiosks, on-line web pages and articles in magazines and newspapers. Information contained in the marketing materials should include location, up-coming changes, regulations, fine payment options and any other information relating to the parking system.

Flyers that list the downtown businesses included with a map showing parking areas and key attractions work well to market both the businesses and the parking system, like the one put out by Main Street. The flyer is even more beneficial if it includes the durations of parking, both on-street and off-street, and clearly defines where all user types should park. This flyer can be specifically designed for different user types such as employee, residential, special event and customer/visitor. This can aid in educating employees or residents on specifically where they should be parking.

Rich & Associates included an example of a parking flyer on **page 38** and **39**. This flyer is intended to be specific to parking in the downtown and should also include locations of bicycle racks. Selling advertising space to businesses on the flyer can help defray the expense of printing, though it can also take away from the message if there are too many adds and text.

**Actions, Time Frame and Cost:**

**4.1** Action - Develop flyers that can be distributed to all parking users; customers/visitors, employees, residents and special event attendees.

Time Frame – 0-1 year and continued yearly.

Cost – \$300-\$500 for flyers with \$500 annually for ongoing maintenance.

### Welcome to Boyne City

Whether you are a first time visitor, a local resident who enjoys all that downtown Boyne City has to offer, a business operator or employee, we want to make your downtown experience even better. This brochure will guide you to where you can park.



### Parking is Easy in Downtown Boyne

The map indicates time restrictions for on-street parking, lots open to the public and lots with parking available for monthly lease.

Public lots are available for use free of charge. Please be aware of overnight restrictions in public lots and on-street .

If you would like to check on availability of leasing a parking space in a public lot or if you would like to discuss a parking idea or concern please contact the Police Department.



### Parking Fines

### Visitor Information

City of Boyne City  
319 North Lake Street  
Boyne City, MI 49712  
Ph: 231.582.6597 ♦ Fax: 231.582.6506

Hours:  
Monday - Friday  
9:00 am - 5:00 pm

### Questions?

Police Department  
Phone: 231.582.6611

Hours:  
Monday - Friday  
8:00 am - 4:00 pm

## Parking Guide



### Welcome to Boyne City, Michigan



## 5. Special Event Parking



Rich & Associates recommends that a plan be developed for parking during special events. This plan should include a remote lot location (public school, church, City or Municipally owned lot) and if necessary an agreement with the lot owner. Additionally, some form of shuttle service may need to be arranged with the local transit service, or schools.

Purchase sandwich boards and develop a flyer to be used during special events. The flyers can be handed out to businesses and used in marketing the event (further discussed in the Marketing recommendation). The sandwich boards are used as temporary wayfinding signs during special events leading parkers to the temporary overflow lots.

### Actions, Time Frame and Cost:

**5.1** Action - Develop a flyer that can be distributed to businesses and purchase sandwich boards to be used as temporary wayfinding signs during special events.

Time Frame – Monitor the need.

Cost - \$200-\$550 for signs \$150 - 200 annually for flyers.

## 6. Parking Signs

Parking areas can be difficult to find if they are located behind buildings, particularly if someone is not familiar with the downtown. There should be more directional/location signs in the downtown, especially to lead parkers to public parking lots. The parking lots need identification signs to inform a visitor of the downtown that the specific parking area is not only for public use, but also at no charge (free). It is helpful to name the lots so that a customer can remember where they parked. Naming the lots can also help with giving directions to businesses in the downtown. The names should reflect the lot locations by using street names.

Pedestrian wayfinding is critical once a person parks their vehicle and transitions to walking. Being able to follow wayfinding maps or signs, aid pedestrians in locating key destinations, and then back to where they parked. These are particularly important elements in tourist/customer/-visitor oriented downtowns. Boyne City should consider adding one or two kiosks to the downtown with business listings and parking locations.

Rich & Associates has developed a parking signage best practices package that is detailed in this recommendation. The information is provided to show how the signs work together and provide a comprehensive wayfinding system. Boyne City is in the process of purchasing and installing wayfinding signs, and therefore this recommendation is to show how parking wayfinding will work with the overall wayfinding signage package.

### Best Practice Sign types include

The following four types of parking signs are strongly recommended as best practices for improving driver wayfinding. Communities often miss the important role that signs play in making visitors comfortable with their surroundings and the effect that signs can have on vehicle travel and parking use efficiency.

#### Directional/Location:



Directional-parking signage is distinct in color, size and logo and directs drivers to off-street parking areas. Parking location signage complements the directional parking signage. The signs can have arrows pointing to the off-street lots. The signs are mounted on poles at standard heights, on the streets directing parkers to off-street lots.

#### Identification:



Identification signage is placed at the entry of each parking lot. The name of the parking area is identified and the type of parking available as well as hours of enforcement and the hours of lot operation are listed on the signage. The identification signage is distinctive in color and size, and it is located on a pole at a lower height. The text should be large enough to read while driving.

#### Vehicular Wayfinding:



Vehicular wayfinding signs are placed at points in the downtown leading drivers to places of interest and parking locations. The sign also points out the various landmarks or attractions that can be found. These types of signs are placed at key locations easily found by a driver and are intended to help a driver orient themselves to the downtown area. Arrows should always point forward, to the left and right. Avoid using downward pointing arrows.

**Pedestrian Wayfinding:**



Pedestrian wayfinding signs or kiosks are placed at the points of pedestrian entry/exit to parking lots. Typically, a map illustrating the downtown area that points out the various shops or attractions. These types of signs are placed at locations easily found by a pedestrian and are intended to help that person orient themselves to the downtown area, to locate their destination and then be able to return to where they parked.

The duration parking signs on-street should be consistent in color and text. They should also be placed at a height that will not be obstructed by a SUV parking in front of the sign. Many of the signs in the downtown are difficult to see if a SUV is parked in front of the sign. It is also important that there are enough signs on a block that it is clear that the parking is time restricted.



**Action, Time Frame and Cost:**

**6.1** Action - Name all public lots and add introduction signs at the entrance to all public lots. The text should be large enough to read while driving. This will aid in marketing and wayfinding.

Time Frame – As soon as possible

Cost – See 7.2.

**6.2** Action - Rich & Associates recommends the addition of a family of parking wayfinding (3 sign types, Boyer City currently has vehicular wayfinding) in the downtown.

Time Frame – 0-3 years

Cost – \$75,000-\$150,000 for a package of signs.

**6.3** Action – All duration parking signs on-street and off-street should be consistent in color and text. They should also be placed at a height that will not be obstructed by a SUV parking in front of the sign.

Time Frame – 0-3 years

Cost – To be determined

**6.4** Action – Unauthorized parking duration signs placed on buildings degrade the system and create confusion and frustration. Work with business owners to stop the trend of placing parking duration signs in front of public parking.

Time Frame – As soon as possible

Cost – To be determined

## 7. Pedestrian Enhancements & Activity

Pedestrian movement is an important aspect of parking. It is extremely difficult to get people to park beyond the front door of their destination if there is any concern regarding safety or if the experience is not pleasant. Lighting and landscaping can greatly change a perception of safety in lots and along sidewalks. Murals, art, window decorations and flowers can create a pleasant walking experience during the day and night. It is important to follow the landscaping criteria Boyne City has developed for designing parking for all lots in the downtown.

All pedestrian walkways should be barrier free and easy to navigate. Minimize pedestrian and vehicular interaction by creating a clear distinction between the street and sidewalk. This can be done by using texture, colors, trees, or planters between the sidewalks and streets. It is also important to provide handicap accessibility at all intersections.

Trees, banners, art and window displays are other ways to help reduce the speed in downtowns. Bump outs or bulb outs help provide an area of safety when pedestrians are crossing the street. Creating a more pedestrian friendly downtown encourages people to park once while visiting the downtown helping cut down on congestion. It is important to keep trees trimmed so they do not block signs or lighting.

Minimize surface lots and large breaks between buildings to promote walking in the downtown. People tend to walk further without complaint if the walk is pleasant enjoyable and engaging. Boyne City has several sculptures and art features located in the downtown along with decorated store windows, flowers and landscaping that make the walking experience enjoyable.

Dumpsters are an issue in some of the parking lots. Consider trying a combined dumpster service and work with private lot owners to try and limit the number of dumpsters with the use of a shared dumpster plan. This would free up parking spaces in lots and provide aesthetically pleasing alleys. It also creates safer walkways because it eliminates places for people to hide.

Examples:



**Action, Time Frame and Cost:**

**7.1 Action** - Follow landscaping criteria outlined in the land use ordinance for all parking lots in the downtown (public and private) in order to enhance the pedestrian experience in well lighted and landscaped parking lots. This provides a perception of safety and provides clearly defined areas for cars and pedestrians.

Time Frame – 0-3 years

Cost – Must be determined on a case by case basis.

**7.2 Action** - Encourage shared dumpsters/compactors/grease bins in lots that have several businesses surrounding the lot.

Time Frame – 0-3 years

Cost: \$500-\$1,000 per area, Shared dumpsters would include dumpster enclosure and collection of dumpster fees from agreements.

**8. Bicycle Racks**

Consider providing additional bicycle parking which in turn cuts down on the number of motor vehicle spaces needed during peak season.



**Guidelines on Bicycle Racks:**

- Racks should allow bike frame to make contact at two points.
- Should allow for more than one bike per rack.

- Needs to allow for popular “U” shape lock.
- Racks should be placed where they will not impede upon pedestrian traffic, though need to be readily identifiable.
- Should be clearly signed with a bicycle parking sign or pavement markings.



These are examples of on-street bike facilities, that meet the guidelines for bicycle racks. Both are a version of the popular U-rack. The pictures show an on-street parking space turned into 14 to 12 parking spaces for bicycles.

### **Actions, Time Frame and Cost:**

**8.1** Action - Add additional bicycle racks to the downtown following the guidelines provided.

Time Frame - 0-3 years

Cost - \$100 - \$300/rack, depending on size and number of racks

## **9. Parking Enforcement**

The enforcement is currently done only when a complaint is made about a vehicle. A police officer will locate the owner of the vehicle and have a discussion about the time limits. As discussed in the Turnover and Occupancy section there were several vehicles parking beyond the posted time limits in the two-hour parking spaces. These vehicles could be business owners, employees, visitors or potentially residents or renters of condominium units. The additional employee spaces and residential parking permits should help get people parking in the correct spaces. The three hour on-street duration change should help customers/visitors have additional time to spend in the downtown without moving their vehicles.

Parking enforcement is typically an important component of a parking system. By differentiating the time limits of parking between off and on-street parking, with shorter limits for convenient on-street spaces to encourage turnover we are helping to ensure that customers and visitors always have adequate and convenient parking. Once the recommendations are completed an occupancy analysis should be conducted by staff to see how many vehicles are overstaying the three hour time limits. If it is necessary to enforce the parking time limits in order for the allocation to work, this recommendation has been provided on how to conduct parking enforcement.

Enforcement of time restrictions and other regulations should follow the posted enforcement time in the entire downtown. Within reason, the enforcement staff cannot choose who gets a parking citation. Enforcement must be fair and consistent. Parking regulations are necessary and implemented to increase the efficiency of the parking system by allocating certain parking areas to specific users. When the regulations are not followed the systems efficiency is degraded.

One part time Parking Enforcement Officer (PEO) should be adequate to ensure that parking is routinely monitored per the applicable regulations. Specifically, one PEO can monitor a route consisting of between 600 and 800 parking spaces. This ratio assumes the use of handheld ticket writers and includes the PEO covering a mixture of long and short-term parking. If an individual is in a vehicle, a specified route of 600 to 800 parking stalls can be monitored up to four times during a standard shift (as permitted with scheduling). There should be multiple routes with varied times so that patterns are not developed allowing patrons to know when and where to park to avoid a citation.

If parking enforcement is done consistently there is no need to have full time PEO's or to cover every space for every hour of the enforcement time. It is important to maintain a level of staffing to cover the entire parking supply though this can be done randomly. Begin with Police staff and as budgeting allows, follow the recommendations below for parking enforcement. The officer should work varying schedules between 11:00AM – 6:00PM Monday through Friday.

It is recommended that enforcement be conducted with handheld parking ticket writers that track license plate numbers and print tickets. A handheld unit allows PEO's to issue a courtesy ticket for first time offenders (discussed in Recommendation 10). Due to the tourist nature of the downtown it is important to invest in the handheld unit so a courtesy ticket can be issued for the first offense. Handheld units increase efficiency by storing the license plate numbers of vehicles, thus negating the need to physically chalk tires. This allows enforcement to occur during inclement weather, whereas marking tires with chalk cannot be done in rain or snow because the chalk does not mark well on a wet tire. When using the handheld device and following a route, every parking space, whether occupied or not, is then entered into the device (typed in or a picture taken of plate) giving a time stamp of when the PEO checked the space. This helps ensure that a vehicle is not given a ticket before the posted duration.

Software needs to be purchased to run a handheld system and process and file tickets. A cloud based back up or a “home base” where the handhelds can be downloaded and updated daily will also be required. There are several options of specific ticket writing units. Much of the software written for enforcement can be used with tablets or smart phones. The units can also take pictures of the vehicle in violation.

PEO’s may only be necessary during peak season and adjusted as necessary. Street signs should indicate that parking is enforced from 11:00AM to 6:00pm Monday – Friday in any and all areas where there is a limited duration or restrictions for parking.

**Action, Time Frame and Cost:**

**9.1** Action- Consider conducting peak season enforcement of the short term parking spaces if the recommendations do not change the behavior of employees and residents. If that time comes follow the recommendations provided.

Time Frame – When needed.

Cost – To be determined.

## **10. Parking Fines**

When needed, if handheld ticket writers are purchased, it is recommended that the City move to a graduated fine system (i.e. the first ticket would be a courtesy ticket which is currently \$20.00, and the second ticket would be \$25.00 with each ticket after increasing in price). By offering a courtesy ticket first, the parker has clearly been warned of the parking time durations and with free long-term parking available there are the appropriate parking options.

The recommended graduated parking fine schedule for overtime parking tickets is:

1st– Courtesy ticket

2nd –\$25.00

3rd –\$30.00

4th –\$35.00

Offer courtesy tickets during the first few weeks of enforcement. After the first few weeks, adopt the recommended fine schedule and only offer a courtesy ticket when a parker has not received a ticket in the previous six months (or whatever time frame is chosen). From a public relations standpoint, it would be preferable to issue a Courtesy ticket alerting the parker of their violation and then explaining the rules for parking in the downtown including a map of labeled parking areas.

All fine revenue should go to a parking fund and should be used to cover parking operating expenses with any net revenue going back into the downtown area (parking fund) for things such as parking enforcement, sidewalk cleaning, signs, lighting, banners etc. Parking revenue is then helping to pay for the upkeep of the downtown.

**Action, Time Frame and Cost:**

**10.1** Action- If needed, adopt the recommended fine schedule along with courtesy tickets.

Time Frame – 3-5 years as budgeting allows for handheld units to be purchased.

Cost – Covered in the cost of handheld units, with a loss of revenue of the first ticket.

**10.2** Action- It is recommended that all fine revenue go into the parking fund.

Time Frame – As soon as possible

Cost – N/A

**11. Maintenance of Parking Spaces On-street and Off-street**

Develop a maintenance schedule for the lots to keep up with maintenance needs and help budget yearly costs. This should include trash removal, sweeping, striping, lighting (lens cleaning, bulb replacement), signs, landscaping and tree trimming. A rotating schedule should be developed with daily, weekly, monthly and annual tasks to assure proper maintenance is completed.

Work with the Chamber and the Main Street program to develop a business text alert system that allow the City to share important information. This system can share changes to the parking system, street closures, plowing routes and times, special event information as well as emergency situations.

**Action, Time Frame and Cost:**

**11.1** Action- Work with the Chamber and the Main Street program to develop a business text alert system that allows the City to share important information.

Time Frame – As soon as possible

Cost – To be determine

**11.2** Action- Develop a maintenance schedule for the lots to keep up with maintenance needs and help budget yearly costs.

Time Frame – As soon as possible

Cost – To be determined

## **12. Create a Sinking Fund for Maintenance and Upgrades to the Parking System**

Create a sinking fund for maintenance and upgrades to the parking system. We recommend putting aside \$25.00 per parking space per year. This money would go into a parking fund and should be allocated for long term maintenance and upgrades.

### **Action, Time Frame and Cost:**

**12.1** Action- Create a sinking fund for maintenance and upgrades to the parking system.

Time Frame – As soon as possible

Cost – Minimal

## **13. Valet Parking**

Valet parking is currently not used in the downtown. As more restaurants come to the downtown and additional development occurs, there is the potential for use of valet parking for restaurant and entertainment venues that makes coming downtown a more attractive adventure. The City would not necessarily operate the valet parking, though the City should have a policy in place for regulating how valet operations would be run and where vehicles can be parked.

This policy should include using public parking areas and private off-street lots as valet parking storage and on-street spaces for vehicle drop off and pick up. The policy should specify rental charges for on-street parking spaces and used for pick-up and drop-off. If any public lots are used there will also need to be a fee set up for the use of these spaces. It is important to limit the number of pick up and drop off-spaces as often valet companies want to reserve more spaces than they actually need.

**13.1** Action- Develop a policy on Valet parking.

Time Frame – 0-3 years

Cost – Minimal

## **14. Discourage the Development of Any New Private Parking Lots in the Downtown that are not Shared Use Parking**

A parking system works best when the parking can be shared and the municipality is in control of 50% or more of the available parking in the downtown. This is an important benchmark because it allows for shared use parking. Maximizing the percentage of the parking supply that is shared among different users and recognizing that different types of land use will peak at

different times of the day, allows the parking needs of the City to be met with fewer spaces, thereby requiring less investment. The City's control of 63% of the parking meets the 50% minimum benchmark. At higher percentages of public parking, even more flexibility is available.

When parking spaces are reserved for specific businesses or uses, and are not available for multiple businesses in the downtown, many spaces may often go unused during parts of the day. While the current parking demand analysis showed that there is an overall sufficient parking supply, the availability of shared use public parking is vital for downtown businesses to succeed. When there is a lack of available public parking because the parking is reserved for specific uses, this makes it difficult for a customer/visitor of the downtown to visit more than one location without having to move a vehicle. This also makes it difficult to provide a sufficient amount of employee parking off-street for those businesses without their own lots.

Density combined with a mixture of land use types encourages activity in an urban setting. Privately developed surface parking lots can be discouraged through zoning ordinances. Some communities outright ban parking development by private developers, while others implement parking maximums that limit the amount of on-site parking that can be built with development.

When a community chooses to discourage private parking within a specific business district, the Municipality takes on the task of providing enough parking to support economic activity for all developments (other than uses such as hotel or residential) within the district. Like Boyer City, many downtowns do not require parking in the Central Business Districts. The reasoning behind this move is that a dense downtown can be created without an excess of parking. The parking that is built, is intended to be shared among all businesses increasing the efficient use of the spaces. This also encourages walking, thus encouraging customers to visit multiple locations. Additionally, this allows the City to keep development where they want, parking in locations that benefit the whole district and provide a more pedestrian friendly downtown.

Currently the majority of the parking need in the downtown is provided by the City. In order for the City to pay for additional parking it may become necessary to consider charging for parking, an in-lieu of parking fee (or Parking Improvement Fund fee) for new development and/or create an assessment district to fund new parking projects. It most often takes more than an assessment district or an in-lieu of fee to pay for new parking. Many communities have to use multiple funding sources.

Excepting parking requirements for development in the downtown core encourages density, mixed land use and development in the district. Currently the Zoning Ordinance allows the Planning Commission the option of reducing or waiving parking requirements. Most communities do require residential developments to provide parking in a Downtown Business District. Residential parking can sometimes work as shared use parking, though it is difficult to rent or sell units when there is not a dedicated parking space provided, especially in an area without multiple forms of public transportation.

**Actions, Time Frame and Cost:**

**14.1 Action** - The City should continue to discourage the development of any new private parking lots in the downtown that are not for residential use or public parking, and continue to encourage the use of the ordinance allowing shared use parking (Article X.- CBD, Sec. 10.10.)

Time Frame - Immediately

Cost – To be determined

**15. Work with Private Parking Lot Owners in the Downtown to Create Shared Use Parking**

Public/private partnerships are another key factor in providing additional shared use parking. It is recommended that the City work with lot owners that have underutilized lots to bring these spaces into the public parking system, through a lease or an agreement to clean, light and enforce. Where possible it will benefit the City to seek out public/private partnerships with banks, churches, schools or other entities that have large parking lots that are not needed every day or all day. There is a church on block 19 that has twelve spaces, a private lot on block 12 with 16 spaces, a private lot on block 15 with 10 spaces, the school lot on block 20 and there is a bank on block 4 that may be willing to work together with the City. This will increase the amount of publicly available shared use parking. Even though there is enough parking in the study area it would be beneficial for agreements to be developed to share parking lots, especially to help provide convenient employee parking.

**Actions, Time Frame and Cost:**

**15.1 Action** - The City should work with owners of private lots to allow for public shared use of the private parking areas where possible.

Time Frame – 0-3 years

Cost – Potentially would require cleaning, lighting, and enforcement of lots.



<p><b>CITY OF BOYNE PARKING STUDY</b></p> <p>Boyne City, Michigan</p>	<p><b>RICH &amp; ASSOCIATES</b> PARKING CONSULTANTS</p> <p>25677 Northwestern Hwy, Suite 208 Southfield, Michigan 48033</p> <p>Southfield, MI 248.333.5060    Lutz, FL 813.949.9668</p> <p>ARCHITECTS • ENGINEERS • PLANNERS</p> <p>09-17-18 sar</p>	<p><b>LEGEND:</b></p> <p>— STUDY AREA</p> <p>— Employee Parking</p> <p>— 3-Hour Parking</p> <p>— 15-Minute Parking</p> <p>— Potential New Parking</p> <p><b>BLOCK FACE KEY PLAN:</b></p>	<p>Sheet Title:</p> <p style="text-align: center;"><b>PARKING RECOMMENDATIONS</b></p>	<p>MAP Number:</p> <p style="text-align: center;"><b>MAP 8</b></p> <p style="text-align: right;">Pg. 60</p>
---------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------

## NEW PARKING

Rich & Associates was asked to determine locations for new parking. There is currently a surplus of parking in the downtown and at this point additional parking would only be necessary when there are re-occupancies of vacant space and additional development occurs.

When the time comes for additional parking it is recommended to look for on-street options first. There is the opportunity to add additional spaces along Lake Street following the pattern of the existing 90-degree spaces near the public restrooms. There was some discussion of moving Lake Street and developing the parking into the east side of the street in order to keep views for future development. Either option will work and it will be up to the City and residents to determine if the cost of moving the road will be necessary for development.

While there were no immediate recommendations for new parking some stakeholders stated that the downtown needed a parking garage. It is important to understand parking structure development costs and how they may be financed in order to have a conversation on the price difference between surface parking and structured parking. Surface parking typically cost between \$3,500 and \$5,000 per space not including land cost. The construction costs for a parking structure in this region, depending on site constraints, number of spaces and overall efficiency of the layout, is estimated to be in the range of \$70-\$85 per square foot. Project soft costs without land costs are generally between 15% and 17% and then finance costs are between 5% and 7% of the project cost.

There are other costs for parking improvements such as new signs, lot improvement, etc. No specific funding mechanism has been identified, though there are several options.

- Paid parking
- In -lieu of fee
- Assessment district
- General fund
- General Obligation Bond
- TIF

### Timing for Additional Parking Development

Parking development in the City of Boyer City will need to be coordinated with demand to ensure that as development occurs the City will have the ability to decide when to begin considering new parking. The City will need to regularly check occupancy levels and updated the demand matrix provided with any land use or parking changes to keep a firm grasp on the overall parking system.

## Discussion on Meters and Charging for Parking

At this time, it is not recommended to charge for parking. As the downtown continues to grow and develop there may be a point in which the parking is operating at or near 85%-90% occupancy and at that point meters could become necessary as a part of managing parking.

Generally, cities that have parking systems that are self-sufficient rely upon revenue from several sources. This includes revenue from a paid parking system, fine revenue and fee-in-lieu programs. It is difficult if not impossible to build future parking downtown and have it fully amortized without a pooled system of revenue. This is why pooling other parking revenue sources such as all lots and on-street parking, is so important.

Based on parking Best Practices it is generally agreed that on-street parking should be reserved for customers and visitors. In areas that have little commercial activity, the on-street spaces can have longer durations of stay allowed. There is a body of information that has been prepared by Donald Shoup from UCLA that suggests that all on-street parking should be metered. The rationale, simply put, is that on-street parking is the most sought after and thus the most valuable parking. Therefore, there should be a charge that places a premium on this type of parking.

Further, it is suggested by Shoup, that revenue from parking meters should be used to cover parking operating expenses and any net revenue go back into the downtown assessment area for things such as sidewalk cleaning, signs, lighting, banners etc. Parking revenue is then helping to pay for the upkeep of the downtown.

Parking meters and other parking technology encourage turnover in a downtown, though enforcement can also work to keep parking spaces turning over. Parking meters or some other type of system to pay for use of a parking space in downtown Boyne City makes sense from a Best Practices standpoint and would provide a revenue stream to improve, maintain and expand the parking in the downtown. Our experience has been that unless there is a properly conducted education process explaining why metered parking is necessary to get property owners and business owners behind paid on-street parking, the implementation of the system will be difficult.

The following is a review of potential ways to charge for parking:

### Individual Meters

This option would use individual meter heads for each parking space. The meter can accept coin or credit card and can work with a phone payment application. This option can be the least expensive for initial install if there is not a credit card option. The down side of these meters is

that not all will offer the ability for flexible rates and you need one post along the sidewalk for every two meter heads. Cost - \$300-600

### **Permit Parking**

Permit parking can work with any type of meter. This system can be as simple as a hang tag or a sticker and as complicated as gated lots with cards or codes. Using permits can complement a metered parking system and is simple to enforce. As long as the hang tag or sticker is up to date, showing and the permit holder is parked in the appropriate location they will not receive a citation.

If a permit parking system is started it will be necessary to create a database of all permit holders and to what vehicle each permit is registered. As the system grows it will most likely be necessary to purchase permit software that will help to run and keep track of the system. This type of software will also work together with enforcement software to help in enforcing the system. Cost – depending on number of permits (starting with printing and staff time)

### **Multi Space Meter**

The multi space meter was designed to handle both on-street and off-street parking. The simplest multi space meters are simply a meter head that can cover multiple spaces. This type of machine will typically only accommodate credit card and coins. The more complex multi space meter can handle any number of spaces and can accommodate someone paying for parking by coin, bills, credit or value card. The parker simply inputs their stall number or license plate number into the machine and then either selects the amount of time they want to stay (up to a maximum if applicable) and then pays the amount on the screen. A receipt is issued and the parker continues on to the downtown.

The system allows a parker to add time to their space, though ideally would not tell them how much available time was on the space to dissuade someone from driving up and using someone else's unused time. The enforcement officer either wirelessly downloads a report or gets a printout from the machine that indicates spaces or vehicles that have time paid for. Cost - \$6,500-\$10,000/per unit

### **Pay by Phone and Meter/Machineless**

With either option there is the potential to use a pay by phone system. The parker would have to establish an account with the company which can be done in advance or while parking. Once a vehicle is parked the parker would then enter a web address into their smart phone which would then prompt the parker to enter in their stall number along with the length of time they want to purchase. This information would be incorporated in the real time wireless data system allowing an enforcement officer to pull a report from the machine or handheld ticket writer, giving the pay by phone payment and valid time along with the payments to the meter. Cost – Minimal

Potential ways to pay for a parking system when not charging for parking:

### **Assessment Districts**

This option collects yearly fees from all business or building/land owners within a defined district and in this case the money collected would go into a parking fund to offset maintenance, enforcement and management of a parking system. This option is typically used along with a metered parking system and sometimes along with an in-lieu of fee. This option will not pay for new parking alone, it is typically used to help offset the maintenance and day to day costs of running a parking system. Cost – N/A

### **In-Lieu of Fees**

In-Lieu of parking fees are typically based on a percentage of the cost of providing one parking stall in a new parking structure. The rate determined needs to be mindful of the need to redevelop the downtown. If the rate is set too high this can discourage development. The rate will need reviewed every three to five years to keep the amount in line with market prices and construction costs. Cost – N/A