

HASTINGS



TRANSPORTATION  
AND PARKING

MASTER PLAN

August 2022



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## Acronyms

<b>ADA</b>	Americans with Disabilities Act
<b>ARPA</b>	American Rescue Plan Act
<b>BID</b>	Business Improvement District
<b>BNSF</b>	Burlington Northern Santa Fe
<b>BUILD</b>	Better Utilizing Investments to Leverage Development
<b>CDBG</b>	Community Development Block Grant Program
<b>City</b>	City of Hastings
<b>CMAQ</b>	Congestion Management Air Quality
<b>CWSRF</b>	Clean Water State Revolving Funds
<b>DOT</b>	Department of Transportation
<b>FHWA</b>	Federal Highway Administration
<b>GID</b>	General Improvement District
<b>INFRA</b>	Infrastructure for Rebuilding America
<b>ITS</b>	Intelligent Transportation Systems
<b>LEHD</b>	Longitudinal Employment-Household Dynamics
<b>LEP</b>	Limited English Proficiency
<b>LID</b>	Local Improvement District
<b>PAC</b>	Project Advisory Committee
<b>PIF</b>	Public Improvement Fees
<b>RAISE</b>	Rebuilding American Infrastructure with Sustainability and Equity
<b>R.Y.D.E.</b>	Reach Your Destination Easily
<b>SID</b>	Special Improvement District
<b>SIMD</b>	Special Improvements Maintenance District
<b>STBG</b>	Surface Transportation Block Grant Program
<b>STP</b>	Surface Transportation Program
<b>TIF</b>	Tax Increment Financing
<b>TIFIA</b>	Transportation Infrastructure Finance and Innovation Act
<b>TIGER</b>	Transportation Investment Generating Economic Recovery
<b>TPMP</b>	Transportation and Parking Master Plan
<b>URA</b>	Urban Renewal Authority
<b>WIFIA</b>	Water Infrastructure Finance and Innovation Act

## City Council Acceptance

The Hastings Transportation and Parking Master Plan was accepted by the Hastings City Council at the regular City Council meeting on July 25, 2022. The Hastings Transportation and Parking Master Plan will serve as an advisory document important to the planning of Hastings' future multimodal transportation network and downtown parking system.

### HASTINGS CITY COUNCIL

By: \_\_\_\_\_

Corey Stutte, Mayor

Attest By: \_\_\_\_\_

Kim Jacobitz, City Clerk



# Acknowledgments

*City of Hastings Mayor* Corey Stutte

## *Hastings City Council*

- ▲ Jeniffer Beahm, 1st Ward
- ▲ Ginny Skutnik, 1st Ward
- ▲ Butch Eley, 2nd Ward
- ▲ Ted Schroeder, 2nd Ward
- ▲ Joy Huffaker, 3rd Ward
- ▲ Chuck Rosenberg, 3rd Ward
- ▲ Shawn Hartmann, 4th Ward
- ▲ Matt Fong, 4th Ward

## *Core Project Management Team*

- ▲ Lisa Parnell Rowe, Director of Development Services
- ▲ David Ptak, City Administrator
- ▲ Lee Vrooman, Director of Engineering

## *Executive Committee*

- ▲ Corey Stutte
- ▲ Paul Hamelink
- ▲ Chuck Rosenberg
- ▲ Dave Ptak
- ▲ Randy Chick
- ▲ Clint Schukei
- ▲ Marshall Gaines
- ▲ Lisa Parnell-Rowe

## *Community Interest Group*

- ▲ Deb Bergmann
- ▲ Bill Bivin
- ▲ Roger Coffman
- ▲ Mike Florek
- ▲ Mark Funkey
- ▲ Marshall Gaines
- ▲ Tony Harman
- ▲ Jeff Hassenstab
- ▲ Brian Hessler
- ▲ Willis Hunt
- ▲ Trent Kelly
- ▲ Steve Kostner
- ▲ Michael Krings
- ▲ Michelle Lewis
- ▲ Trent Meyer
- ▲ Judy Mignery
- ▲ Dawn Miller
- ▲ Tara Ogren
- ▲ Rev. Greg Allen Pickett
- ▲ Bruce Sandahl
- ▲ Clint Schukei
- ▲ Shawn Scott
- ▲ Leremy Seelow
- ▲ Brad Starling
- ▲ Adam Story
- ▲ Mike Stromer
- ▲ Dave Wacker
- ▲ Wes Wahlgren
- ▲ Steve Ardiana

The residents of Hastings—in particular those who provided input through our two rounds of virtual surveys or attended one of our in-person focus group meetings.

Prepared by:

**Kimley»Horn**

## Executive Summary

The City of Hastings' (City's) Transportation and Parking Master Plan (TPMP) sets the vision for the City's multimodal transportation system for the next 20 years by setting transportation goals and identifying key projects to support those goals.

### Plan Purpose

The Hastings TPMP leverages the previous planning work conducted by the City and holistically evaluates the City's transportation and mobility needs. The TPMP identifies solutions to enhance mobility while preserving the uniqueness that makes Hastings a place that people want to live, work, and visit. The TPMP will provide both a framework and toolkit for the City to use to manage and grow the mobility network in a way that aligns with the community's vision.

### Transportation Opportunities

Transportation opportunities are existing or anticipated strengths of the transportation system or city demographics that will contribute to the future development and maintenance of the City's multimodal transportation network. Hastings' transportation opportunities include:

- ▲ The City has undertaken several mobility and transportation-related plans recently, which help to paint a more accurate picture of the city's transportation system and needs.
- ▲ Crash frequency has been declining in Hastings over the past several years.
- ▲ Top survey respondent priorities (maintenance and safety) match well with the City's focus on roadway resurfacing and making spot-specific safety improvements.
- ▲ There are several projects on the City's One and Six Year Plan (the list of funded and anticipated transportation investments) that would cover key issues brought up in survey comments.

### Transportation Constraints

Transportation constraints are existing or anticipated weaknesses or threats to the transportation system or city demographics that will make future investments in the transportation system more difficult. Hastings' transportation constraints include:

- ▲ The railroads cutting through Hastings pose a significant obstacle to efficient connectivity and emergency access.
- ▲ More recent developments in the city have had less of a focus on transportation connectivity than the historic parts of Hastings.
- ▲ The City's Comprehensive Plan, Imagine Hastings, is aging and its goals and direction need to be reaffirmed to reflect the community's land use and policy priorities.
- ▲ Almost all the City's roadway budget is required for maintenance and upkeep of the current system.



## TPMP Recommendations

Based on the identified transportation opportunities and constraints, along with input from City staff and residents, a series of recommendations for development of the multimodal transportation system have been prepared.

Recommendations include improvements to the roadway, pedestrian, and trail system. Roadway projects have been organized into eight different categories:

- ▲ **New roadway connection.** Construct a new two-lane roadway with associated on-street parking, curb, gutter, drainage, sidewalks, and bicycle facilities as determined appropriate by the City at the time of construction.
- ▲ **Roadway paving.** Remove and replace the existing driving surface as well as appropriate striping and bicycle facilities as determined appropriate by the City at the time of construction.
- ▲ **Roadway reconstruction and widening.** Reconstruct the existing roadway and widen to incorporate bicycle, pedestrian, parking, and drainage facilities as deemed necessary by the City or through a subsequent study.
- ▲ **Roadway widening.** Widen the existing roadway to include additional through travel lanes, turn lanes, bicycle facilities, pedestrian facilities, and drainage facilities as deemed necessary by the City or through a subsequent study.
- ▲ **Bypass signage improvements.** Improve and supplement existing signage on the primary highways to indicate the bypass route to avoid central Hastings, particularly for trucks.
- ▲ **Intersection improvements.** Construct improvements for reducing traffic congestion, completing bicycle and pedestrian network links, and improving pedestrian, bicycle, and motorist safety as determined by a detailed intersection study.
- ▲ **Railroad grade separation.** Construct an overpass or underpass for the roadway to replace the existing at-grade railroad crossing. A subsequent study looking at these potential projects in detail should determine the prioritization of location.
- ▲ **Bridge construction.** Identify appropriate locations for railroad overpasses to replace current at-grade crossings.

Figure 0-1 shows the recommended roadway projects, including signage, paving, reconstruction, new construction, bridges, and traffic signal projects.

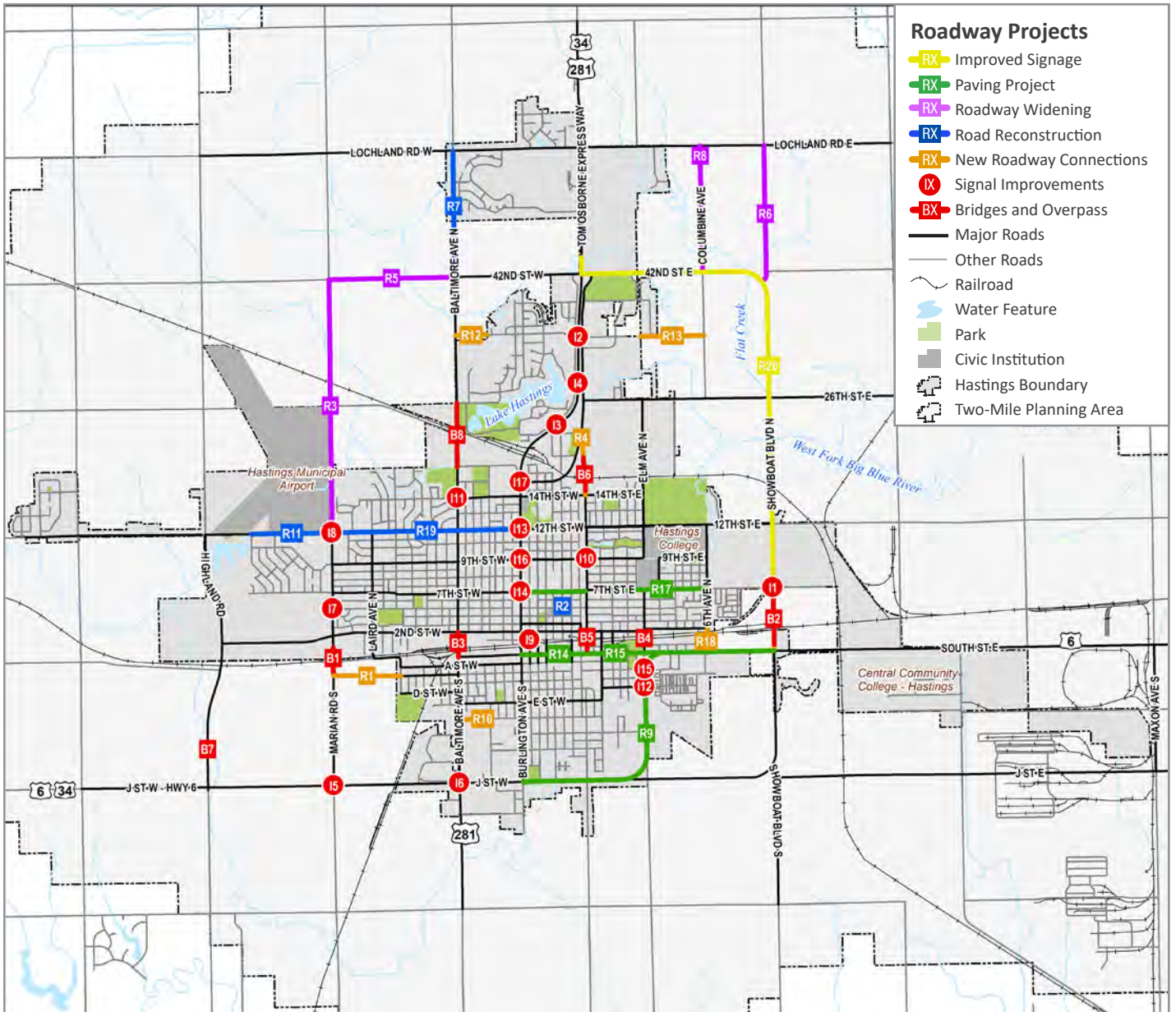


Figure 0-1: Recommended Roadway Projects

Figure 0-2 provides primary, secondary, and tertiary priority areas for improving existing sidewalks or constructing new sidewalks to improve network connectivity.

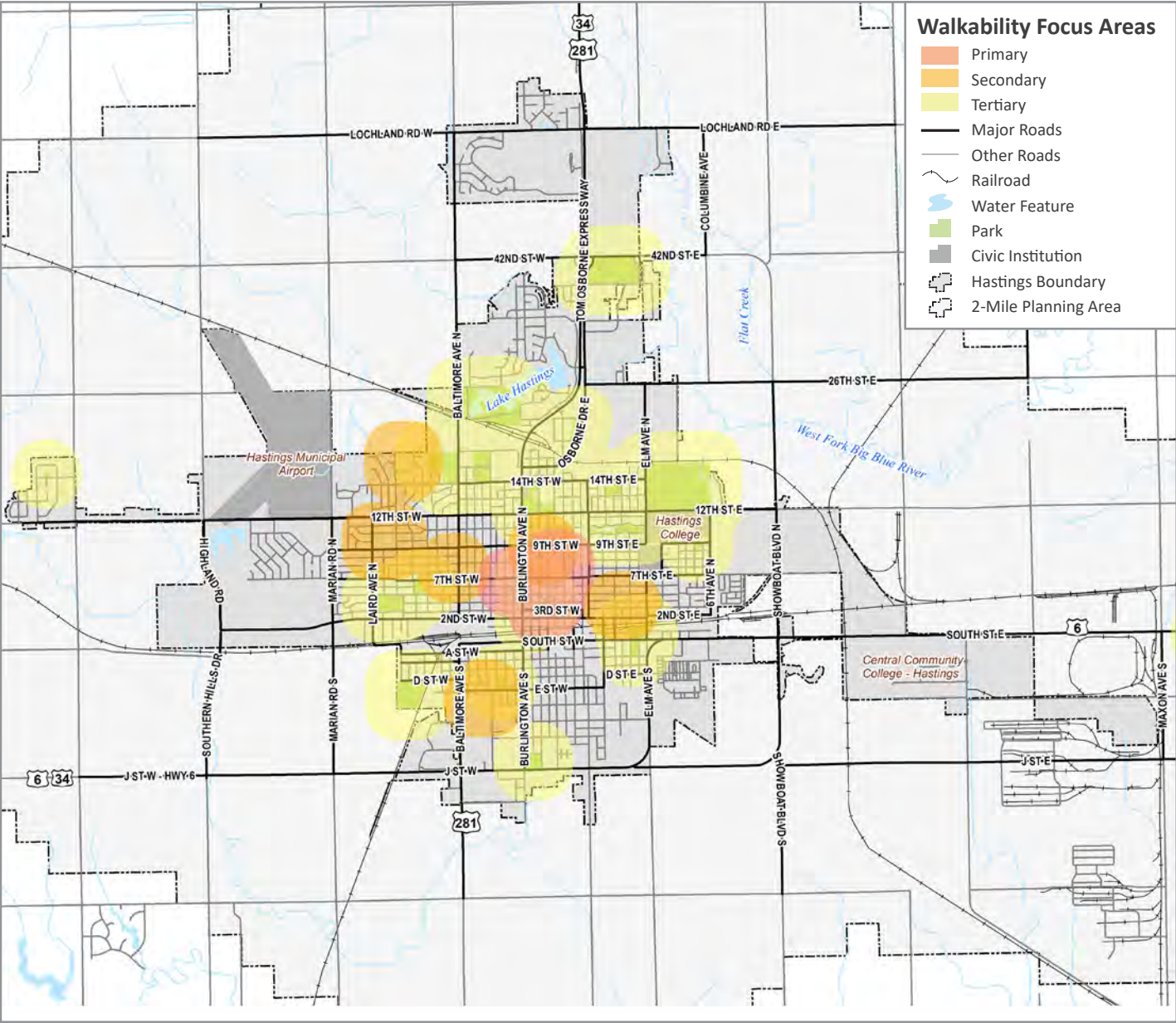


Figure 0-2: Sidewalk Priority Areas

Figure 0-3 shows a recommended phasing for adding to the City’s existing trail network. The top priority should be extending the Pioneer Spirit Trail through southern and then western Hastings (Phases 4A and 4B). The routes shown are illustrative; actual trail routing may vary slightly based on design constraints discovered later in the implementation process or opportunities to link activity centers. An example of these activity center opportunities is the upcoming renovation of the Hastings Family YMCA, which will include construction of a short section of trail along 16th Street.

Aside from the Pioneer Spirit Trail extensions, a number of potential other trails have been identified that require future studies to determine their alignments and phasing. The City should update the Trails Plan regularly to ensure the latest opportunities and constraints are reflected in proposed trail designs. It is recommended that the Trails Plan get updated every five to seven years.

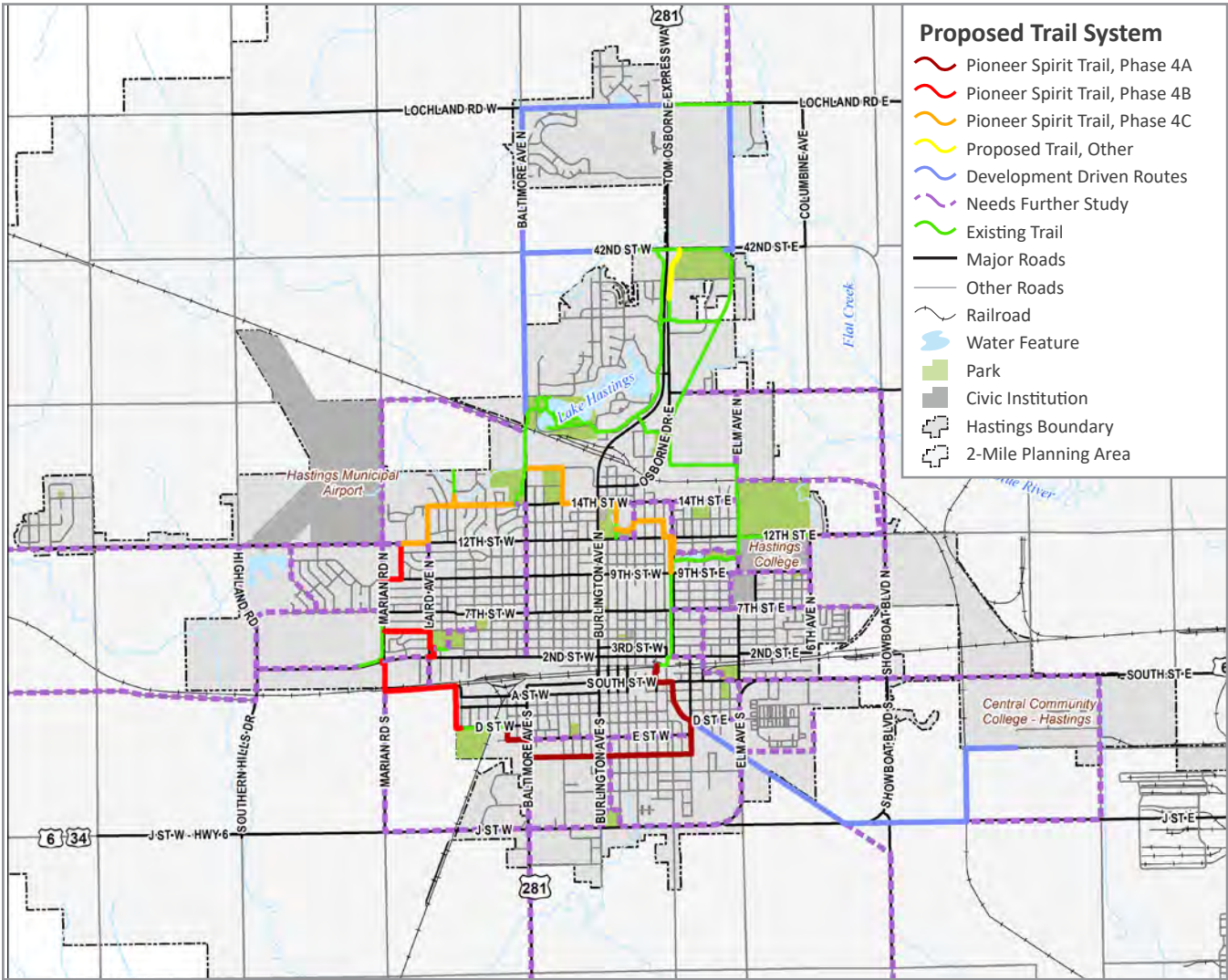


Figure 0-3: Trail Projects

# 1

## Introduction

Transportation systems establish the connections that move people and goods. Developing a vision for the various transportation systems in Hastings is essential for providing an environment that aligns with the community's goals and priorities.

1.1 | PLAN PURPOSE

1.2 | CONTEXT AND RECENT PLANNING INITIATIVES

1.3 | PUBLIC AND STAKEHOLDER ENGAGEMENT

1.4 | GUIDING PRINCIPLES



## 1.1 | PLAN PURPOSE

Prior to the City embarking on the planning process for the TPMP, the City’s transportation goals were housed within multiple documents developed over time. These documents include:

- ▲ The City’s comprehensive development plan, Imagine Hastings
- ▲ Topic-specific plans such as the Walkability + Connectivity Study and the Central Business District One-Way/Two-Way Street Conversion Traffic Study
- ▲ Area-specific plans such as the Downtown Revitalization Plan

The City has developed this TPMP to pull together these previous planning efforts, recognizing the benefits of creating a coordinated, city-wide transportation plan. The TPMP is a strategic document that guides transportation decisions the City will make with its limited local, state, and federal funding opportunities. The process is based on foundational community values and specific policies and expectations outlined in Imagine Hastings, along with other visionary plans produced in Hastings. The TPMP will help set a vision for how investments are made across all transportation modes. It will balance the City’s small-town character with growth and mobility needs by identifying transportation improvements that are consistent with the community’s core values.

The TPMP represents a long-range planning effort that:

- ▲ Describes the current state of the City’s transportation network
- ▲ Establishes a community-driven vision and guiding principles for transportation and mobility decisions
- ▲ Summarizes previous plans that have identified transportation improvement projects
- ▲ Details specific transportation policies, projects, and programs that could be further explored as part of future planning and design projects

As part of the efforts around the TPMP, the City has also endeavored to further investigate transportation topics that are unique to Hastings. These topics include investigation into viaducts over the railroad corridors throughout the city, railroad quiet zones, one-way to two-way street conversions, and parking within the downtown area.



## 1.2 | CONTEXT AND RECENT PLANNING INITIATIVES

Hastings is located in Adams County, south of Interstate 80 near the center of the state as shown in **Figure 1-1**. The city is one of the “Tri-Cities” with two other larger municipalities in the center of the state, Kearney and Grand Island.



Figure 1-1: Statewide Context

The City was founded in 1872 at the intersection of the Burlington and Missouri River railroads and the St. Joseph and Denver City Railroad, which now cut through the center of Hastings. Hastings is largely on a grid network, with suburban curvilinear streets in some of the newer residential developments at the periphery of the city. In addition to the City proper, the TPMP also encompasses a two-mile area around the city boundaries as new developments in this area would likely incorporate into the City. A map of the study area is shown in **Figure 1-2**.

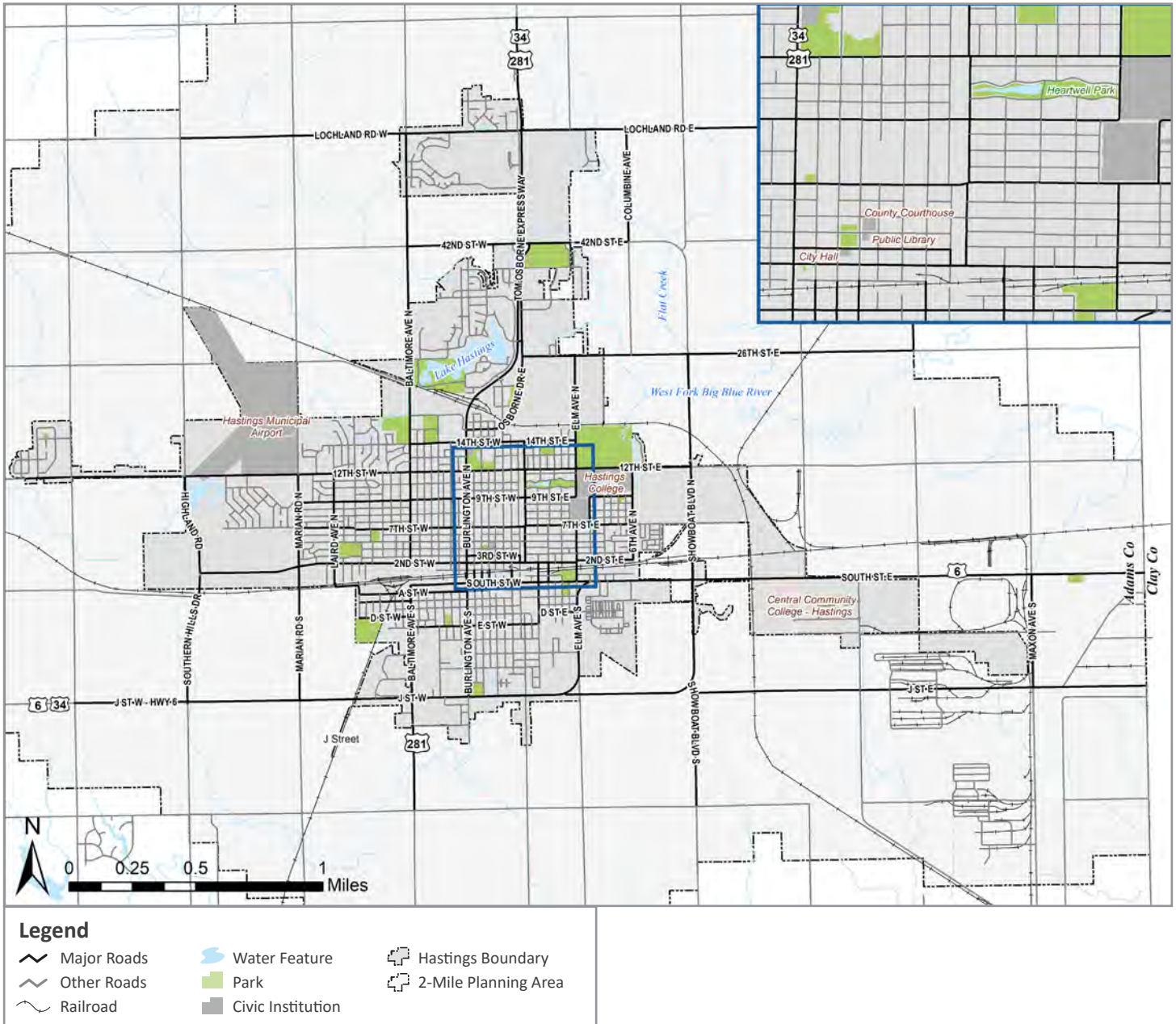


Figure 1-2: Study Area

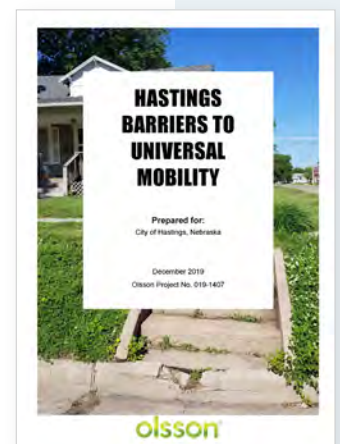
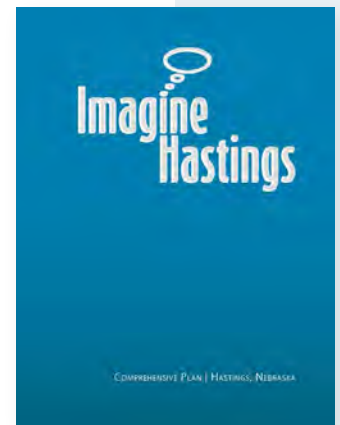


## Recent Planning Initiatives

As a thriving community, Hastings is growing and changing both in its physical landscape and its mobility needs. Planning is an integral way to ensure businesses, residents, and visitors have their evolving mobility needs served, without forgoing the small-town charm on which Hastings is founded.

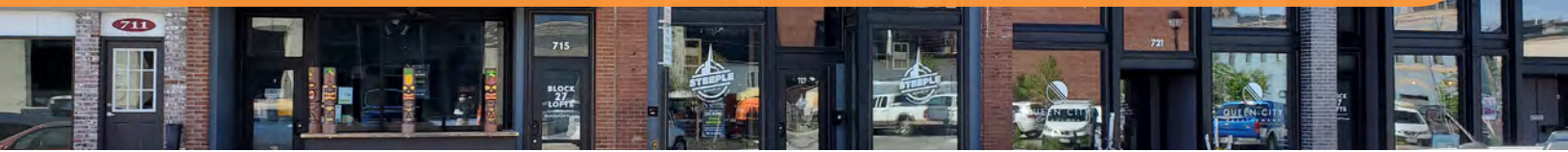
Hastings has been conducting transportation and land use planning studies for several years to help guide public investments appropriately.

- ▲ **Grand Island/Hastings/Kearney Intercity Bus Study (2020)** develops a framework for implementing intercity bus services in the Tri-Cities area. The study developed options for how to enhance the transit connectivity within and between the three cities, including potential routes, costs, timetables, and ridership estimates.
- ▲ **Hastings Walkability + Connectivity Study (2019)** set out to understand existing conditions and opportunities to enhance the non-motorized transportation network in Hastings. The plan focused on improving access to the downtown core, business district, schools, and parks; managing trail development throughout the city; and improving pedestrian facilities and Americans with Disabilities Act (ADA) accessibility.
- ▲ **Hastings Barriers to Universal Mobility Plan (2019)** focused on how residents move around the city, particularly residents with ADA accessibility needs. Barriers were identified on crosswalks, ramps, and sidewalks to highlight gaps in the ADA-accessible routes. A primary takeaway from this study was the need to create a clear, consistent, and feasible program for sidewalk and curb ramp improvements.
- ▲ **Downtown Revitalization Plan (2013)** was conducted to determine a set of recommendations and opportunities to enhance the downtown area for residents, visitors, and businesses. Along with outlining a community vision, recommendations were identified in two categories: physical investments and strategic motions.
- ▲ **Hastings Railroad Quiet Zone Feasibility Study (2010)** developed conceptual designs and costs for upgrading the 12 at-grade railroad crossings in Hastings. The goal of these upgrades would be for the City to be able to implement a quiet zone along the Burlington Northern Santa Fe (BNSF) tracks to reduce the negative impacts of train horns on the surrounding residential neighborhoods.
- ▲ **Hastings Comprehensive Development Plan, Imagine Hastings (2009)** set the vision and desired character for the entire city that forms the framework for its growth. The plan included a wide array of goals related to topics including general planning, land use, mobility, growth, and others that have guided major investments over the past decade. The City is currently updating its Comprehensive Plan to incorporate the latest available information and ensure the vision reflects current Hastings residents' views and preferences.
- ▲ **Central Business District One-Way Two-Way Conversion (2005)** was conducted to evaluate the anticipated impacts of converting the existing one-way road network downtown to two-way. Much of the report centers around design options for this conversion and identifying needed investments such as signal upgrades and parking impacts due to the traffic flow change.





## 1.3 | PUBLIC AND STAKEHOLDER ENGAGEMENT



Public engagement, whether through direct contact or by the input of community representatives, is an important part of successful transportation planning. The City is committed to inclusive and meaningful public involvement, as well as open and honest communication with all individuals and entities. Community outreach is also critical for identifying community goals and context, which provide insight on desired and appropriate transportation solutions.

Several public and stakeholder engagement opportunities were provided during the TPMP planning process:

- ▲ Project Advisory Committee (PAC) meetings throughout the study
- ▲ Community focus group meetings on August 6, 2020
- ▲ A public open house on August 5, 2020
- ▲ Public Survey 1 – Issues and Opportunities, available September 15 through October 12, 2020
- ▲ Public Survey 2 – TPMP Projects, available throughout April 2021
- ▲ Parking Management Plan charrette on February 2, 2021

A description of each of these engagement opportunities is provided in the following sections. Additional detail on input received through each of these efforts is provided in Appendix A.

### COVID-19 Impact

The TPMP planning process was conducted throughout 2020 and 2021, during the height of the COVID-19 pandemic. This pandemic wave limited personal contact and typical group outreach events that would normally have been included in the TPMP public outreach activities.

While some in-person engagement opportunities were available with appropriate social distancing and masking requirements, most of the engagement was conducted virtually via two electronic surveys. Every effort was made to promote these virtual engagement opportunities; however, the disturbance to people's daily lives because of the pandemic, such as working from home and virtual learning for school children, resulted in less engagement than would typically be desired for the TPMP.



## Project Advisory Committee (PAC)

The PAC provided oversight and direction throughout the project to ensure the project direction, methods, and outcomes are consistent with the expectations and understanding of the community. The PAC comprised individuals who represented a variety of interests in Hastings and included members from different backgrounds, including City staff, local advocacy groups, state agencies, and community leaders.

## Community Meetings

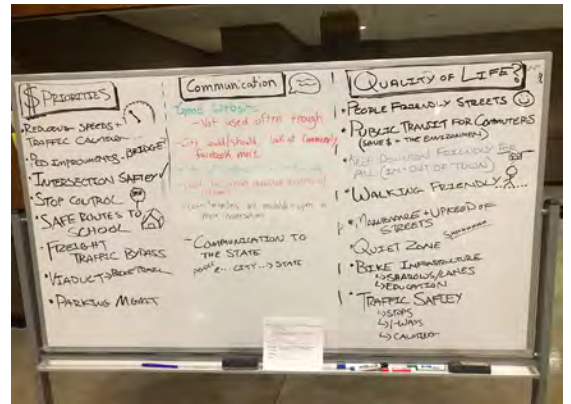
### Focus Group Meetings

Four focus group meetings were conducted near the beginning of the project process with representatives from each of the City's four voting wards. Engaging the public through community leaders and prominent stakeholders can help bring out opinions that may not be heard through traditional engagement methods and build support for the plan. Focus group participants were asked to provide feedback on the current conditions of the transportation system, what they thought was going well, what needed improvement, and what they valued as citizens.



### Public Open House

For those that were not able to attend the individual ward-specific focus group meetings, an additional public open house was held to obtain similar feedback for the city at large. This open house was advertised and open to the larger public if they chose to provide input in-person.



## Results

The focus group meetings and public open house asked attendees about successes and areas for improvement regarding Hastings' transportation system by placing sticky notes on whiteboards. Major topic areas that emerged included:

- ▲ **Safety.** Ensuring that safety is a top focus of all transportation investments, regardless of mode of travel, emerged in every focus group meeting.
- ▲ **Character.** Many believed that future transportation investments should reinforce Hastings' small-town character through design elements while accommodating new growth.
- ▲ **Connectivity.** North-South multimodal connectivity is severely impacted by the two railroad lines that run East-West through Hastings, which has an impact on emergency response, traffic congestion, and circuitous travel patterns.
- ▲ **Maintenance.** Ensuring that Hastings' existing infrastructure is well-maintained, including roadways, sidewalks, and trails, was a major topic throughout the focus group meetings.
- ▲ **Traffic Flow.** Traffic congestion and traffic signal timing emerged as a major topic, particularly along the Burlington Avenue corridor. Additionally, backups from the at-grade railroad crossings around the city, and Baltimore Avenue in particular, can cause major delays and reduces the reliability of travel times in Hastings.
- ▲ **Sidewalks.** The city's sidewalk network is incomplete and many of the existing sidewalks are in poor condition. Identifying a politically feasible recommendation for improving the city's sidewalks should be a priority of the TPMP.

# Public Surveys

Two virtual public surveys were conducted during the TPMP study process—an Issues and Opportunities survey was conducted near the beginning of the process and a Potential Projects survey was conducted later in the process.

## Issues and Opportunities Survey

The first survey was focused on getting a general understanding of how the public viewed the current system and what areas should be focal points of subsequent steps in the TPMP process. A total of 187 people responded to the Issues and Opportunities Survey. The survey was divided into three major sections.

### Determine Focus Areas

This page asked participants to rank their top five most important goal priorities for the TPMP. The results showed that safety, maintenance, and efficiency were the most often ranked, with safety and maintenance being the highest rated when ranked. These results are shown in Figure 1-3.

*Frequency: the number of times each goal was placed in someone’s top five goals list.*

*Intensity: the average ranking of each goal within people’s top five list.*

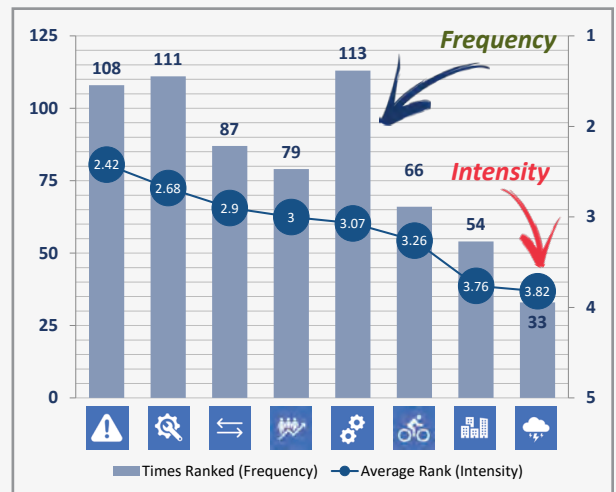


Figure 1-3: Focus Area Prioritization Results

### Survey Questions

There were five topics, each containing one to two questions, as shown in Figure 1-4. The five topics included Trails, Traffic Flow, Sidewalks, Parking, and Transit. The responses helped provide an understanding of how the public currently utilizes the transportation system and how they would like to use it in the future.

**Survey**

- Trails
- Traffic Flow
- Sidewalks
- Parking
- Transit

**Trails**

How would you like to use the trail system?

- To walk recreationally
- To bike recreationally
- To commute to work
- Day-to-day travel (ie. grocery store)

When investing in trails, the city should focus on

Select...

Figure 1-4: Survey Question Example

## Map Issues and Opportunities

The final portion of the Issues and Opportunities Survey asked participants to map out points around the city that need attention from automobile, pedestrian, bicycling, and connectivity perspectives. These points, which are shown in Figure 1-5, served as the basis for the list of potential projects developed for the TPMP. Locations with a car icon indicate comments related to vehicle travel and areas with a number show that there was a concentration of comments in that location.

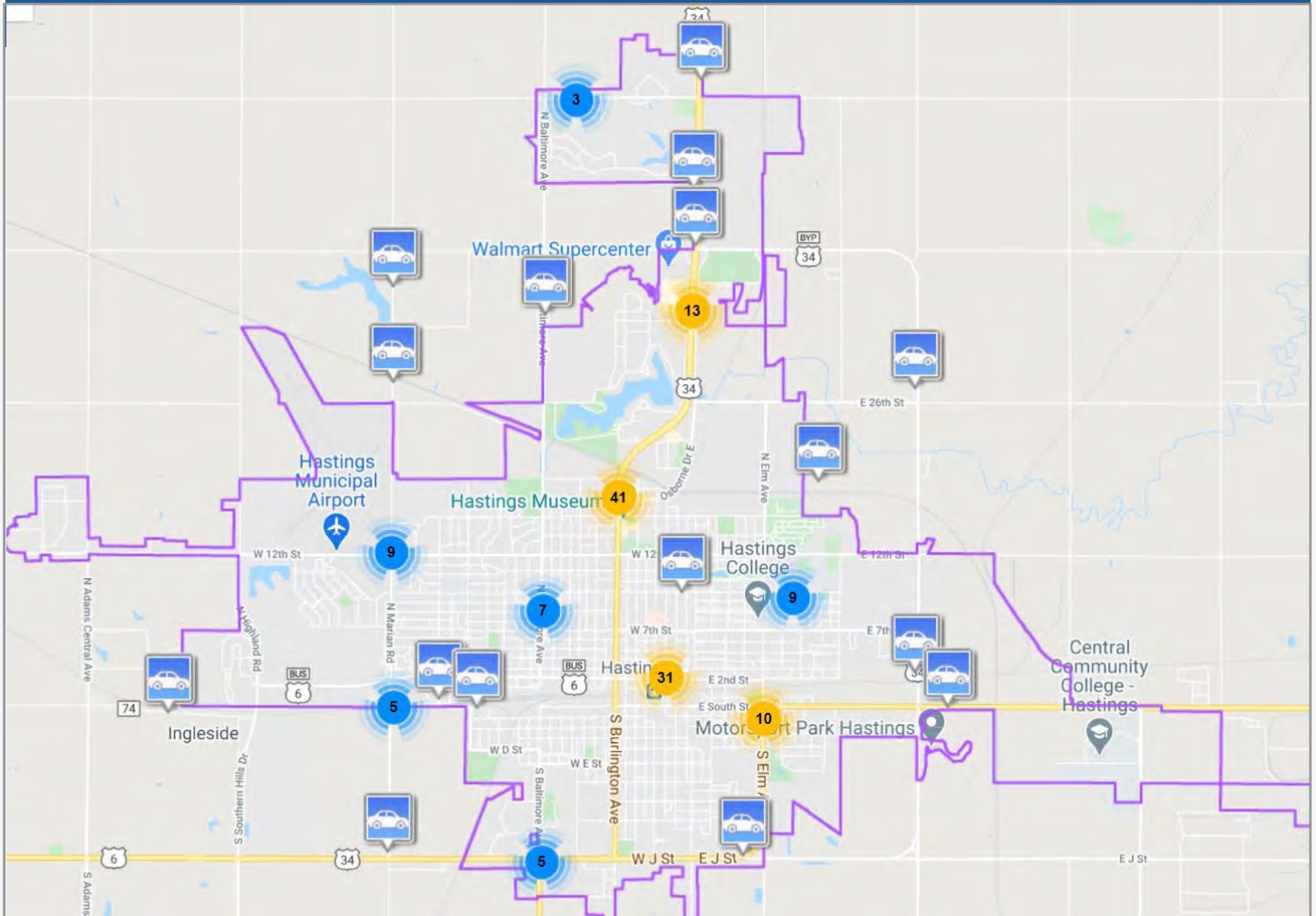


Figure 1-5: Issues and Opportunities Map

## Key Findings from the Issues and Opportunities Survey

- ▲ Connecting existing trails together to make a more complete network was the most common suggestion for improving trails in Hastings.
- ▲ Street maintenance was the most common priority regarding driving in Hastings, followed by mitigating traffic congestion.
- ▲ Most respondents (73%) were in favor of implementing a local tax to fund sidewalk repairs.
- ▲ Regarding parking in Downtown Hastings, 48% of respondents had a positive view, while 23% had a negative view.
- ▲ A large portion of respondents (46%) were not interested in investing in or expanding public transit in the city.
- ▲ Traffic congestion was the biggest issue identified in the mapping exercise, particularly along the Burlington Avenue corridor.
- ▲ Connectivity around the railroad tracks in downtown and along Osborne Drive was an issue identified in the mapping exercise.
- ▲ Downtown and Ward 1 were highlighted as having a cluster of safety concerns for pedestrians.

## Recommended Projects Survey

A second survey was conducted as the TPMP projects were identified. In this Projects Survey, the the public was asked to provide feedback on the proposed projects and provide other comments that they felt should be considered.

Participants were able to provide comments regarding automobile, pedestrian, bicycle, or general improvements, as well as view and respond to comments made by others. Proposed projects were broken into four categories for this:

- ▲ Existing Roadway Improvements
- ▲ New Roadways
- ▲ Intersection Improvements
- ▲ New Bridges/Replace Bridges

A map of the proposed roadway projects and comment points respondents placed using the mapping tool is shown in **Figure 1-6**. A full listing of results is provide in **Appendix A**.

## Parking Management Plan Charrette

A virtual charrette was held in early 2021 with a large group of stakeholders to discuss parking management issues observed in Downtown Hastings, potential parking management strategies, and the link between parking and economic development.

The charrette was highly interactive, and included live polling questions throughout the presentation, including:

- ▲ Preferences for potential downtown parking management strategies
- ▲ Whether long-term parking is taking up short-term parking spaces in downtown
- ▲ Views on the most important parking issue in Downtown Hastings
- ▲ Funding and maintenance responsibilities for publicly-accessible parking

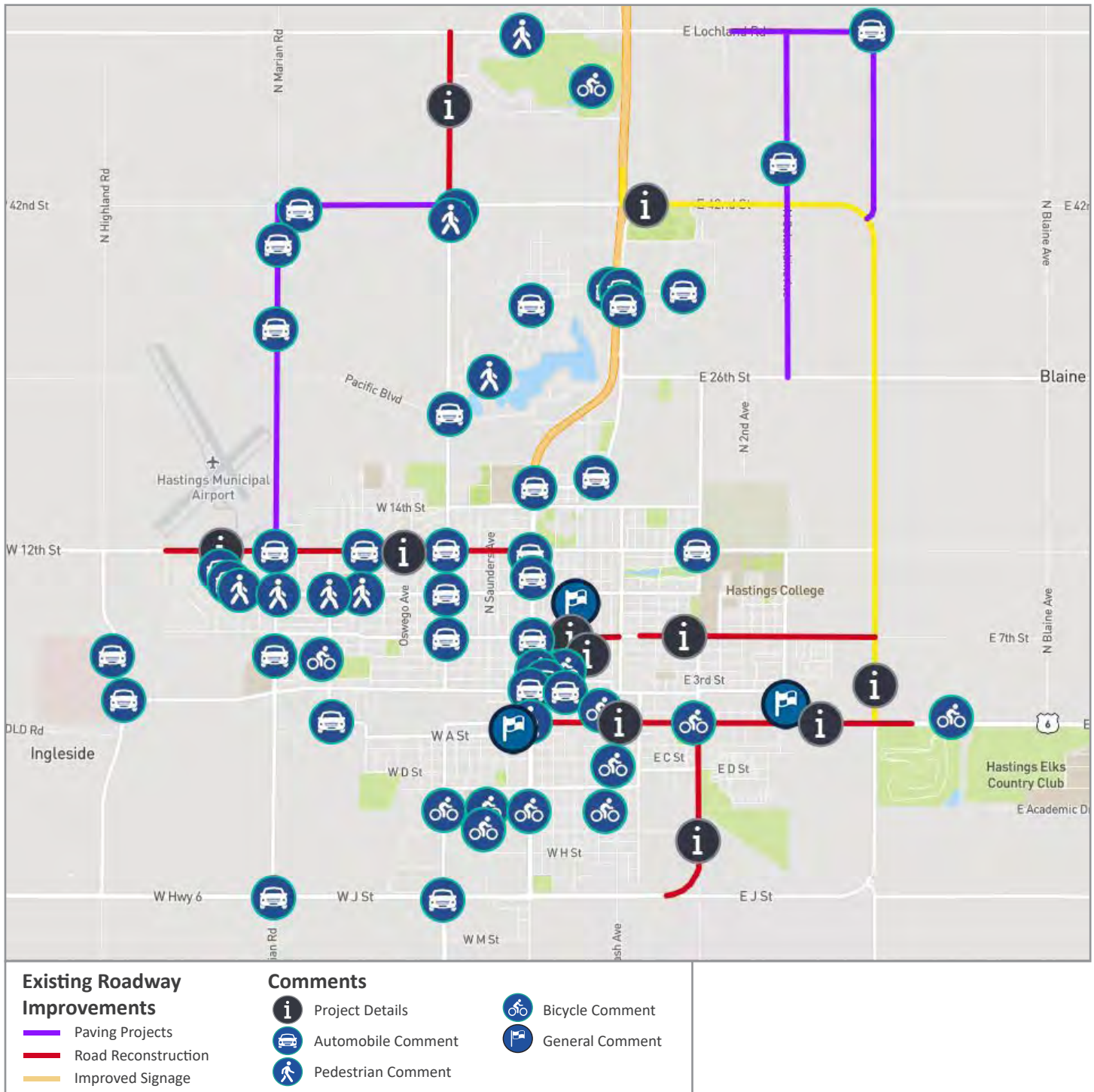


Figure 1-6. Projects Survey Roadway Project Map Comments



## 1.4 | GUIDING PRINCIPLES

Three guiding principles and corresponding strategies were developed following the initial public outreach in late 2020. These three principles are important concepts necessary to ensure that future investments by the City are fulfilling the transportation vision identified by the community. Multi-faceted and long-term in nature, these guiding principles will require a comprehensive and concerted effort by both the public and private sectors. All energy and resources should be harnessed toward furthering the concepts outlined by these principles.

Through executing these mobility strategies with intentional public investments and coordinated regulations, Hastings' transportation system will transform and achieve the vision of a safe and engaging network that focuses on the needs of our residents, visitors, and businesses.



### Guiding Principle 1. Connectivity and Equity

Hastings will achieve a well-connected transportation system that promotes equitable and multimodal access for all users by:

- ▲ Increasing opportunities for residents to access goods and services through safe and convenient transportation connections
- ▲ Creating a transportation network that is easy to navigate and connects residents and visitors with popular community destinations to promote economic development
- ▲ Providing easy and safe ways to change between modes, creating a transportation network that is equitable for all users
- ▲ Developing connections in new and existing infrastructure that creates a continuous transportation network
- ▲ Supporting a transportation system that prioritizes safety across all modes





## Guiding Principle 2. Quality of Life

Hastings will further promote a strong sense of community through transportation investments by:

- ▲ Promoting aesthetically pleasing transportation projects that promote economic activity and encourage social interaction between residents and visitors
- ▲ Offering walking and biking transportation choices that encourage active and healthy lifestyles
- ▲ Investing in transportation projects that promote access to local shopping, outdoor recreational opportunities, and other Hastings' community assets that support the local economy
- ▲ Making transportation investments that build on Hastings' character and strong sense of community
- ▲ Developing a transportation system of small roadways that promotes efficiency, spreads traffic demand, and considers local context



## Guiding Principle 3. Fiscally Responsible

Hastings will be prudent by implementing feasible transportation investments that are fiscally responsible and sustainable through:

- ▲ Utilizing existing infrastructure to support Hastings' transportation network goals
- ▲ Investing in transportation projects that equitably disperse transportation assets and resources throughout the community
- ▲ Focusing on quality investments, design, and materials for long-term transportation solutions
- ▲ Ensuring safety is prioritized in project design and implementation



# 2

## Current Conditions

Understanding the makeup of the community and the mobility patterns that create transportation system demands is a crucial step in transportation planning.

2.1 | POPULATION AND DEMOGRAPHICS

2.2 | PHYSICAL FORM

2.3 | TRANSPORTATION SAFETY ASSESSMENT

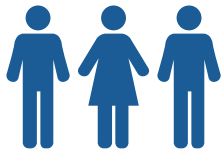
## 2.1 | POPULATION AND DEMOGRAPHICS

City demographics provide context and can be used to identify unique qualities that shape how people are moving around. This can be helpful from a planning perspective as it informs recommendations about how the transportation network can better serve the users. It is important to understand details how residents in Hastings are commuting to and from work to better understand how residents use and rely on their local transportation network.

### Residents

The City's population has remained relatively steady for many years; however, the composition of that population has changed. The portion of the city's population that is of retirement age has seen sizable growth. Key demographic statistics for Hastings are shown in **Figure 2-1**.

#### TOTAL POPULATION (2019)



**24,906**

#### POPULATION CHANGE 2010-2019



Age 1-19

**+5%**



Age 65+

**+12%**

#### MEDIAN TRAVEL TIME TO WORK



**10-14 Minutes**

90%+ Drive to Work

Figure 2-1: Key Hastings Demographics

## Vehicle Availability

With over 90% of the population driving to work, having a vehicle is crucial for Hastings’ residents. **Figure 2-2** shows relatively high percentages of Southern Hastings residents’ lack of access to a vehicle. These households can depend largely on non-vehicle modes, like walking, biking, and transit or are reliant on rides from friends or family members. There are several block groups that have over 20% of households having zero vehicles available to them. It is important that these areas of the city can access goods, services, and employment via modes other than personal vehicles.

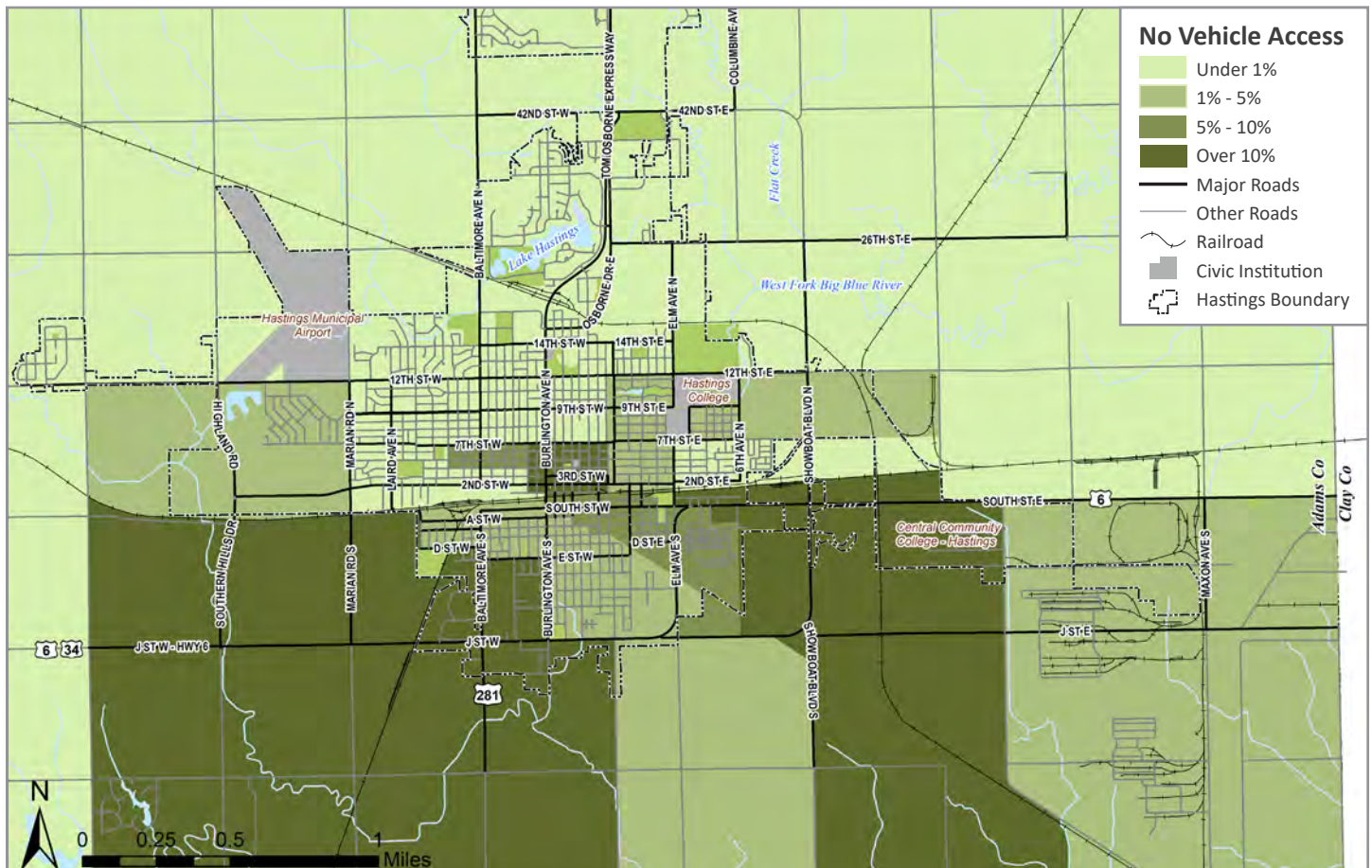


Figure 2-2: Vehicle Availability

## Poverty

According to the Federal Highway Administration (FHWA), income has a strong correlation to trip-making and distance traveled, specifically by motor vehicle. Low-income individuals are likely to take fewer trips and/or stay in place.

**Figure 2-3** shows that areas in Hastings have 10% - 20% of households under the poverty line and areas in the southeast and southwest portions of the city have more than 20% of households under the poverty line.

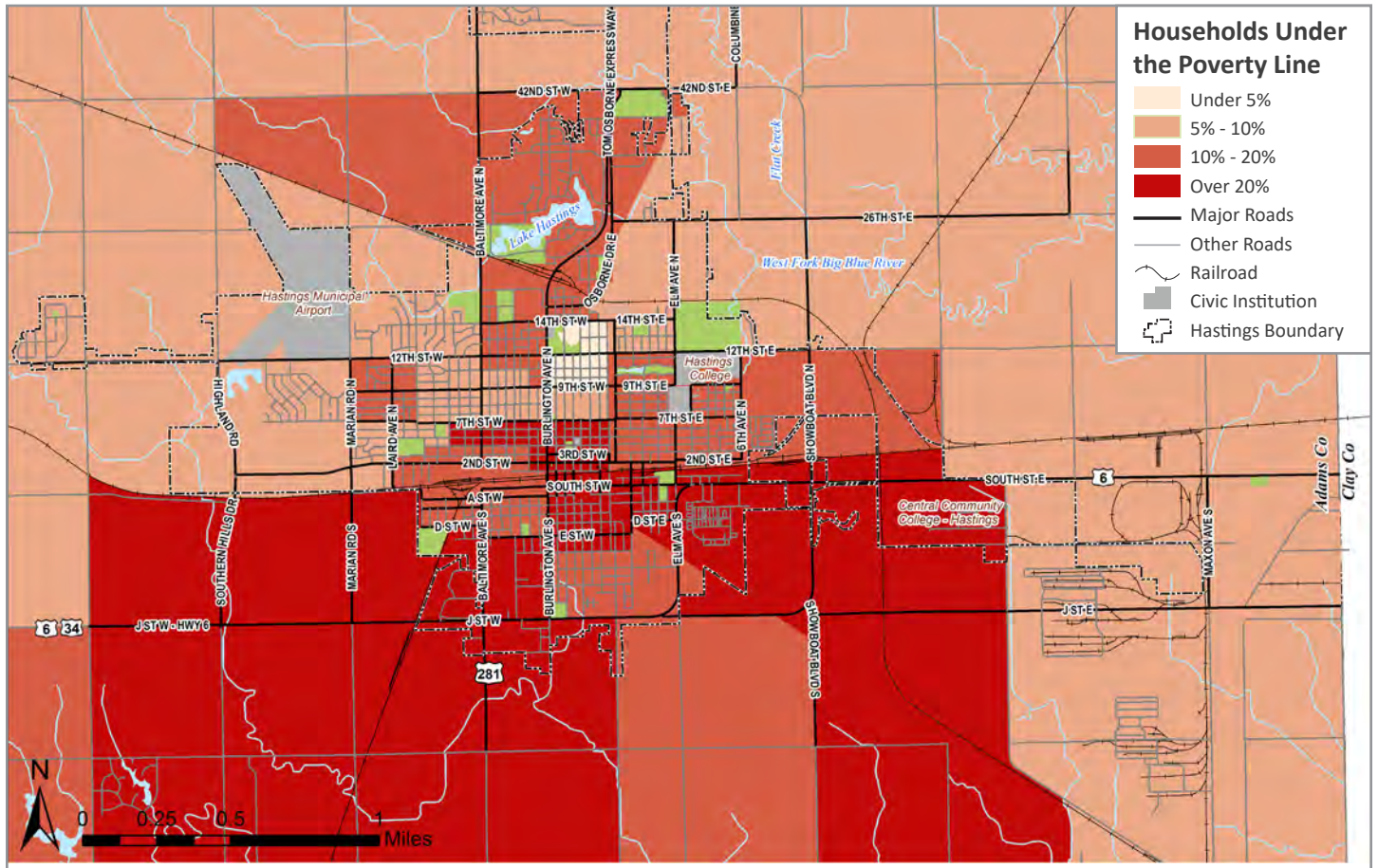


Figure 2-3: Households Under the Poverty Line

## Language Barriers

Transportation can become a challenge for limited English proficiency (LEP) households, particularly when it comes to ensuring accessibility to the transportation network and community-based programs and services. Concentrations of LEP households are shown in **Figure 2-4**. The southeast corner of the city and a block group in the center of the city have higher concentrations of households with LEP.

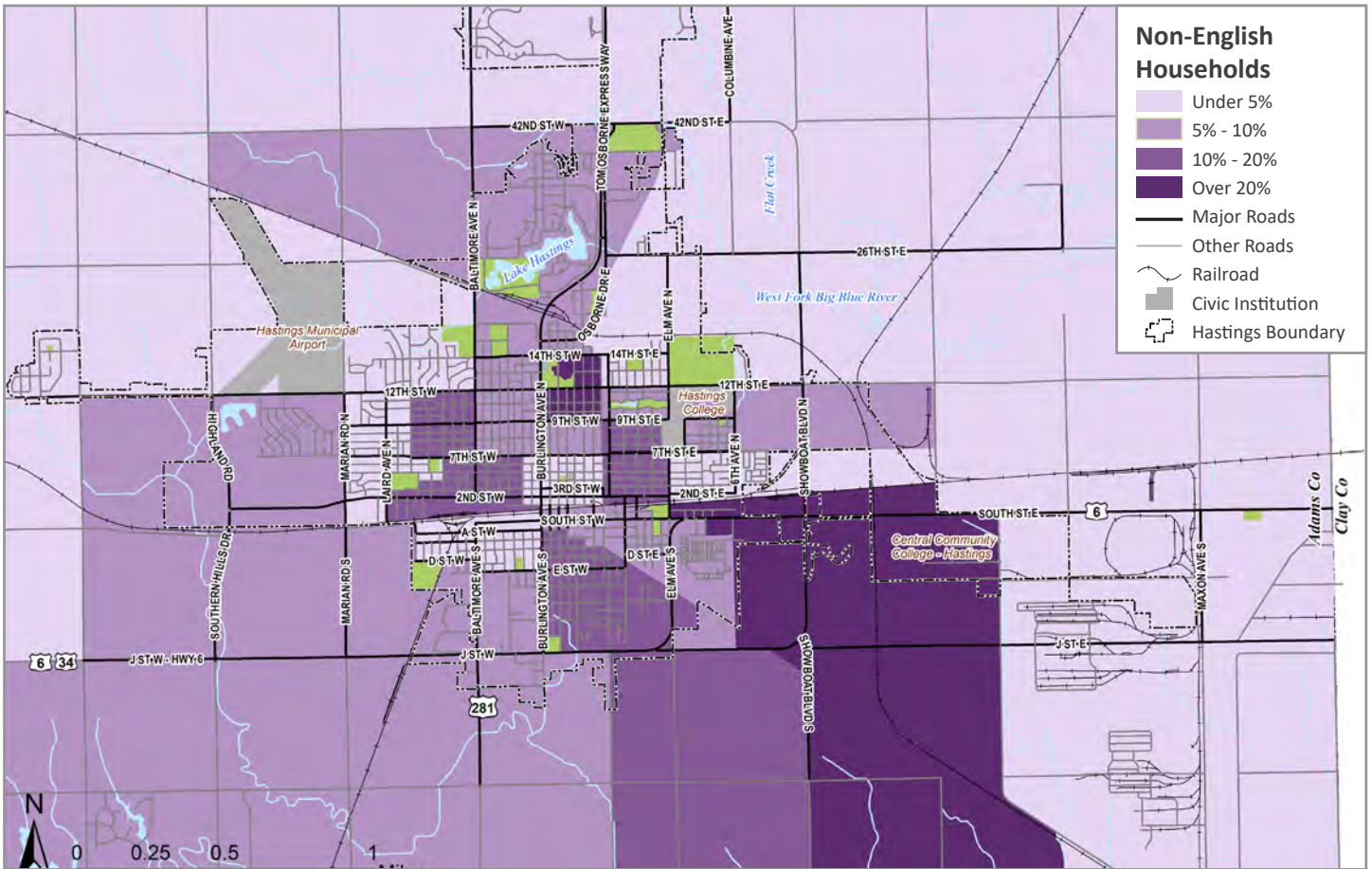


Figure 2-4: LEP Households

## Employees

Understanding the origins and destinations of commuters is an important consideration when developing recommendations for how to best serve commute flows. The U.S. Census Bureau collects data on workers' commutes between home and work—both the mode of travel and origin/destination data.

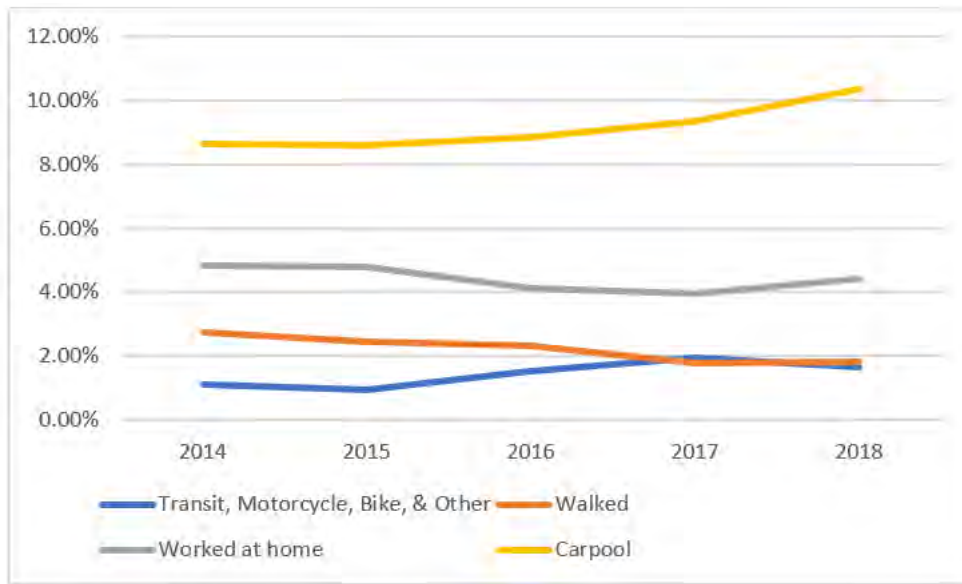


Figure 2-5: Mode of Travel to Work (Non-Drive Alone) (2014-2018)  
 Source: U.S. Census Bureau, American Community Survey (2014-2018)

Figure 2-5 shows the pre-COVID commute mode of travel for Hastings residents. Over 80% of people commuted alone in a vehicle, with the next highest mode of travel being carpooling.

Figure 2-6 shows that just over 5,000 people both live and work within the city limits of Hastings, while approximately 4,300 Hastings residents leave the city for work. Another 5,000 people commute from outside Hastings to jobs within the city limits.

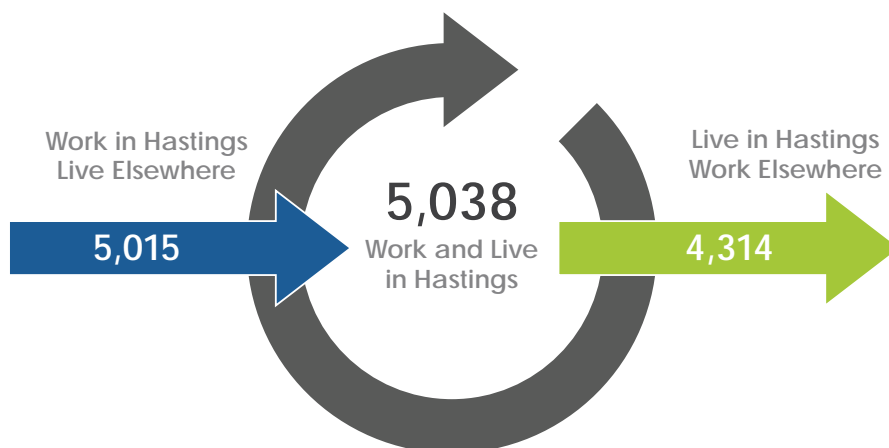


Figure 2-6: Commuting Inflow/Outflow  
 Source: U.S. Census Bureau, Longitudinal Employment-Household Dynamics (LEHD) Data (2018)

## Where Hastings Residents Work

While approximately 5,000 Hastings residents also work inside the city (approximately 54% of the workforce), over 4,300 residents commute outside of the city for work. Over 10% of the Hastings workforce commutes to Grand Island. Additionally, Kearney, Lincoln, and Omaha each employ approximately 3% of Hastings' workers. **Figure 2-7** shows the distance and direction that Hastings' residents travel for work and **Figure 2-8** shows the major destinations outside of Hastings where residents work.

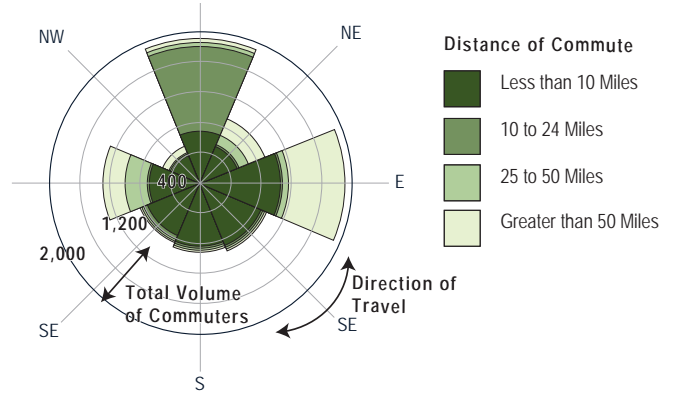


Figure 2-7: Hastings Resident Commute Directionality  
Source: U.S. Census Bureau, LEHD Data (2018)

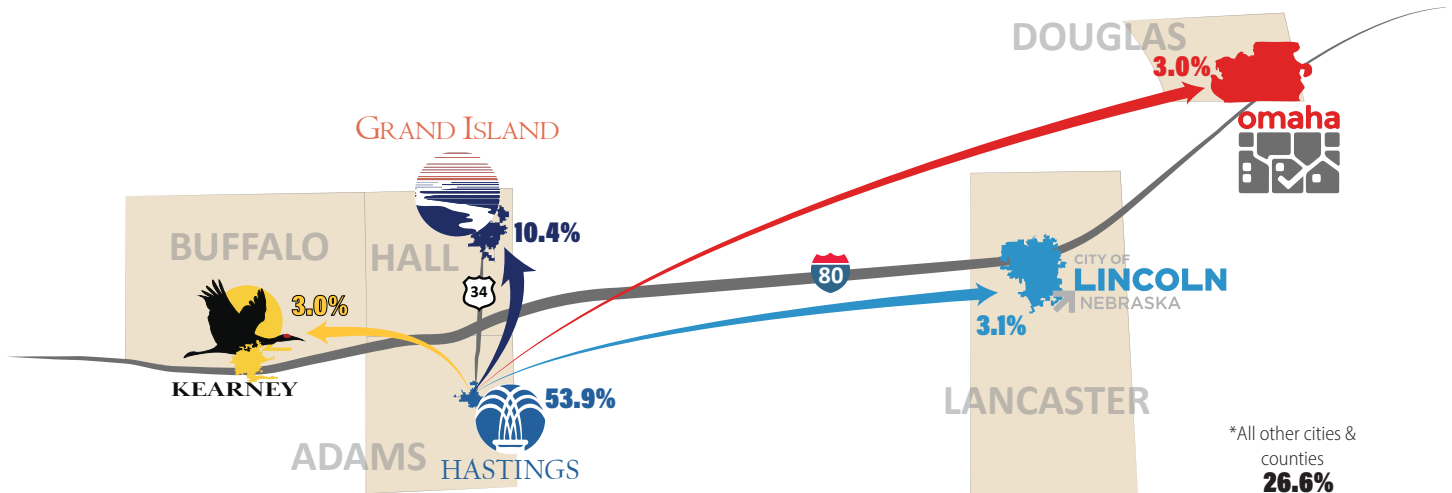


Figure 2-8: Hastings Resident Commute Destinations  
Source: U.S. Census Bureau, LEHD Data (2018)



## Where Hastings' Workers Live

A slight majority of Hastings' workforce lives inside the city; however, almost as many of those that work in Hastings live outside of the city limits. **Figure 2-9** shows the distance and direction from which Hastings' workers commute for work. Major locations from which Hastings' workers commute include Grand Island, Kearney, Lincoln, Kenesaw, Juniata, and Omaha, as shown in **Figure 2-10**.

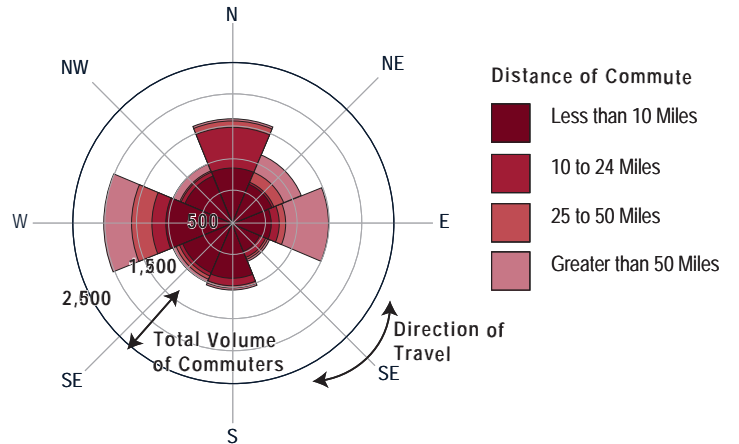


Figure 2-9: Hastings Worker Commute Directionality  
Source: U.S. Census Bureau, LEHD Data (2018)

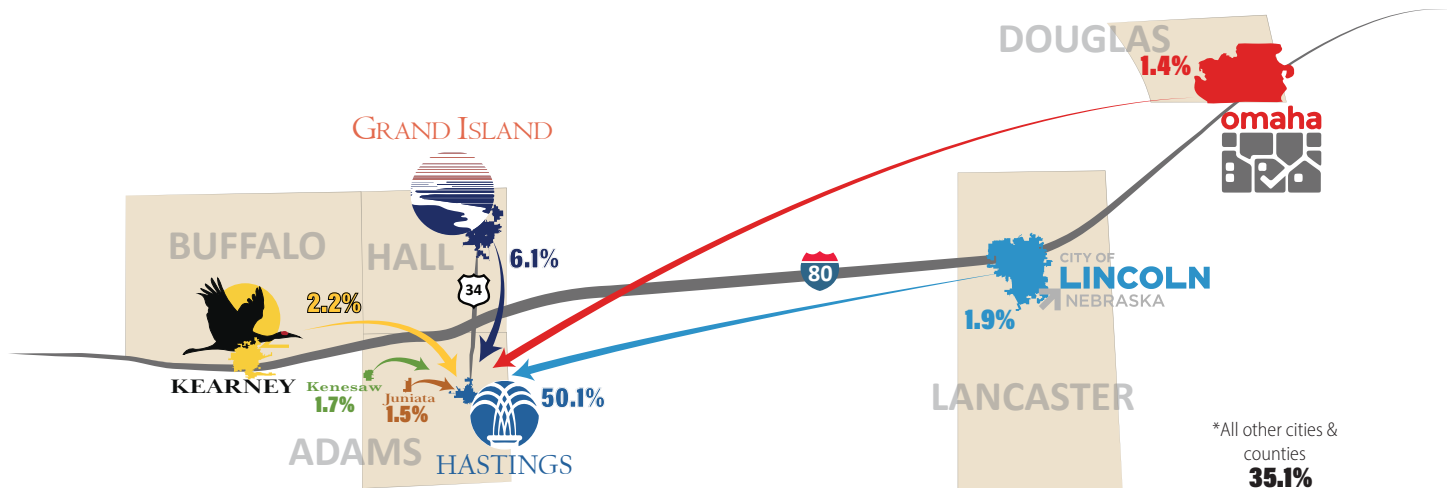


Figure 2-10: Hastings Worker Commute Origins  
Source: U.S. Census Bureau, LEHD Data (2018)

## COVID-19 Impact

Before the COVID-19 pandemic, approximately 5% of Hastings' workforce worked from home. Throughout the pandemic, that number has significantly increased, though an exact percentage is not known. As the pandemic subsides, the exact long-term impact on working from home is difficult to predict but will likely be larger than pre-pandemic levels. Longer-distance commutes, such as those that commute to or from Lincoln or Omaha may be particularly heavily impacted by increased work-from-home protocols, resulting in a lower daily commuting demand between Hastings and Eastern Nebraska. Increased focus on broadband infrastructure investment in the recent Bipartisan Infrastructure Bill could further incentivize long-term work-from-home protocols.



## Key Takeaways

- ▲ The relatively high percentage of people who both live and work in Hastings highlights a potential to serve this population with alternative modes of travel, such as walking or biking, due to short trip distances.
- ▲ A significant portion of the workforce commutes into or out of Hastings daily. Access to Grand Island, Kearney, and the I-80 corridor via US 34 are critical to efficiently serving these commuters.
- ▲ The relatively large number of trips between the Tri-Cities may be an opportunity to implement the intercity bus service studied by the Nebraska Department of Transportation (Nebraska DOT).



This section provides brief summaries of the various modes of travel and parking conditions present in Hastings. A more detailed Mobility Audit is provided in **Appendix B**.

## Roadway Assessment

Roads serve as the foundation of the city’s transportation network, accommodating motor vehicles, freight, pedestrians, and bicyclists. Roads are the main component of the transportation network, the primary public space that residents use to travel, and the associated right-of-way is one of the largest assets available to the City. The efficiency, safety, and condition of the road and bridge network is essential to the functionality of nearly all transportation modes and to the economic prosperity and quality of life of the city.

### Functional Classification

Roadways are classified based on the type of traffic they are intended to serve:

- ▲ Interstates and expressways move people at very high speeds between major population centers.
- ▲ Arterial roadways move people for long distances at higher speeds within a city or between cities.
- ▲ Collector streets are lower speed and extend for shorter distances than arterials and connect travelers to the arterials.
- ▲ Local streets are very low-speed, intended for short distances with direct access to residential and commercial properties.

Functional classifications have an inverse relationship between access and mobility, as illustrated in **Figure 2-11**.

**Figure 2-12** shows the functional classification of roadways in Hastings. US 34/US 281 is the only Expressway and connects Hastings to the I-80 corridor. US 6 is the only Principal Arterial, connecting east-west through Southern Hastings. Several minor arterials cross Hastings and serve as the backbone of the city’s grid network.

Proportion of Service



*Figure 2-11: Functional Classification Mobility vs. Access*

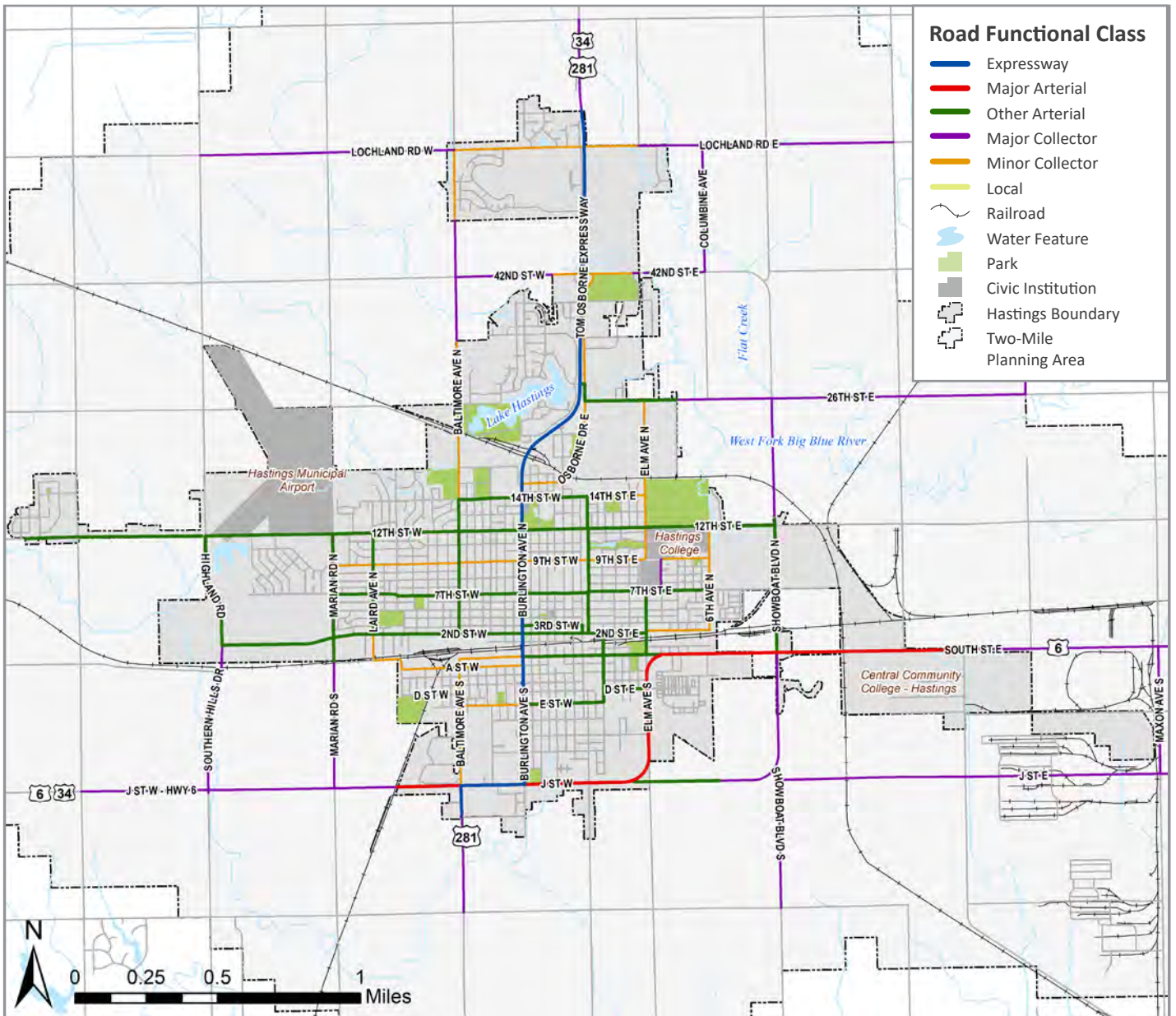


Figure 2-12: Functional Classification

## Current Traffic Volumes

Traffic in Hastings is dispersed throughout its roadway grid. As shown in **Figure 2-13**, Burlington Avenue has the highest traffic volumes, followed by the US 6 corridor. Most collector roads have a traffic volume of less than 5,000 vehicles per day and all counted local roads have a traffic volume of less than 500 vehicles per day. Due to this disparity in traffic volumes, there are a limited number of street segments throughout the city that experience volumes resulting in any significant traffic congestion.

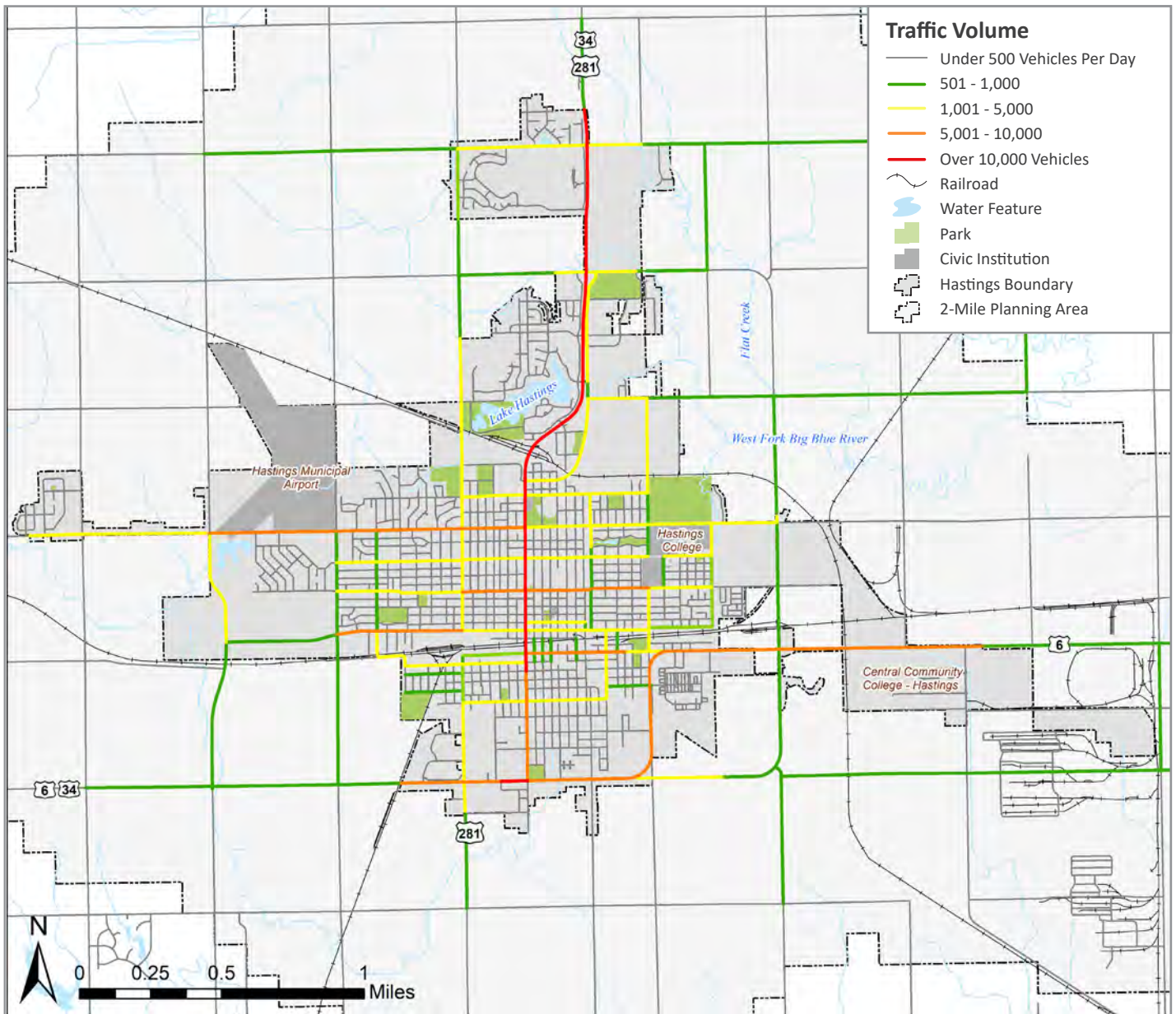


Figure 2-13: Current Traffic Volumes

## Bridge Conditions

Figure 2-14 shows bridge conditions throughout the city from data collected regularly by the State of Nebraska. Many have been maintained well and are in good condition, with limited exceptions. The removal of the Osborne Drive viaduct leaves only four grade-separated railroad crossings in Hastings, two on Burlington Avenue, one on Elm Avenue, and one on Showboat Boulevard.

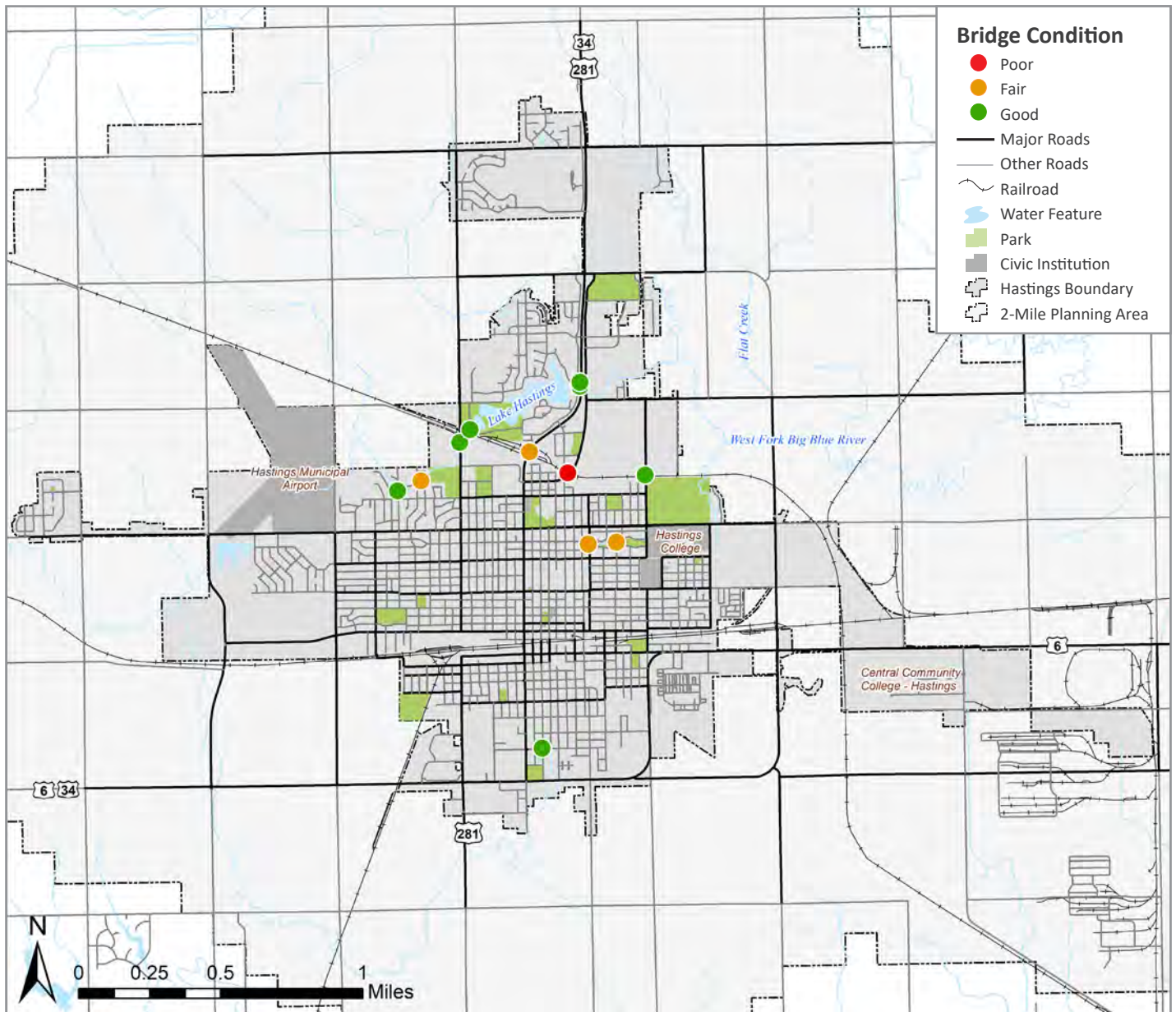


Figure 2-14: Bridge Conditions

## Connectivity

Network connectivity is relatively high across Hastings, except for near the railroad corridors. The two east-west rail lines isolate central Hastings from the north and south sides of the city. Additional viaducts are a major desire of Hastings' residents and would improve travel time reliability and safety in the city.

There are several at-grade railroad crossings on the south side of downtown that connect to Southern Hastings but are often impacted by congestion and safety issues due to frequent trains blocking the crossings. Burlington Avenue is the only grade-separated crossing in this area and becomes congested with vehicles avoiding the at-grade railroad crossings.

The north side of Hastings is not as severely impacted as the south side by the railroad, but connectivity is limited to only a handful of crossings (Marian Road, Baltimore Avenue, Burlington Avenue, Elm Avenue, and Showboat Boulevard). Marian Road and Baltimore Avenue are at-grade crossings that can become congested or pose safety issues for vehicles and pedestrians when trains are crossing these roadways.

As highlighted in the Mobility Audit ([Appendix B](#)) the roadway system is performing adequately. The City does not currently keep a catalog of the pavement quality. It will be crucial that the City continues to maintain transportation infrastructure and makes intentional investments that keep congestion low.

## Downtown Parking Assessment

One of the foundational elements of an effective parking management plan is to first quantify the parking supply that is available for public use, and measure how it is utilized during typical peak conditions (e.g., weekday daytimes, evenings, and weekends). This baseline survey of parking supply and demand helps to answer the questions of whether there is enough public parking downtown, what management strategies are most appropriate, and how much future growth and development can be supported before additional supplies are needed. This section provides a brief overview of the parking analysis, but a more detailed technical memorandum on the parking study is provided in [Appendix C](#).

## Drone-Based Data Collection

A drone-based high-resolution aerial photography data collection plan was utilized to collect downtown parking inventory and occupancy counts. This option provided several advantages, including:

- ▲ The survey methodology provides an accurate record of existing public parking inventory for three days. For each of the days, image capture was completed three times per day. Representative parking demand for morning, mid-day, and evening on both a weekday and weekends was obtained. [Figure 2-15](#) shows an example of the aerial photography obtained through the drone data collection and [Figure 2-16](#) shows the flight path that was used to capture this aerial imagery.
- ▲ The cloud-based data storage and analysis tools can be used to verify parking and other surface transportation and infrastructure conditions. [Figure 2-17](#) shows the on-street parking restrictions within the downtown study area.
- ▲ Drone collection provides an identically repeatable methodology that may be deployed at a future date to evaluate how parking characteristics have changed.

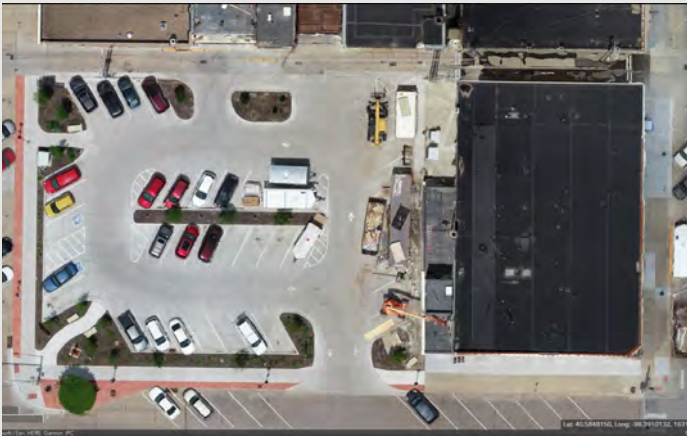


Figure 2-15: Example Aerial Image from Drone Data Collection

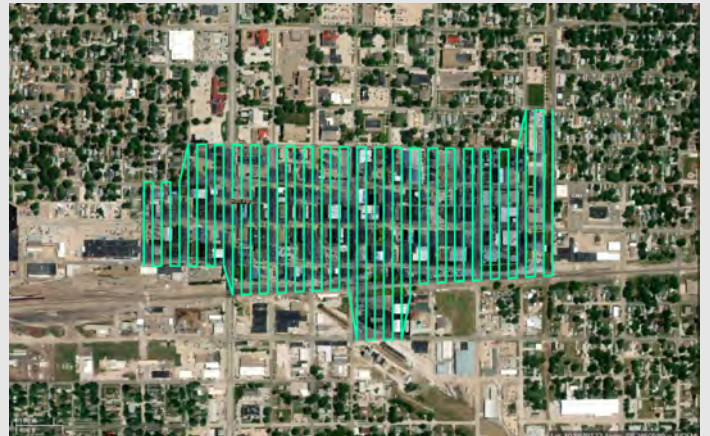


Figure 2-16: Drone Data Collection Flight Path

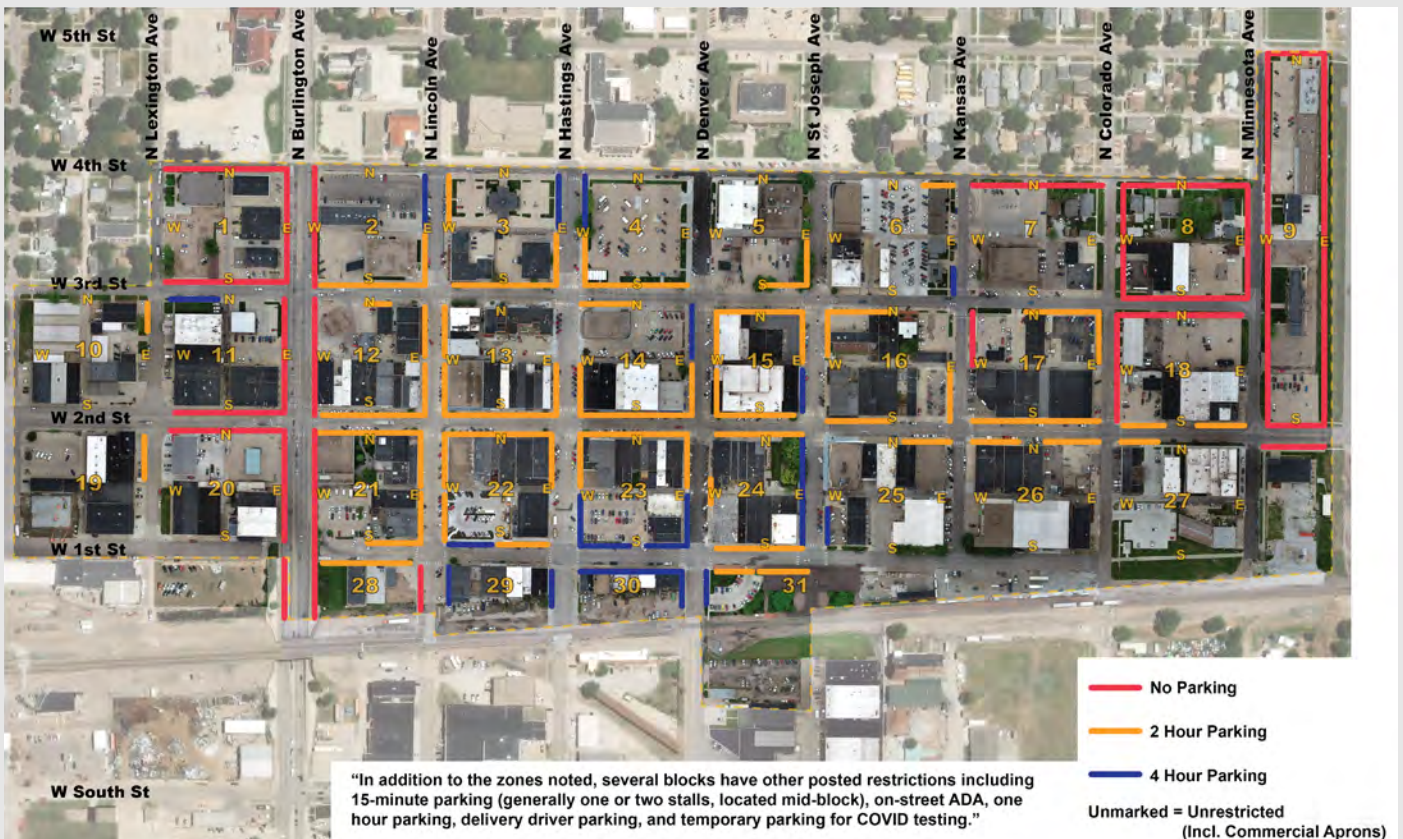


Figure 2-17. On-Street Parking Restrictions



## Parking Analysis Results

**Figure 2-18** shows parking occupancy observed by day and time. The overall parking occupancy of downtown peaks at just under 50% occupancy on weekday mornings. Fridays are slightly lower than other weekdays, but Saturdays are substantially lower than weekdays with peak occupancy at 25%.

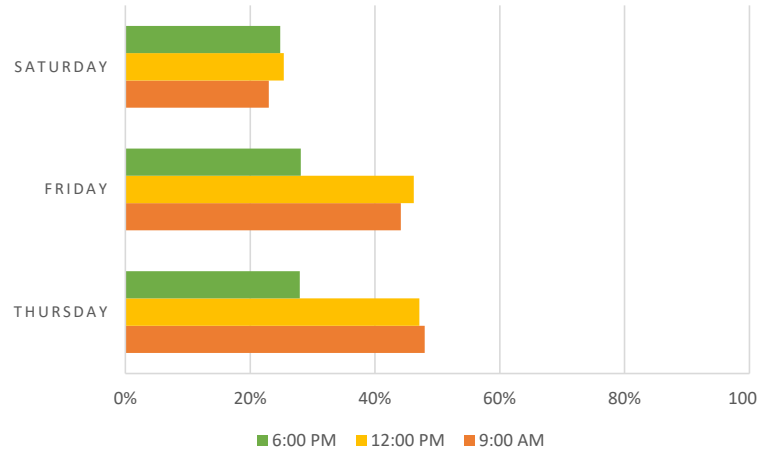


Figure 2-18: Parking Occupancy by Day and Time

**Figure 2-19** shows parking occupancy from the 9am collection time on a typical Thursday. Parking utilization is relatively high between 1st and 3rd streets but is low north of 3rd Street. On-street parking is relatively full near the corner of Lincoln Avenue and 2nd Street and near Saint Joseph Avenue and 2nd Street.

The parking system within the study area is generally underutilized and can accommodate a significant number of additional vehicle users. Parking occupancies are higher during the week than the weekend, especially during the workday. Public off-street parking has the highest occupancy by parking type, with City Hall, Amtrak, Lot 3, and Lot 4 the most heavily used during certain counts. Note that roughly 90% is considered the effective capacity for a given facility or block.

Due to the availability of on-street parking and other alternatives, we conclude the downtown visitor parking is likely sufficient. For Amtrak parking and for some downtown employees, the City might want to continue to promote the Bruckman Rubber Lot as a long-term and employee parking alternative. Other options to address employee parking needs are discussed under the Parking System Recommendations.



Figure 2-19: Peak-Hour Parking Occupancy by Facility

## On-Street Parking Dimensions

Many downtown streets have angled parking. This space could be reevaluated on some streets to accommodate additional bicycle facilities or other infrastructure improvements. **Figure 2-20** shows the amount of space required for various angles of on-street parking. The City could also consider switching to back-in angle parking, which allows for greater visibility of traffic and bicycles when people are pulling out of parking spaces.

## Key Takeaways

The parking system within the study area is generally underutilized and can accommodate a significant number of additional vehicle users. Recommendations for improving parking management include:

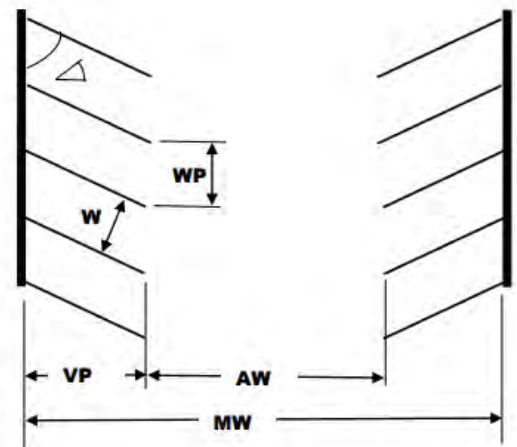
- ▲ Approve budgets for parking system repairs, maintenance, and improvements
- ▲ Implement a more consistent approach to downtown on-street parking restrictions
- ▲ Clarify city government oversight and parking ordinances
- ▲ Expand opportunities for employee parking resources and greater pedestrian connectivity

The following tables summarize parking layout dimensions by User Comfort Factor categories.

### PARKING LAYOUT DIMENSIONS

Parking Angle	Stall Width Projection (WP)	Module Width (1) (MW)	Vehicle Projection (VP)	Aisle Width (AW)
<b>User Comfort Factor 4</b>				
<b>w = 9'-0"</b>				
45	12'-9"	49'-10"	17'-7"	14'-8"
50	11'-9"	51'-7"	18'-2"	15'-3"
55	11'-0"	53'-0"	18'-8"	15'-8"
60	10'-5"	54'-6"	19'-0"	16'-6"
65	9'-11"	55'-9"	19'-2"	17'-5"
70	9'-7"	57'-0"	19'-3"	18'-6"
75	9'-4"	58'-0"	19'-1"	19'-10"
90	9'-0"	62'-0"	18'-0"	26'-0"
<b>User Comfort Factor 3</b>				
<b>w = 8'-9"</b>				
45	12'-4"	48'-10"	17'-7"	13'-8"
50	11'-5"	50'-7"	18'-2"	14'-3"
55	10'-8"	52'-0"	18'-8"	14'-8"
60	10'-1"	53'-6"	19'-0"	15'-6"
65	9'-8"	54'-9"	19'-2"	16'-5"
70	9'-4"	56'-0"	19'-3"	17'-6"
75	9'-1"	57'-0"	19'-1"	18'-10"
90	8'-9"	61'-0"	18'-0"	25'-0"

Parking Angle	Stall Width Projection (WP)	Module Width (1) (MW)	Vehicle Projection (VP)	Aisle Width (AW)
<b>User Comfort Factor 2</b>				
<b>w = 8'-6"</b>				
45	12'-0"	47'-10"	17'-7"	12'-8"
50	11'-1"	49'-7"	18'-2"	13'-3"
55	10'-5"	51'-0"	18'-8"	13'-8"
60	9'-10"	52'-6"	19'-0"	14'-6"
65	9'-5"	53'-9"	19'-2"	15'-5"
70	9'-1"	55'-0"	19'-3"	16'-6"
75	8'-10"	56'-0"	19'-1"	17'-10"
90	8'-6"	60'-0"	18'-0"	24'-0"



Note: (1) Wall to wall, double loaded aisle.

Figure 2-20: Parking Stall Design Guidelines

## Transit Assessment

There are limited public transportation options in Hastings; currently, the city only benefits from on-demand services and Amtrak. Nebraska DOT conducted a feasibility study to determine the best route forward in re-establishing an intercity bus service for the Tri-City area.

### Reach Your Destination Easily (R.Y.D.E.) Service

Community Action Partnership of Mid-Nebraska oversees R.Y.D.E., which provides on-demand transportation service to the residents of Adams, Buffalo, Franklin, Gosper, Hamilton, and Kearney counties. The service has a fleet of over 40 vehicles ranging from small buses to ADA-accessible minivans and provides transportation with fares starting at \$2. Rides are offered from 6am to 6pm on a demand-response schedule and will take the rider to local appointments, events, activities, and so on. Riders must call and reserve a pick-up time 24 hours in advance and wait times for the return trip will vary depending on demand. R.Y.D.E. served 21,947 riders in 2020 with over 75,000 total boardings. The service looks to continue to expand their service area to better serve the communities within their boundaries.

### Amtrak

Amtrak is a passenger rail service that provides train transit across the United States. There is an Amtrak station in Hastings, and four others in Nebraska. The Amtrak line that travels through Nebraska, the California Zephyr, reaches as far west as San Francisco and east to Chicago, where it connects to additional routes around the country. In 2018 and 2019 Amtrak provided 5,304 and 4,757 boardings and alightings, respectively, before seeing a reduction to 2,967 in 2020 due to the COVID-19 pandemic. While the service is available, Amtrak is a more of an interstate, or even cross-country, travel option that does not service daily or routine transportation needs of Hastings residents or employees.

### Key Takeaways

Public transit options are limited in Hastings and the public survey revealed that transit is not a major priority of Hastings residents. However, the recent Nebraska DOT intercity bus study indicates that there may be a market for service between the Tri-Cities.



## Non-Motorized Assessment

The City is committed to providing safe, convenient, and well-maintained biking and walking facilities appropriate for all ages and ability levels. While Hastings generally has pedestrian network coverage, additional facilities and design enhancements can further create places that encourage walking as a part of everyday life. Community feedback indicated several intersection crossings and arterials were higher priority areas for pedestrian infrastructure improvement. **Figure 2-21** shows the pedestrian issues identified by survey respondents: the downtown area, Burlington Avenue in Northern Hastings, Baltimore Avenue, and Marian Road were identified as problematic areas for pedestrians.

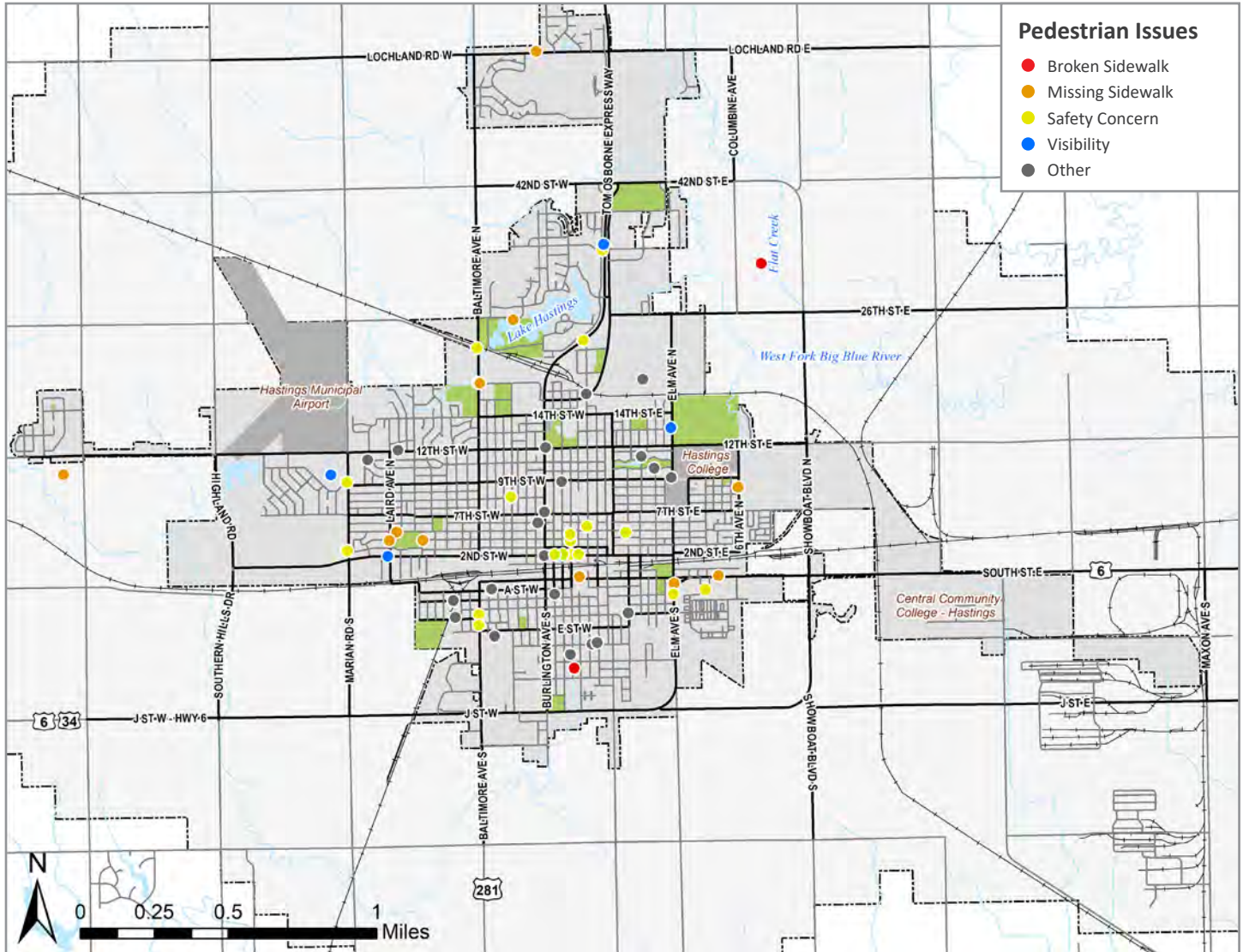


Figure 2-21: Survey-Identified Pedestrian Issues

## Sidewalks

The data gathered for the 2019 Walkability + Connectivity Study, summarized in **Figure 2-22**, showed roughly 64% of the roadways have sidewalks (based on a sample of 100 blocks). Significant barriers to pedestrian mobility were also highlighted along Burlington Avenue, Marian Road for middle school students, along with various neighborhoods around the city.

## Trails

The multi-use trail system in Hastings, the Pioneer Spirit Trail, is more built out in the northern portion of the city. This area lacks a road grid network, and the trail system helps mitigate the lack of street connectivity. The 2019 Walkability + Connectivity Study looked extensively at the state of this system and how to prioritize improvements equitably across the city. **Figure 2-22** shows the existing trail system.

## Key Takeaways

An emphasis on non-motorized transportation has provided the City with a road map for how to improve trails and identified the important destinations for bikes and pedestrians. However, a focus on automobile travel for daily commute has limited the City's investment into local transit.

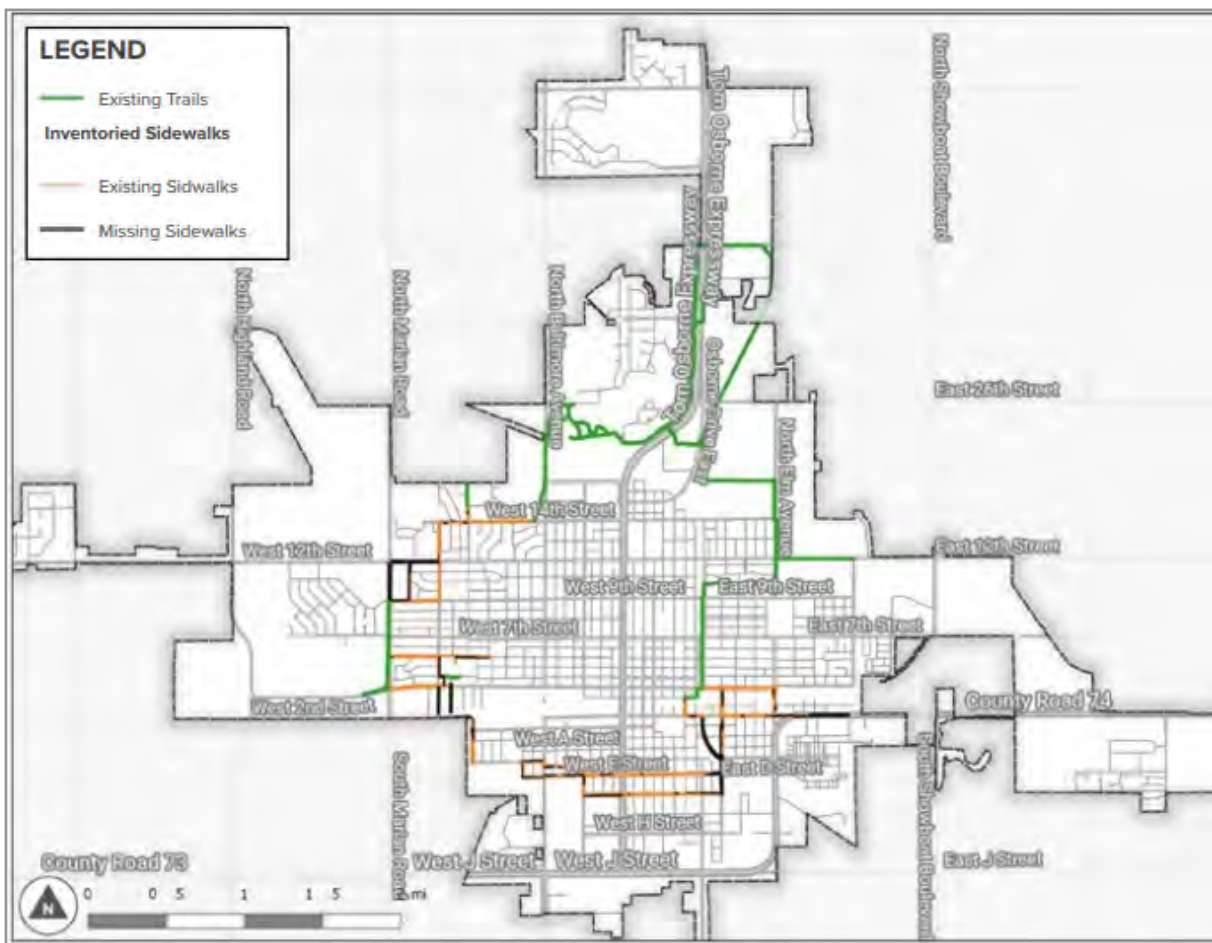


Figure 2-22: Pedestrian Network Map

Source: Hastings Walkability + Connectivity Study

## Land Use

Land use needs are inherently tied to planning for future transportation infrastructure, especially as it relates to accessing key areas of activity. The distribution and types of land uses affect travel patterns and the ability to make trip choices using a variety of modes. Alternatively, the street network shapes land use and development, and the provision of connected sidewalks and bike routes affects how people choose to access their destinations.

**Figure 2-23** shows that there are industrial centers spread throughout the city, with a concentration along the BNSF railroad and southern railroad lines within the city. Commercial centers are also spread throughout with concentrations downtown, along Burlington Avenue and 2nd Street, as well as the commercial area on the north side near Walmart.

The City is currently updating its Comprehensive Plan, which will lay out the land use vision for the next 20 years. The future land use plan will have an impact on the layout and priority of future transportation improvements to ensure they adequately serve anticipated growth areas or meet the City's goals for livability and quality of life.

## Key Takeaways

Land use concentrations throughout the city have a significant role in determining the traffic flow of commuters and other trip types. The City's future land use plan from the ongoing Comprehensive Plan will impact where and how transportation investments are made.

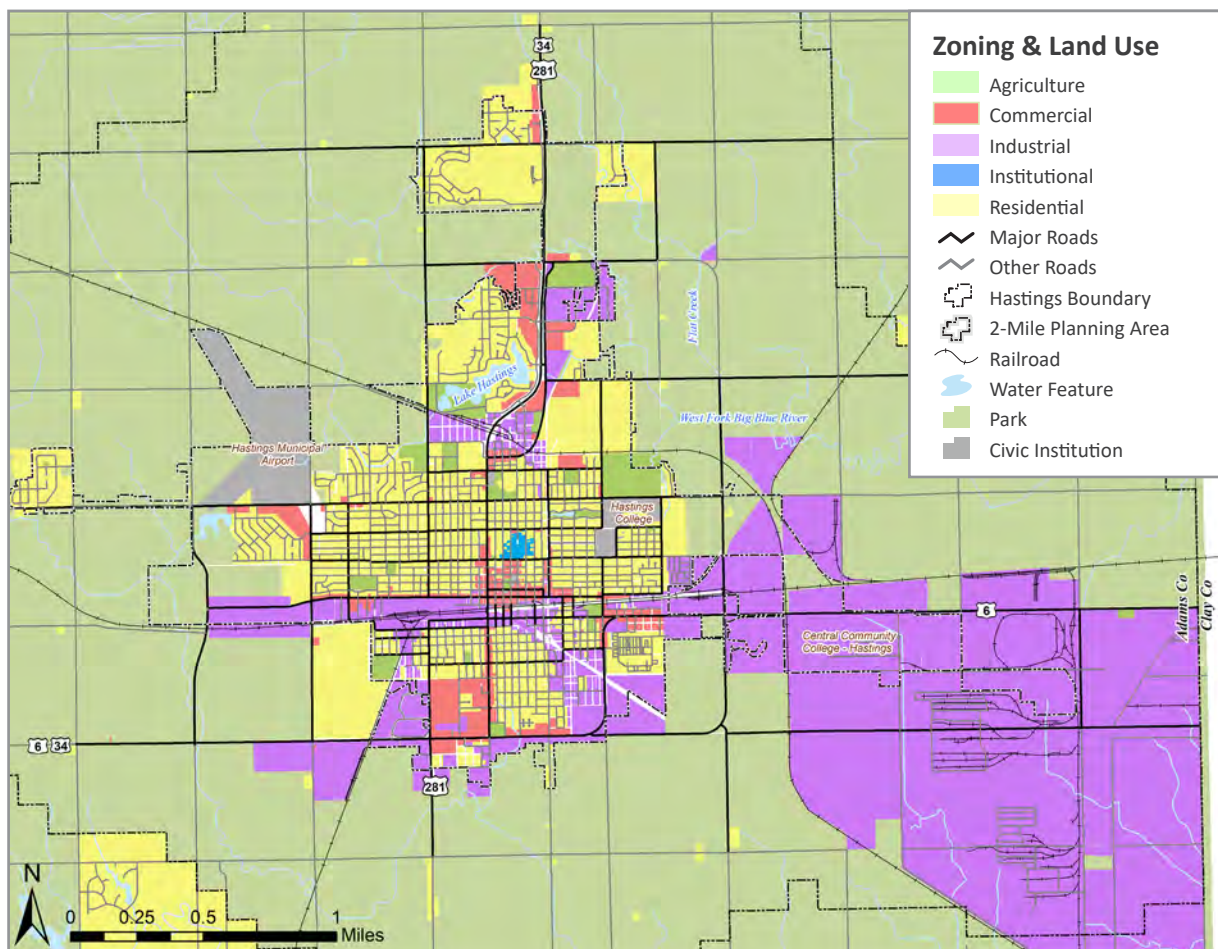


Figure 2-23: Existing Land Use

## 2.3 | TRANSPORTATION SAFETY ASSESSMENT

A common way to evaluate the safety of a transportation network is to assess where vehicle crashes are occurring, the severity of the crashes, and the type or orientation that occur. Patterns can emerge in traffic data that can inform planning recommendations or initiatives to improve safety.

The city had at least one fatal crash every year in the five-year crash history analyzed. These fatalities occurred at various locations around Hastings, with no locations experiencing more than one fatality. However, 12th Street between Baltimore Avenue and Marian Road had two fatalities during the study period (2015-2019). These fatalities, along with the general crash history throughout the city, are shown in **Figure 2-24**.

### Key Takeaways

Crashes are concentrated around the major arterial roadways, including Burlington Avenue and 7th Street. Two fatalities occurred on 12th Street within a five-year period, which should continue to be monitored.

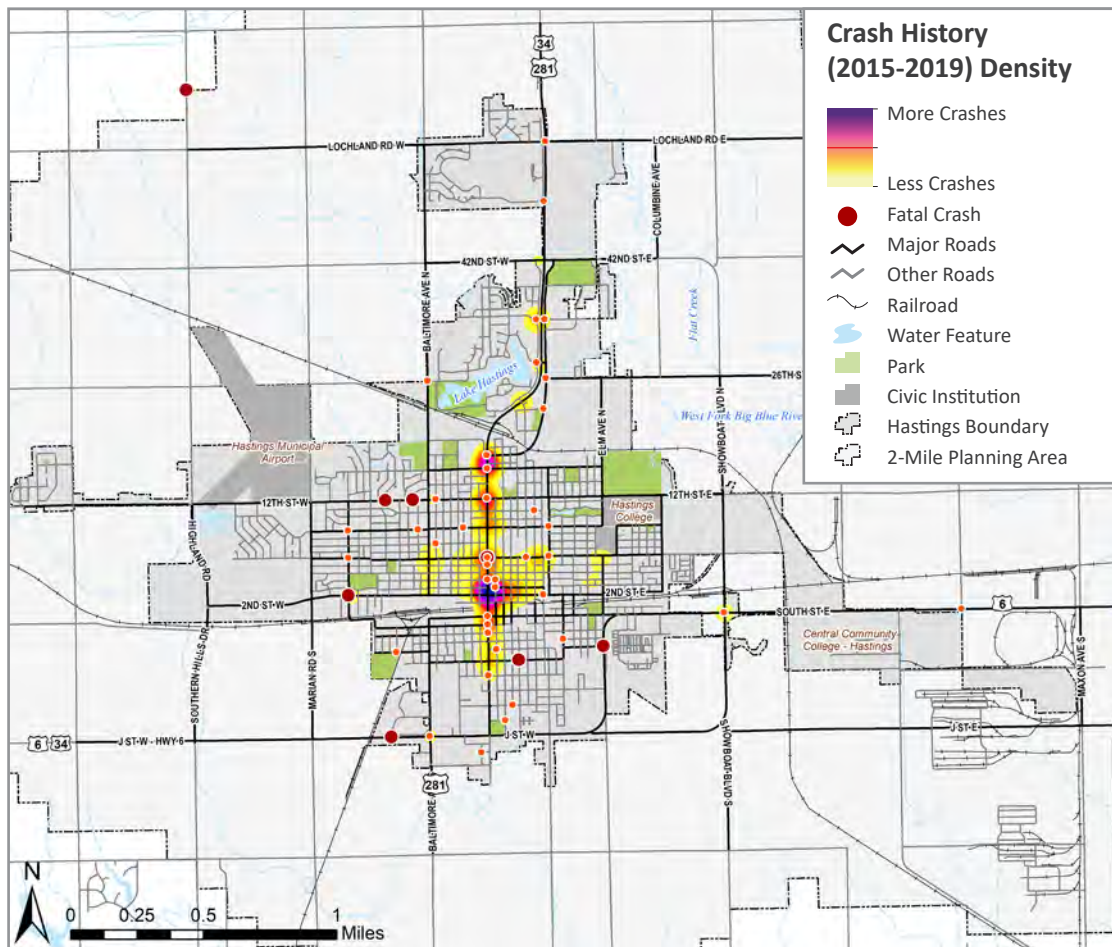


Figure 2-24: Crash Densities and Severe Crash Locations

# 3

## Transportation Recommendations

Based on transportation deficiencies and opportunities identified, recommendations have been developed to address gaps and challenges, leverage opportunities, and improve the transportation experience in Hastings.

3.1 | ROADWAY PROJECTS

3.2 | NON-MOTORIZED PROJECTS

3.3 | POLICIES AND STUDIES

3.4 | DOWNTOWN PARKING AND CIRCULATION





## 3.1 | ROADWAY PROJECTS

Roadways are the backbone of the transportation system. They are the critical links that connect residents and employees to destinations within the city and beyond. Providing a safe and resilient road network for efficient movement of residents and visitors is a critical component of the overall transportation system.

### Project Identification

Roadway capital improvement projects identified from a variety of sources creates a comprehensive list of roadway projects to work towards achieving this roadway vision. These sources included previously completed plans, the One and Six Year Plan, City staff input, projects identified by the public through the engagement process, and projects identified through technical analyses during the TPMP. **Figure 3-1** and **Table 3-1** include the roadway capital projects evaluated as part of the TPMP.

Project description definitions:

- ▲ **New roadway connection.** Construct a new two-lane roadway with associated on-street parking, curb, gutter, drainage, sidewalks, and bicycle facilities as determined appropriate by the City at the time of construction.
- ▲ **Roadway paving.** Remove and replace the existing driving surface as well as appropriate striping and bicycle facilities as determined appropriate by the City at the time of construction.
- ▲ **Roadway reconstruction and widening.** Reconstruct the existing roadway and widen to incorporate bicycle, pedestrian, parking, and drainage facilities as deemed necessary by the City or through a subsequent study.
- ▲ **Roadway widening.** Widen the existing roadway to include additional through travel lanes, turn lanes, bicycle facilities, pedestrian facilities, and drainage facilities as deemed necessary by the City or through a subsequent study.
- ▲ **Bypass signage improvements.** Improve and supplement existing signage on the primary highways to indicate the bypass route to avoid central Hastings, particularly for trucks.
- ▲ **Intersection improvements.** Construct improvements for reducing traffic congestion, completing bicycle and pedestrian network links, and improving pedestrian, bicycle, and motorist safety as determined by a detailed intersection study.
- ▲ **Railroad grade separation.** Construct an overpass or underpass for the roadway to replace the existing at-grade railroad crossing. A subsequent study looking at these potential projects in detail should determine the prioritization of location.
- ▲ **Bridge construction.** Identify appropriate locations for railroad overpasses to replace current at-grade crossings.

Roadway maintenance projects are not included in the TPMP as they do not change the character or vision of transportation in the city. However, they are critically important to maintaining Hastings' high quality of life and should be a major priority of future transportation investments.

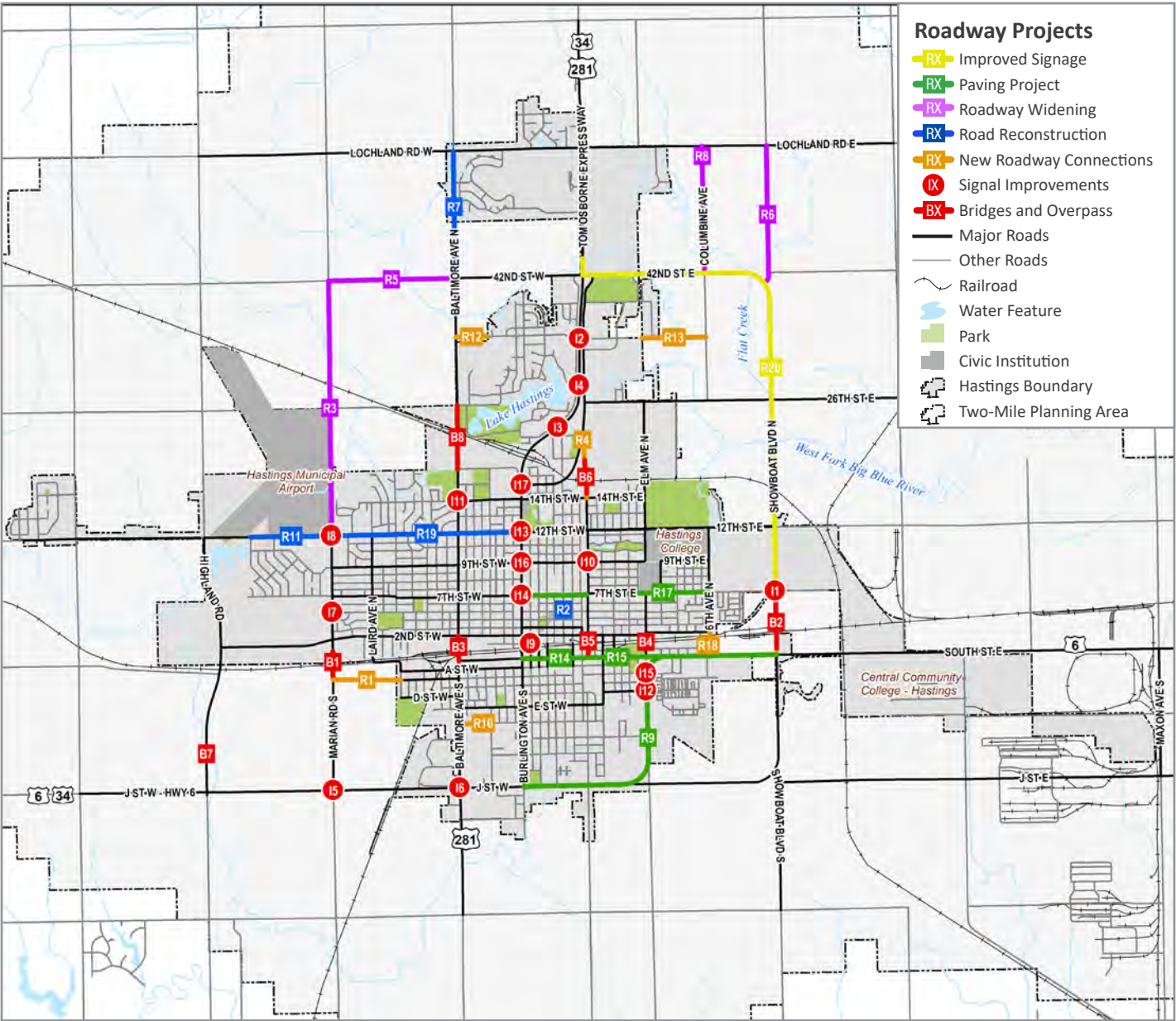


Figure 3-1: Recommended Roadway Projects

Recommended Roadway Projects					
ID	Roadway	From/At	To	Project Description	Source
R1	B St	Woodland Ave	Marion Rd	Roadway reconstruction	Six Year Plan
R2	Kansas Ave	5th St	6th St	Safety improvements/traffic calming	TPMP Process
R3	Marian Rd	12th St	42nd St	Roadway paving	Imagine Hastings
R4	Eastside Blvd	14th St	Osborne Dr	New roadway connection	Survey Response
R5	42nd St	Baltimore Ave	Marian Rd	Roadway paving	Imagine Hastings
R6	Showboat Blvd	42nd St	Lochland Rd	Roadway paving	Imagine Hastings
R7	Baltimore Ave	42nd St	Lochland Rd	Roadway reconstruction and widening	Imagine Hastings
R8	Columbine Ave	42nd St	Lochland Rd	Roadway paving	Six Year Plan
R9	US 6	Burlington Ave	Showboat Blvd	Roadway widening	Six Year Plan
R10	F St	Franklin Ave	Baltimore Ave	New roadway connection	Six Year Plan
R11	12th St	Marian Rd	Sycamore Ave	Roadway reconstruction and widening	Six Year Plan
R12	33rd St	Shadow Ridge Ct	Baltimore Ave	New roadway connection	Six Year Plan
R13	33rd St	Yost Ave	Columbine Ave	New roadway connection	Six Year Plan
R14	South St	Burlington Ave	Wabash Ave	Roadway widening	Six Year Plan
R15	South St	Wabash Ave	US 6	Roadway widening	Six Year Plan
R16	7th St	Burlington Ave	Eastside Blvd	Roadway widening	Six Year Plan
R17	7th St	Pine Ave	6th Ave	Roadway widening	Six Year Plan
R18	6th Ave	US 6	2nd St	New roadway connection	Six Year Plan
R19	12th St	Burlington Ave	Marian Rd	Roadway reconstruction and widening	Six Year Plan
R20	US 34 Bypass	South Street	Tom Osborne Expy	Bypass signage improvements	TPMP Process
I1	Showboat Blvd	7th St	-	Intersection improvements	Six Year Plan
I2	Tom Osborne Expy	33rd St	-	Intersection improvements	TPMP Process
I3	Tom Osborne Expy	Kansas Ave	-	Intersection improvements	TPMP Process
I4	Tom Osborne Expy	North Shore Dr	-	Intersection improvements	TPMP Process
I5	J St	Marian Rd	-	Intersection improvements	TPMP Process
I6	J St	Baltimore Ave	-	Intersection improvements	TPMP Process
I7	Marian Rd	5th St	-	Intersection improvements	TPMP Process
I8	Marian Rd	12th St	-	Intersection improvements	TPMP Process
I9	Lincoln Ave	1st St	-	Intersection improvements	TPMP Process

Table 3-1: Recommended Roadway Projects (Continued on the Next Page)

Recommended Roadway Projects					
ID	Roadway	From/At	To	Project Description	Source
I10	Eastside Blvd	9th St	-	Intersection improvements	TPMP Process
I11	Baltimore Ave	14th St	-	Intersection improvements	TPMP Process
I12	Elm Ave	D St	-	Intersection improvements	TPMP Process
I13	Burlington Ave	12th St	-	Intersection improvements	TPMP Process
I14	Burlington Ave	7th St	-	Intersection improvements	TPMP Process
I15	Elm Ave	B St	-	Intersection improvements	TPMP Process
I16	Burlington Ave	9th St	-	Intersection improvements	TPMP Process
I17	Burlington Ave	16th S	-	Intersection improvements	TPMP Process
B1	Marian Rd	2nd St	South St	Railroad grade separation	2008 Quiet Zone Study
B2	Showboat Blvd	South St	7th St	Railroad grade separation	2008 Quiet Zone Study
B3	Baltimore Ave	2nd St	South St	Railroad grade separation	2008 Quiet Zone Study
B4	Elm Ave	2nd St	Park St	Railroad grade separation	2008 Quiet Zone Study
B5	Eastside Blvd	2nd St	Park St	Railroad grade separation	2008 Quiet Zone Study
B6	Eastside Blvd	14th St	16th St	Railroad grade separation	TPMP Process
B7	Southern Hills Dr	32-Mile Creek	32- Mile Creek	Creek bridge construction	Six Year Plan
B8	Baltimore Ave	18th St	North Shore Dr	Railroad grade separation	TPMP Process

*Table 3-1: Recommended Roadway Projects*

## 3.2 | NON-MOTORIZED PROJECTS

### Sidewalks and Walkability

While it is commonplace to have sidewalks along every street, there are gaps in the pedestrian system throughout Hastings. As suggested by the Hastings Barriers to Universal Mobility (2019), the City should focus its efforts on improving the core of the system and then work outwards. **Figure 3-2** shows a general prioritization of areas for sidewalk improvement investments.

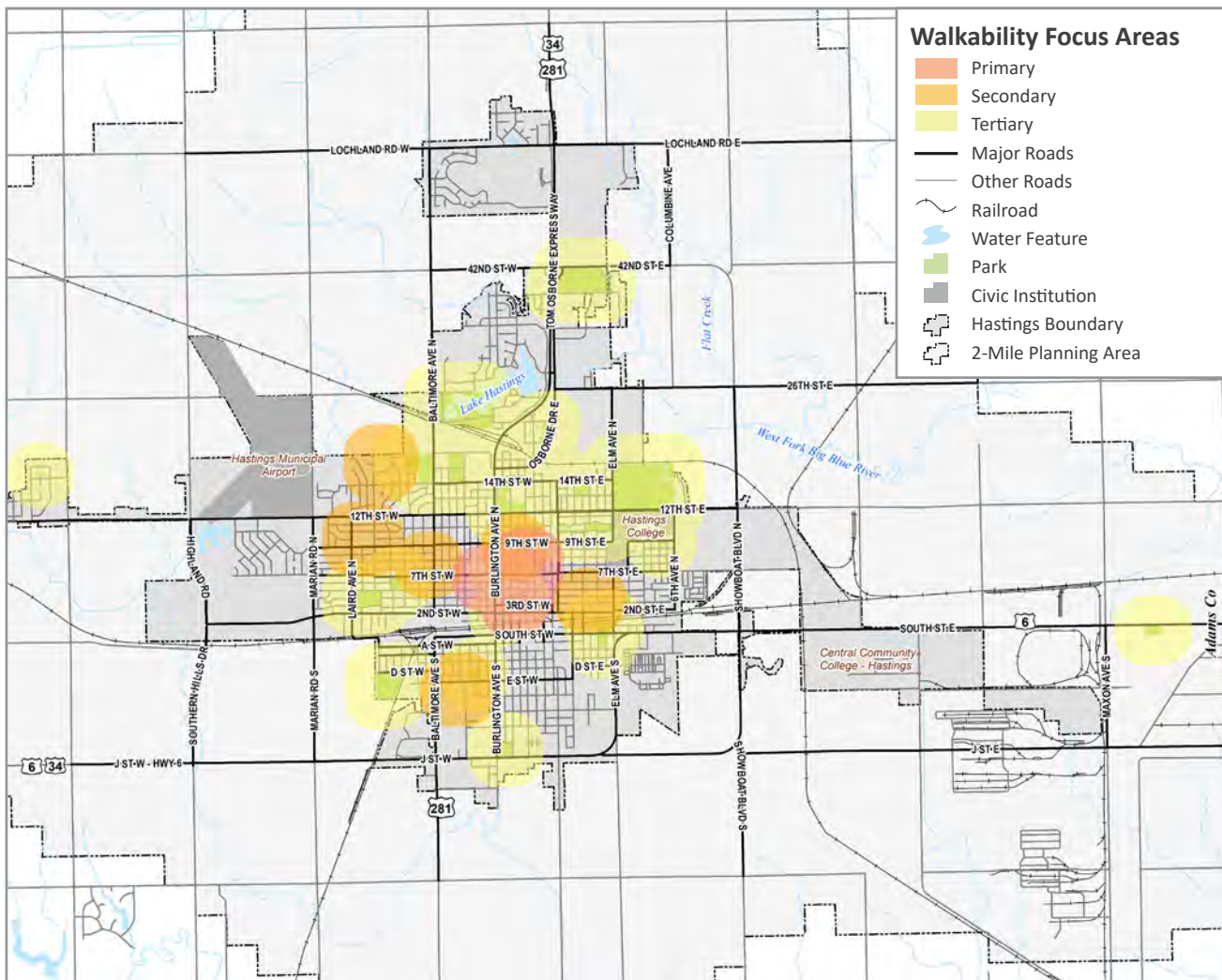


Figure 3-2: Sidewalk Improvement Focus Areas

The City is currently improving sidewalks within a four-block radius around City Hall which was made possible by Community Development Block Grant (CDBG) funding. This effort falls very much in line with the general prioritization of sidewalk investment, which prioritizes the downtown area.

The public engagement survey revealed that the majority of respondents are in favor of some sort of tax increase to fund sidewalk improvements. Examples of successful sidewalk improvement frameworks include:

- ▲ Funding program where the City splits the cost of sidewalk improvements with the property owner. The City's portion would be funded by a voter-approved tax increase or diverting a set amount from the General Fund.
- ▲ Supplemental local sales tax specifically for sidewalk improvements that would either identify the projects to be funded in advance of the vote, or a specific amount of money dedicated to sidewalk improvements.
- ▲ A reimbursement program for property owners who improve sidewalks.



## Pioneer Trail System

The Pioneer Trail throughout Hastings is a cherished amenity for the community. Trail improvements were often brought up throughout the public engagement outreach process. **Figure 3-3** shows the proposed trail investments throughout the city. It is recommended that a south loop of the Pioneer Spirit Trail is completed first (Phase 4A), followed by the western (Phase 4B) and northern connections (Phase 4C). Additional trail connections are recommended after implementing the Pioneer Spirit Trail, but many require additional studies. Some trails will also be implemented by developers as new developments are constructed.

An option for funding near-term trail improvements could be to use Federal funding through the American Rescue Plan Act (ARPA). There are a number of corridors and segments throughout the community that need further study to determine the specifics of the route, impacts to the residents and right-of-way, costs, and other factors as well as some trail segments that should be constructed by developers as new subdivisions and commercial developments come online.

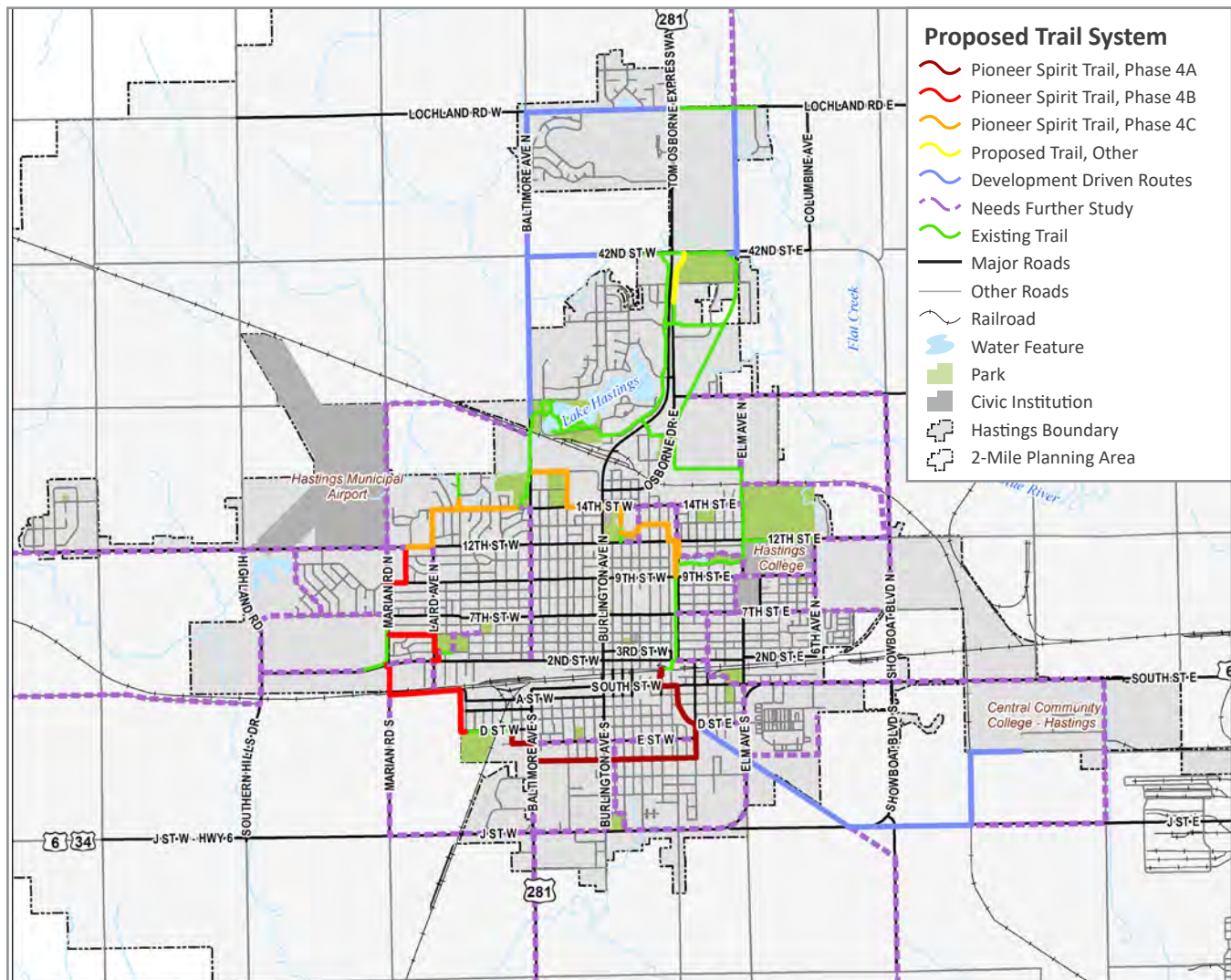


Figure 3-3: Trail Projects

Not all future transportation investments can be fully vetted in the TPMP; subsequent studies are needed to further explore and define high-priority transportation investments.

### Downtown Pedestrian Mall Study

This study is based around the idea of turning 1st Street into a pedestrian focused promenade that puts foot traffic at the top of the priority list among transportation modes. Cities around the country have reverted thinking for downtown space, making cars a guest instead of the main feature of the right-of-way. Examples can be found ranging from Mackinac Island to Denver's 16th Street Mall, which allows only transit vehicles, to more common festival streets with curbsless design and an emphasis on landscaping and urban design features.

### Railroad Viaduct Study

There are several at-grade railroad crossings around Hastings that could be good candidates for grade separation. The at-grade crossings south of downtown, in particular, impact travel time reliability, emergency response times, and safety for pedestrians, cyclists, and motorists. These locations also hinder north-south travel and connectivity within Hastings. Constructing grade separations is very expensive, so the City should conduct a study to identify which locations would provide the most benefits and where grade separation is most feasible. This study would narrow candidate locations down to one or two locations where the City could focus effort on identifying grant funding or advocating with State representatives for funding.

### Hastings Local Transit Feasibility Study

The slight majority of Hastings' workforce both works and lives within Hastings. Investment in transit could provide a convenient mobility option while improving residents' quality of life by reducing automobile traffic and limiting future congestion. Transit also provides an opportunity for the City to invest in multimodal infrastructure that further encourages alternative travel choices such as walking and biking. A study should be conducted to test the feasibility of a transit system that analyzes the specifics of the city's internal commute patterns and to determine if there is any. The southern portions of the city have higher poverty rates and lower automobile ownership, indicating that there may be more transit demand connecting the south side of Hastings to destinations in northern Hastings than in other areas of the city.

This study should build on the recommendations of the Tri-Cities Intercity Bus Study performed by Nebraska DOT. Future connectivity between the intercity routes and more locally focused circulator routes could provide flexible options for local and regional trips.

### Network Connectivity Study

The City should continue to improve its road network by enforcing City code that requires connected roads. This review should be completed with a wide view of the road network for each development application throughout the city. While City code does not require arterials or collector streets to be straight, the intent of the code is to ensure connectivity and the ability for traffic to be dispersed through a network of viable alternative routes, rather than traffic be funneled onto a limited number of roads. **Figure 3-4** shows high-priority road connections that are expected to be constructed by future development, as it occurs, to facilitate this traffic dispersion.



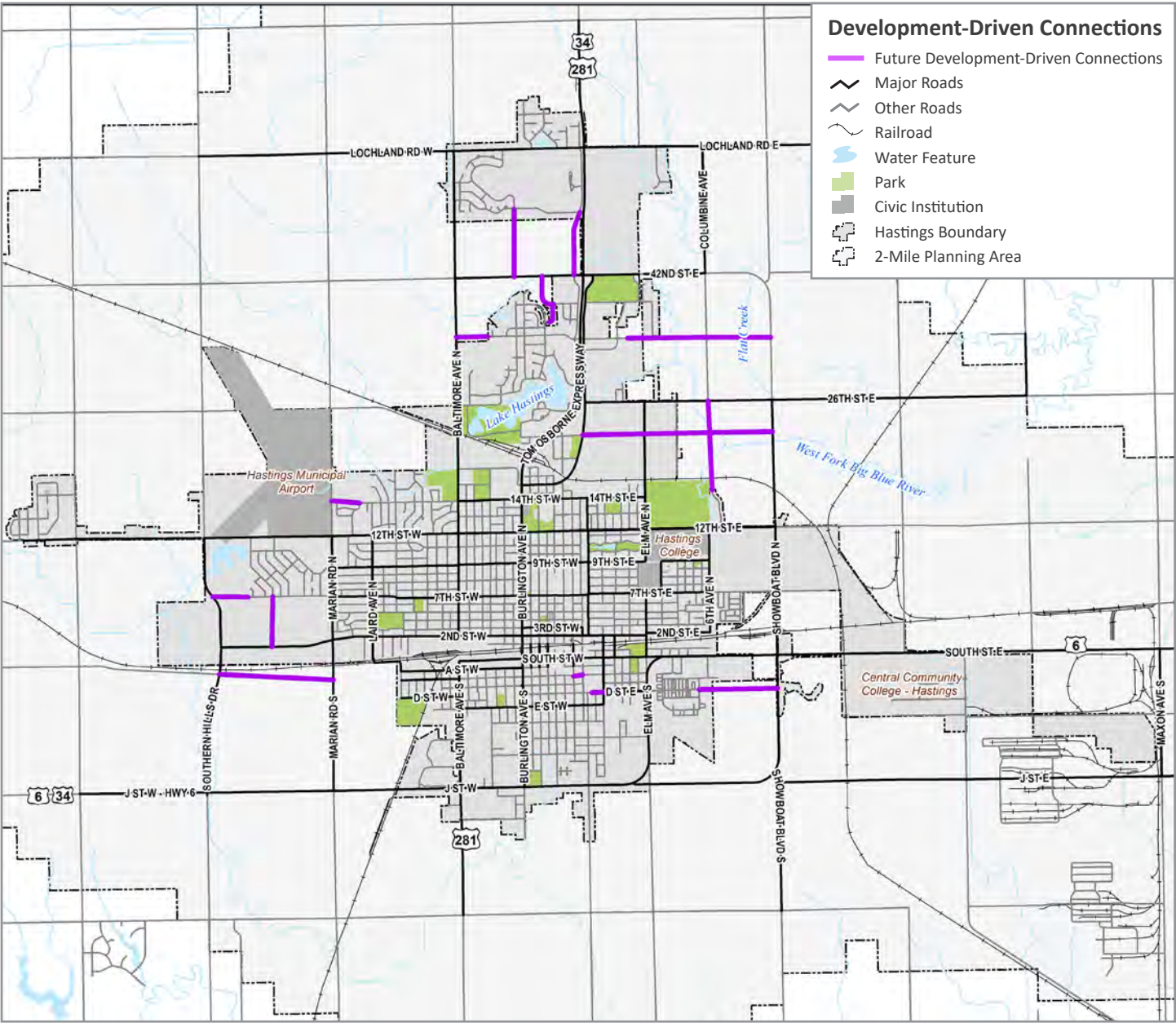



Figure 3-4: Development-Driven Roadway Connections



## 3.4 | DOWNTOWN PARKING AND CIRCULATION

Some specific recommendations are proposed for Downtown to facilitate its role in the city. These recommendations are results from the parking data collection and observations, Steering Committee input, City staff, and a downtown stakeholder group. A deeper look at these recommendations is provided in the Parking Addendum.

### Parking Recommendations

#### Budget for Parking

The condition of public parking assets is important to address as part of the City's regular maintenance cycle. The condition of parking assets sets the standard for the first and last customer experience in the downtown. More importantly, delayed infrastructure maintenance can lead to issues with snow removal, more costly repairs down the road, and eventual unsafe conditions for pedestrians and motorists, which may be a liability issue in extreme cases.

As a general industry guideline, it is recommended that parking system owners typically set aside around 2% of the base construction cost each year to address major maintenance needs. For a typical surface parking lot, this would be approximately \$120 - \$170 per space per year. Major maintenance projects, including resurfacing, re-striping, and concrete repair, are needed at periodic intervals (every five to eight years) as the assets age.

#### Consistent Parking Restrictions

The current pattern of on-street parking restrictions could be described as ad hoc. This is evident on some block faces that have a mix of unrestricted, two-hour, and four-hour posted restrictions, with additional 15-minute restrictions located mid-block on some block faces. One of the major issues with ad hoc restrictions is that it becomes difficult for visitors to predict where and how long they should park. The system is also difficult for parking enforcement officers to consistently monitor and enforce times limits.

#### Clarify Management

It is recommended the City establish a formal parking management department and job descriptions. For the time being, these roles might be handled as positions under the Police Department. City ordinances should be updated to address the administrative process for applying for parking permits of all types for use of City-owned assets for private, commercial, and overnight parking.

A nominal fee should be charged for any temporary permit requests for administrative costs. We do not recommend addressing curb management requests on a one-off basis but recommend establishing a consistent block face template for application of valet and pick-up drop off zones, where these are appropriate.

## Pedestrian Access to Parking

The City should consider improving pedestrian connections across Burlington Avenue. A pedestrian bridge at 1st Street has been discussed, which might tie into other future improvements and provide access to additional parking options for 1st Street business customers and employees. Improving the comfort of crossing Burlington Avenue could increase use of underutilized parking facilities and avoid needing to increase the parking supply in the core of downtown.

## Downtown Circulation

As the Downtown continues to evolve, the character, and ultimately the function of downtown streets, continues to be an important conversation for the City. It is the recommendation of the TPMP to move forward with converting all downtown one-way streets to operate as two-way. While this recommendation plays a small role in the ability of the streets to accommodate traffic, there are many benefits, including:

- ▲ **Safety.** One-way streets encourage higher traffic speeds, which increases the risk of serious injury or fatalities, particularly for pedestrians and cyclists.
- ▲ **Efficiency.** One-way streets force circuitous travel patterns for some trips, resulting in additional time spent driving and increased vehicle emissions.
- ▲ **Wayfinding.** One-way streets can be disorienting and annoying for visitors or those not familiar with the downtown area, leading to a poorer view of downtown as a whole.
- ▲ **Commercial Exposure.** Numerous studies have shown that commercial storefronts benefit from one-way to two-way street conversions by improving access and visibility.
- ▲ **Place Making.** By slowing traffic speeds and prioritizing modes other than vehicles, the opportunity for developing a unique and enjoyable downtown area is increased.

A follow up conversion study should be conducted, similar to the study completed in 2005, to re-examine the traffic, wayfinding, and placemaking impacts of converting from one-way to two-way streets. **Figure 3-5** shows two potential options for one- to two-way street conversion layouts – one that prioritizes on-street parking and one that prioritizes on-street bicycle access.

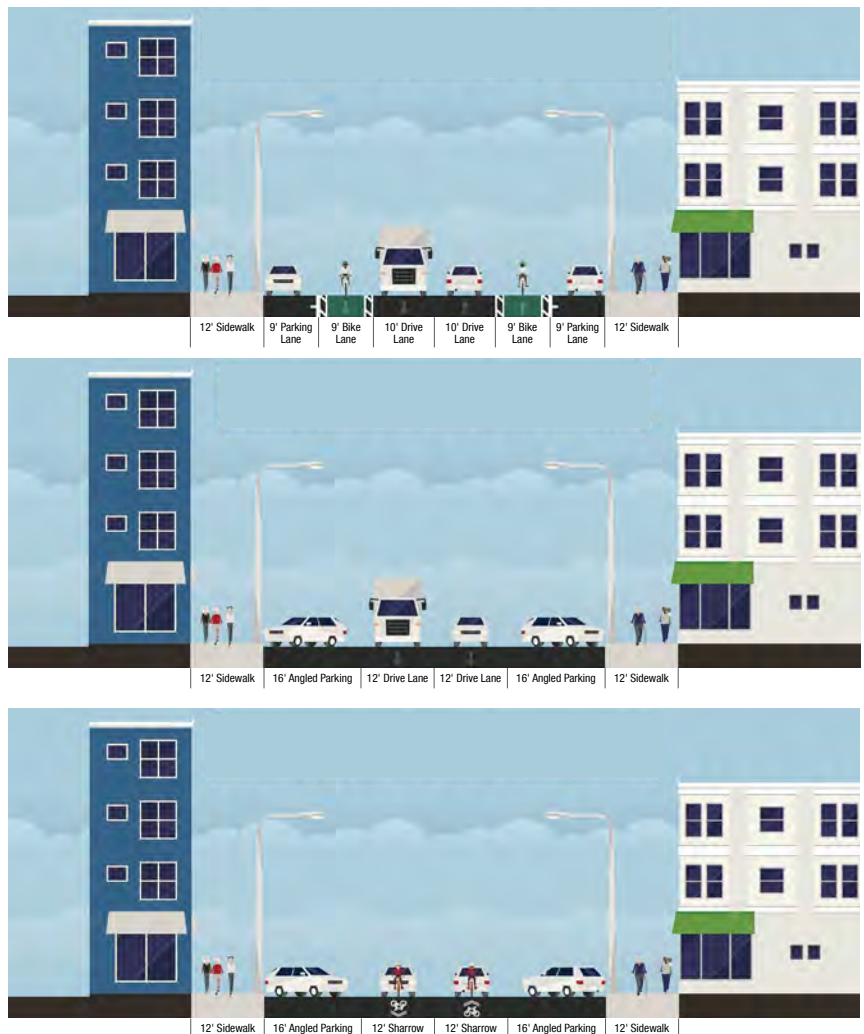


Figure 3-5: One-Way to Two-Way Street Conversion Concepts

# 4

## Implementation

After determining which projects are recommended as part of the TPMP, an Implementation Plan provides information, such as relative costs and potential funding sources, to help guide implementation of projects and other recommendations.

### 4.1 | IMPLEMENTATION PRIORITIES

### 4.2 | FUNDING SOURCES AND OPPORTUNITIES



## 4.1 | IMPLEMENTATION PRIORITIES

A roadway project prioritization methodology was developed with the City to quantitatively score, and subsequently rank, roadway projects to show how impactful each project would be towards achieving the Guiding Principles. Executing a prioritization process provides a guide for the City as it looks to implement the identified projects. The metrics in this prioritization were derived from the guiding principles, ensuring the solutions are rooted in advancing the community's vision.



Figure 4-1: Roadway Project Prioritization

## Roadway Project Prioritization

**Table 4-1** list represents the relative ranking of the roadway projects using the prioritization process. The table also provides an order of magnitude cost of implementing the recommendation.

Roadway Capital Projects by Prioritization Tiers					
ID	Roadway	From/At	To	Project Description	Priority
I14	Burlington Ave	7th St	-	Intersection improvements	High
R9	US 6	Burlington Ave	Showboat Blvd	Roadway widening	High
I12	Elm Ave	D St	-	Intersection improvements	High
I6	J St	Baltimore Ave	-	Intersection improvements	High
R2	Kansas Ave	5th St	6th St	Safety improvements/traffic calming	High
R11	12th St	Marian Rd	Sycamore Ave	Roadway reconstruction and widening	High
I13	Burlington Ave	12th St	-	Intersection improvements	High
R19	12th St	Burlington Ave	Marian Rd	Roadway reconstruction and widening	High
R16	7th St	Burlington Ave	Eastside Blvd	Roadway widening	High
R5	42nd St	Baltimore Ave	Marian Rd	Roadway paving	Mid-High
I1	Showboat Blvd	7th St	-	Intersection improvements	Mid-High
B2	Showboat Blvd	South St	7th St	Railroad grade separation	Mid-High
B4	Elm Ave	2nd St	Park St	Railroad grade separation	Mid-High
I17	Burlington Ave	16th S	-	Intersection improvements	Mid-High
I15	Elm Ave	B St	-	Intersection improvements	Mid-High
R17	7th St	Pine Ave	6th Ave	Roadway widening	Mid-High
R15	South St	Wabash Ave	US 6	Roadway widening	Mid-High
I8	Marian Rd	12th St	-	Intersection improvements	Mid-High
R4	Eastside Blvd	14th St	Osborne Dr	New roadway connection	Mid
I7	Marian Rd	5th St	-	Intersection improvements	Mid
R3	Marian Rd	12th St	42nd St	Roadway paving	Mid
R10	F St	Franklin Ave	Baltimore Ave	New roadway connection	Mid
R7	Baltimore Ave	42nd St	Lochland Rd	Roadway reconstruction and widening	Mid
R6	Showboat Blvd	42nd St	Lochland Rd	Roadway paving	Mid
I5	J St	Marian Rd	-	Intersection improvements	Mid
I16	Burlington Ave	9th St	-	Intersection improvements	Mid
R20	US 34 Bypass	South Street	Tom Osborne Expy	Bypass signage improvements	Mid
I3	Tom Osborne Expy	Kansas Ave	-	Intersection improvements	Mid
B1	Marian Rd	2nd St	South St	Railroad grade separation	Mid

*Table 4-1: Roadway Capital Projects by Prioritization Tiers (Continued on the next page)*

Roadway Capital Projects by Prioritization Tiers					
ID	Roadway	From/At	To	Project Description	Priority
B7	Southern Hills Dr	32-Mile Creek	32-Mile Creek	Creek bridge construction	Mid
R8	Columbine Ave	42nd St	Lochland Rd	Roadway paving	Mid
I2	Tom Osborne Expy	33rd St	-	Intersection improvements	Mid
I4	Tom Osborne Expy	North Shore Dr	-	Intersection improvements	Mid
R14	South St	Burlington Ave	Wabash Ave	Roadway widening	Mid
R12	33rd St	Shadow Ridge Ct	Baltimore Ave	New roadway connection	Mid
I11	Baltimore Ave	14th St	-	Intersection improvements	Low
B3	Baltimore Ave	2nd St	South St	Railroad grade separation	Low

Table 4-1: Roadway Capital Projects by Prioritization Tiers

## Other Implementation Factors

While this table can support the City in setting implementation priorities, there are other factors that the City will have to consider when planning and programming projects for implementation or construction. Some examples of additional factors might include: political priorities that would elevate one project or investment in one area over another; the type of funding available, as some types of funding or grants are earmarked for specific investments; or opportunities to leverage other construction or maintenance activities to support implementation of a project on this list.

Another factor that will influence the City's ability to implement projects related to traffic signals on some roadways is whether the City has jurisdiction over the roadway. There are roadways in Hastings, such as Burlington Avenue, South Street, and J Street, that are owned by the Nebraska DOT. Maintenance responsibilities on these state-owned corridors are shared between the Nebraska DOT and the City of Hastings. There are also roadways that are all or partially within the jurisdiction of Adams County. Implementing some of the recommended projects on these facilities will rely on leadership or significant partnership with the State or County. The City should develop and maintain strong relationships with the County and State to ensure that issues are brought to their attention and to enable collaboration. The City can also work through locally elected representatives at the State level to advocate for additional funding and focus on issues along State-maintained roadways.



## 4.2 | FUNDING SOURCES AND OPPORTUNITIES

This section outlines local, state, federal, and private funding sources that the City may pursue to implement recommended transportation improvements. Not every funding source is available for every type of project, so the funding options should be considered on a per-project basis.

### Local Public Funds

The City does not have a dedicated source of local funding for transportation maintenance or capital improvements. Most funding comes from the State of Nebraska via the State's gas tax and vehicle registration fees, from which most funding goes to roadway maintenance.

### Capital Improvement Program

The One and Six Year Plan identifies a list of improvements the City is looking to fund in the next year, as well as the subsequent five years. Annual funding is dedicated to specific projects in the One and Six Year Plan based on the funds provided through the State, and no local funds are usually available for these improvements.

### Local Tax for Transportation

The City has a ½-cent sales tax that funds roadway maintenance projects and trail projects. To support funding for capital projects, the City could consider pursuing a ballot initiative to implement a temporary (10- to 20-year) tax increase for transportation investments. This type of program could either specifically identify projects to be completed with the revenue generated (sometimes known as a Transportation Trust Fund), or the City could offer different investment categories (such as capacity improvement, trail, sidewalk, and maintenance) to provide more flexibility to respond to investment needs as they arise.

### Highway Allocation Funds

The Highway Allocation Fund consists of revenues generated from the collection of motor fuel taxes, motor vehicle registration fees, the motor vehicle sales tax, investment earnings, and the Build Nebraska Act collected by the State of Nebraska. These funds are then allocated to each city and county in Nebraska based on an allocation formula to fund transportation improvements and maintenance projects. The City must contribute local matching funds from other sources to receive Highway Allocation Funds. The current local match is 25%. In Fiscal Year 2021, the City of Hastings received just over \$3.2M in Highway Allocation Funds.

### Surface Transportation Program (STP)

The STP is the most flexible of all the federal highway programs and historically one of the largest single programs. States and metropolitan regions may use these funds for highway, bridge, transit (including intercity bus terminals), and pedestrian and bicycle infrastructure projects. STP can cover 80% of the total cost of a project, with the rest covered by states or localities. Eligible projects include highway and bridge construction and rehabilitation; transit capital projects; bicycle, pedestrian, and recreational trails; and environmental mitigation.



## State and Federal Public Funds

There are a variety of grant programs administered by either the state or federal governments that make funding available to support transportation investments. Grant programs often require agencies to apply for funds for specific projects, and many grant programs require a local financial contribution in the form of a local match. To date, the City does not have set-aside funding for matching funds for grants.

### Surface Transportation Block Grant Program (STBG)

This flexible program was created from the long-standing Surface Transportation Program (STP) and is administered by the FHWA. The flexible nature of this program focuses on funding to priority areas and areas of greatest need. The STBG Program may be used for bridge and safety projects on any public road, facilities for non-motorized transportation, transit capital projects, and public bus terminal and facilities.

### Congestion Mitigation and Air Quality Improvement (CMAQ)

Administered by the FHWA, the CMAQ program was implemented to support surface transportation projects and other related efforts that contribute to air quality improvements and provide congestion relief. The federal government is currently projecting funding of \$2.3 to \$2.5 billion each year from 2016 to 2020 for CMAQ projects nationwide.

### Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant

The RAISE Discretionary Grant program provides funding to invest in road, rail, transit, and port projects that promise to achieve national objectives. Previously known as the Better Utilizing Investments to Leverage Development (BUILD) and Transportation Investment Generating Economic Recovery (TIGER) Discretionary Grants, Congress has dedicated nearly \$9.9 billion for 13 rounds of National Infrastructure Investments to fund projects that have a significant local or regional impact.

### Infrastructure for Rebuilding America (INFRA) Grant

INFRA is also a discretionary program through the U.S. Department of Transportation (USDOT) that can fund up to 60% of surface transportation projects (another 20% can come from other federal grants or assistance). INFRA grants are typically utilized for larger transportation projects with costs in excess of \$100 million, and a minimum grant award of \$25 million.

### Transportation Infrastructure Finance and Innovation Act (TIFIA)

TIFIA financing includes direct loans, loan guarantees, and standby lines of credit to projects of national or regional significance. Minimum project costs include \$10 million for transit-oriented development, local, and rural projects; \$15 million for intelligent transportation systems (ITS) projects; and \$50 million for all other surface transportation projects, and can finance up to 33% of total project costs.

## Federal Community Development Block Grant Program (CDBG)

The State of Nebraska administers the federal CDBG program for municipalities and counties to carry out community development activities. The funds must be used for activities that either benefit low- and moderate-income persons, prevent or eliminate slums or blight, or address community development needs that have a particular urgency. Eligible use of funds includes acquisition, design, engineering, construction, reconstruction, or rehabilitation or installation of public improvements or public facilities.

## Water Infrastructure Finance and Innovation Act (WIFIA)

WIFIA is a financing/loan program. The eligibility threshold for projects as part of the program is \$20 million and projects must be of regional or national importance. The program's function is mainly to address funding gaps from the Clean Water State Revolving Fund (CWSRF). Projects do not apply if they are partially funded by the issuance of tax-exempt bonds.

## Dedicated Funding Sources

The sources identified in this section describe types of programs that municipalities throughout the country have established to support financing of public infrastructure, including transportation infrastructure. These types of programs would not be project-specific, but instead put in place in anticipation of significant public infrastructure demand and investment in an area to offset or supplement the costs borne by an agency for providing new or upgraded infrastructure.

## Business Improvement District (BID)

A BID is a private-sector initiative to manage and improve the environment of a business district with services financed by a self-imposed and self-governed assessment. Services financed by a BID are intended to enhance, not replace, existing City services. BIDs can finance a wide variety of services, including marketing, maintenance, economic development, public safety, planning, and events and parking management.

BIDs are accountable to those who pay through a BID board of directors comprising property and business owners within the district. Services financed by a BID are usually provided by a private-sector organization, not government. BIDs require demonstrated support from owners of personal and real property, representing more than 50% of assessed value and acreage.

## General Improvement District (GID)

A GID is a public infrastructure district that applies an additional property tax or assessment to a specific improvement area to pay for new public infrastructure. GIDs are commonly used to fund shared infrastructure facilities. They can be initiated by a majority of property owners. GIDs are well suited to provide long-term financing for one-time major public improvements and for ongoing maintenance funding.

## Special Improvement District (SID)

SIDs apply special assessments or charges to specific individual properties that benefit from public improvements. The special assessment is determined based on the amount of benefit a property receives. The overall assessment to a particular area benefiting from an improvement must be distributed equitably. The most likely improvements that involve the use of a SID include roads, sidewalks, sewer lines, and water lines. The assessments are typically distributed in an area based on linear feet of road adjacency, the number of lots, or area. Special assessments are not property taxes but represent a lien on a property included in an SID. In these types of arrangements, bonds are issued to finance the improvements, and the assessments charged to property owners typically represent the sole source of repayment for these bonds. Colorado Springs has its own version of an assessment district referred to as a Local Improvement District (LID). SIDs or City-approved LIDs are particularly well suited as a method of finance for discrete one-time public improvement upgrades. At least 50% of property owners must concur with the assessment.

## Special Improvements Maintenance District (SIMD)

SIMDs have the ability to levy ongoing property taxes for the purpose of maintaining existing public improvements. They do not have the authority to borrow money or issue debt. SIMDs could be employed to provide funding for the ongoing maintenance of landscaping and streetscape improvements originally installed using other funding sources. SIMDs do not have separate boards that govern their operation, but they may have advisory committees that oversee operations. City Councils typically act as the de facto board overseeing SIMDs.

## Tax Increment Financing (TIF)

TIF is a tool in which improvements are financed through a net increase in property or sales tax in a defined area. Under TIF arrangements, a base property valuation or base sales tax level is identified for the specified area, and the TIF entity collects the tax revenue generated by additional property or sales tax revenues. The City continues to receive the base level of tax proceeds from the specified area.

## Urban Renewal Authority (URA)

A URA is a quasi-municipal organization intended to address or redevelop deteriorating or “blighted” areas. There is normally only one URA in a given municipality, but a city can have multiple urban renewal project areas. It is common for URAs to utilize TIF to fund improvements. A mayor-appointed board governs a particular URA.

To form an urban renewal project area, the City Council must pass a resolution stating that blight is being eliminated through the URA process and its activities. In addition, a URA must develop a formal urban renewal plan for each project area, outlining the proposed public improvements to move forward. The City can establish an urban renewal area when one or more redevelopment projects with a significant potential tax increment have been identified and have a strong probability of near-term initiation.

## Private Funding

### Public Improvement Fees (PIFs)

Developers impose a PIF on retail and service tenants to fund public improvements. PIFs are collected as a fee charged on sales within a set of negotiated categories and a designated geographic boundary. General obligation or revenue bonds may be issued based on the revenue collected. Because PIFs are fees, they become a part of the cost of the sale or service and are subject to sales tax. Administered through covenants on retail leases, PIFs are usually collected by a metro district established as part of a project.

### Impact Fees

These are additional fees assessed to a developer as projects go through the approval process and as development gets built. These are commonly used to fund public safety, utilities, schools, and other services.

### Private Foundations

Private foundations provide grants across a variety of focus areas including arts and culture, civic and community initiatives and education, health, and human services.

HASTINGS



TRANSPORTATION  
AND PARKING  

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MASTER PLAN

# Appendix A

## Public Engagement Results

HASTINGS



TRANSPORTATION  
AND PARKING

MASTER PLAN

**METROQUEST**  
SURVEY SUMMARY

### 1 Let's get moving!

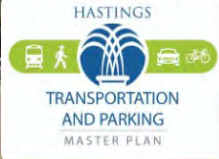
**WELCOME**

**Welcome to the City of Hastings' Transportation and Parking Master Plan Survey**  
 This survey is part of the Community Mobility and Parking Audit, which highlights existing and future transportation deficiencies. We want your input to help identify and prioritize future investments in the transportation system.

[View the Plan Area](#) [Begin](#)

This survey builds on the previous engagement opportunities:

- A community focus group & online survey
- Four voting ward-specific focus groups

HASTINGS  
  
 TRANSPORTATION  
 AND PARKING  
 MASTER PLAN

### 2 Rank the TPMP Goals

**GOALS**

Order your top 5 items above this line

- Resiliency
- Integration
- Maintenance
- Safety
- Efficiency
- Connectivity
- Growth
- Choices

Help us rank and prioritize the preliminary goals. These goals, and their prioritization, set the framework for transportation investments moving forward. You can provide a comment for the goals or use the "Suggest another" button if you think we missed one.

Please drag 5 of the items above the line in your preferred order.

[Suggest another](#)

### 3 Survey

**SURVEY**

- Trails
- Traffic Flow
- Sidewalks
- Parking
- Transit

**Trails**

How would you like to use the trail system?

- To walk recreationally
- To bike recreationally
- To commute to work
- Day-to-day travel (ie. grocery store)

When investing in trails, the city should focus on:

Select...

[Next](#)

### 4 MAP IT!

**MAP IT!**

Please drag and drop at least 3 markers on the map.

- Automobile
- Connectivity
- Pedestrian
- Bicycle
- Home & Work
- My Destinations

Map showing Hastings area with markers for Juniata, Ingleside, Hastings, and Hastings College. Includes zoom controls and Google logo.

### 5 Thank you!

**STAY INVOLVED**

**Final Questions (Optional)**

My primary mode of transportation is...  
 Select...

Which voting ward do you live in?  
 Select...

Age  
 Select...

How has COVID impacted your travel behavior?  
 Select...

Email Address (to receive project updates)  
 Type...


Additional Comments (optional)  
 Type here...

[Submit Final Questions](#) [Skip](#)

**Thank you!**

Thank you for your feedback! This input will help us understand what is important and guide decisions about the future of the transportation network.

[Please visit the project's website!](#)

HASTINGS  
  
 TRANSPORTATION  
 AND PARKING  
 MASTER PLAN

Kimley»Horn



187

participants



4,100+

data points



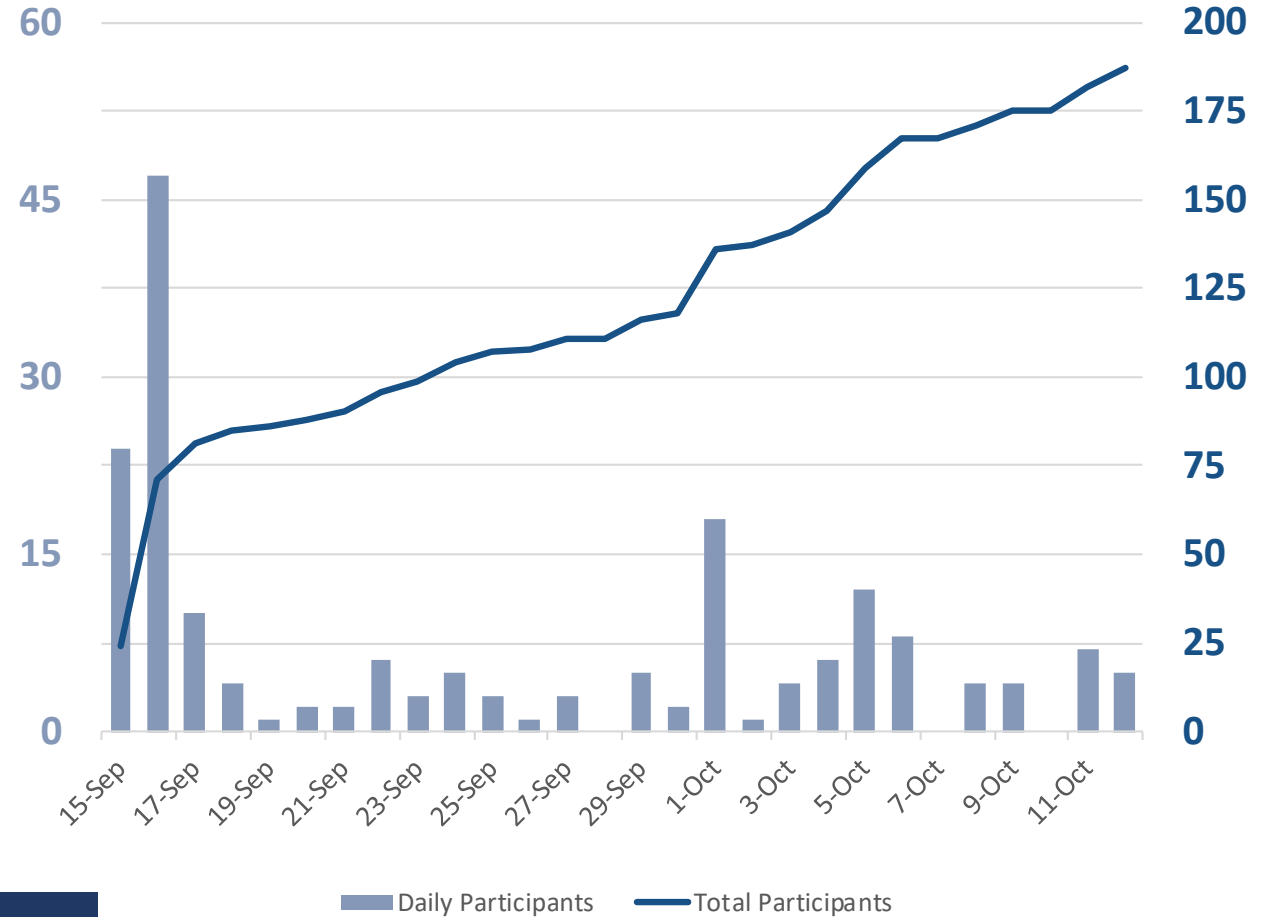
450+

comments



MetroQuest Survey

- Online engagement site designed to educate the public about the project and collect feedback using interactive and visual screens
- Active: September 15 to October 12, 2020
- Project information provided on the “welcome” screen
- Asked participants to weigh in on priorities and respond to various survey questions
- Requested participants place map markers on areas of opportunities and concerns
- Collected optional information including participants primary mode of transportation, voting ward, age, and how COVID has impacted their travel.



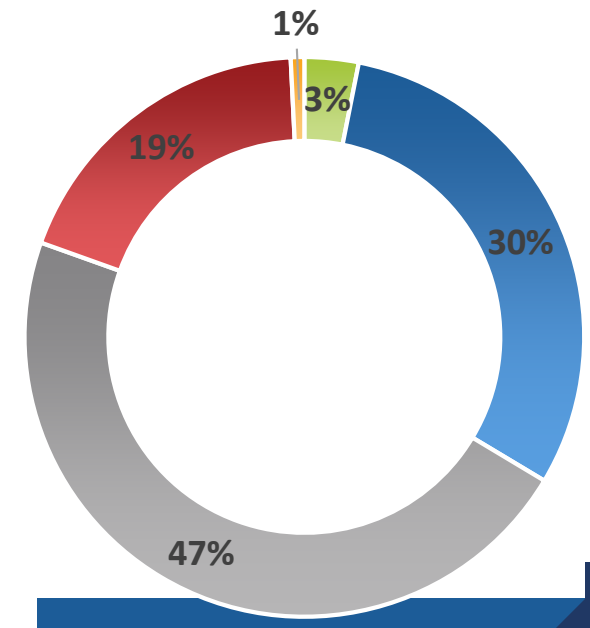
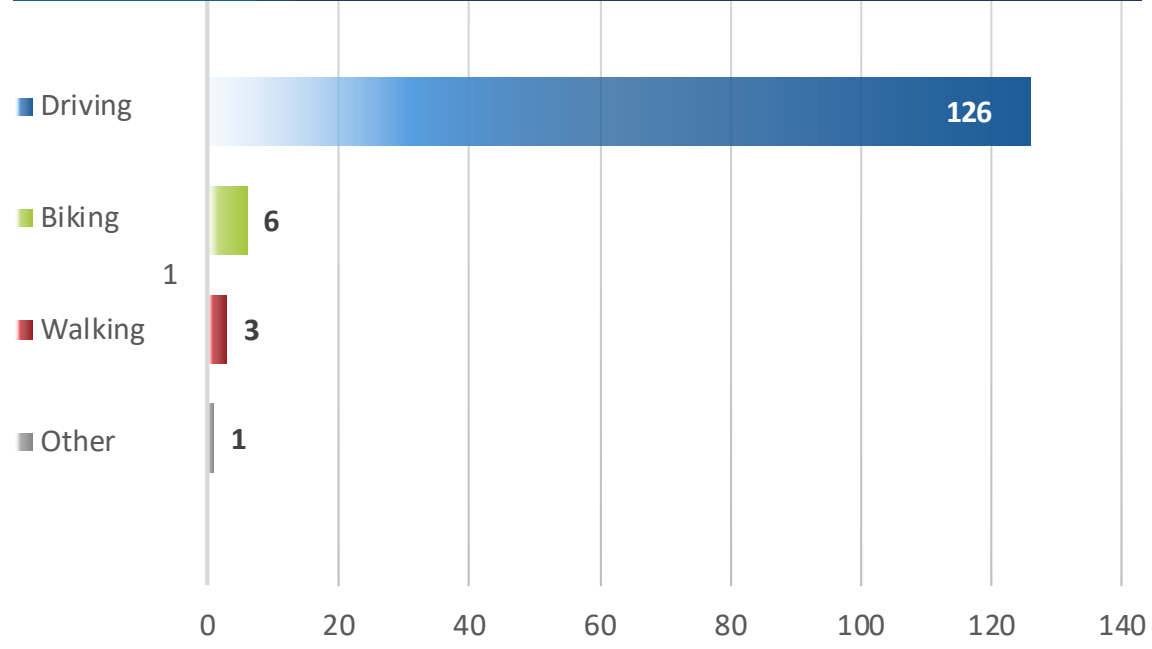


# Participant Profile



MetroQuest Survey

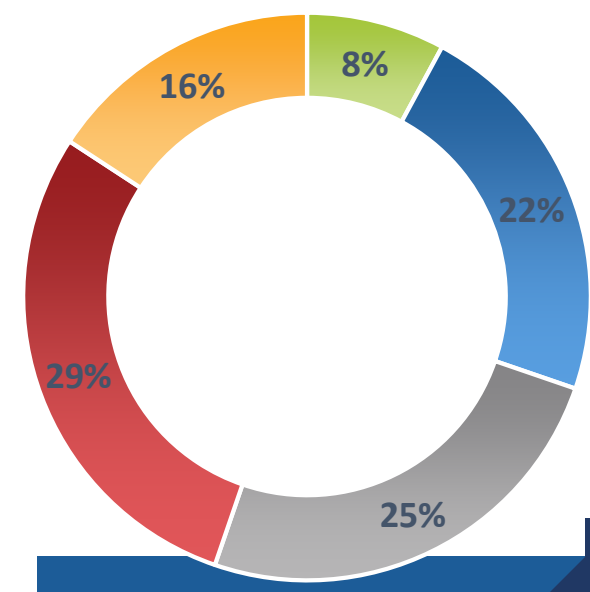
## Primary Mode of Transportation



- 25 and under
- 26 to 40
- 41 to 65
- 66 to 80
- 81 and over

## What is Your Age?

*Note – This profile is comprised of participants who filled out the Stay Involved portion of the survey.*



- Ward 1
- Ward 2
- Ward 3
- Ward 4
- I live outside of Hastings

## Where Do You Live?

# Goal Priorities

MetroQuest Survey

The Goals screen covered some key goals of a successful transportation system.

**2 Rank the TPMP Goals**

**GOALS**

Order your top 5 items above this line

- Resiliency
- Integration
- Maintenance
- Safety
- Efficiency
- Connectivity
- Growth
- Choices

Help us rank and prioritize the preliminary goals. These goals, and their prioritization, set the framework for transportation investments moving forward. You can provide a comment for the goals or use the "Suggest another" button if you think we missed one.

Please drag 5 of the items above the line in your preferred order.

Suggest another

## *Resiliency*

*Design transportation facilities and networks so they are secure and resilient to impacts from man-made or natural disasters.*

## *Integration*

*Integrate transportation and land use decisions to create and preserve neighborhoods that promote vibrant community character and encourage active living.*

## *Safety*

*Transportation facilities that provide safe travel options for all residents and visitors.*

## *Efficiency*

*Optimize the use of existing infrastructure as well as strategic seeking of funding options to make effective investments in the transportation network.*

## *Connectivity*

*Design transportation facilities and networks so they are secure and resilient to impacts from man-made or natural disasters.*

## *Growth*

*Promote growth in the economy, development, and tourism by providing a transportation system that accommodates current and future demand for the movement of residents, visitors, and goods.*

## *Choices*

*Provide travel choices that are accessible to all travelers, promote local mobility, and reduce the impacts of transportation on the environment and neighborhoods.*

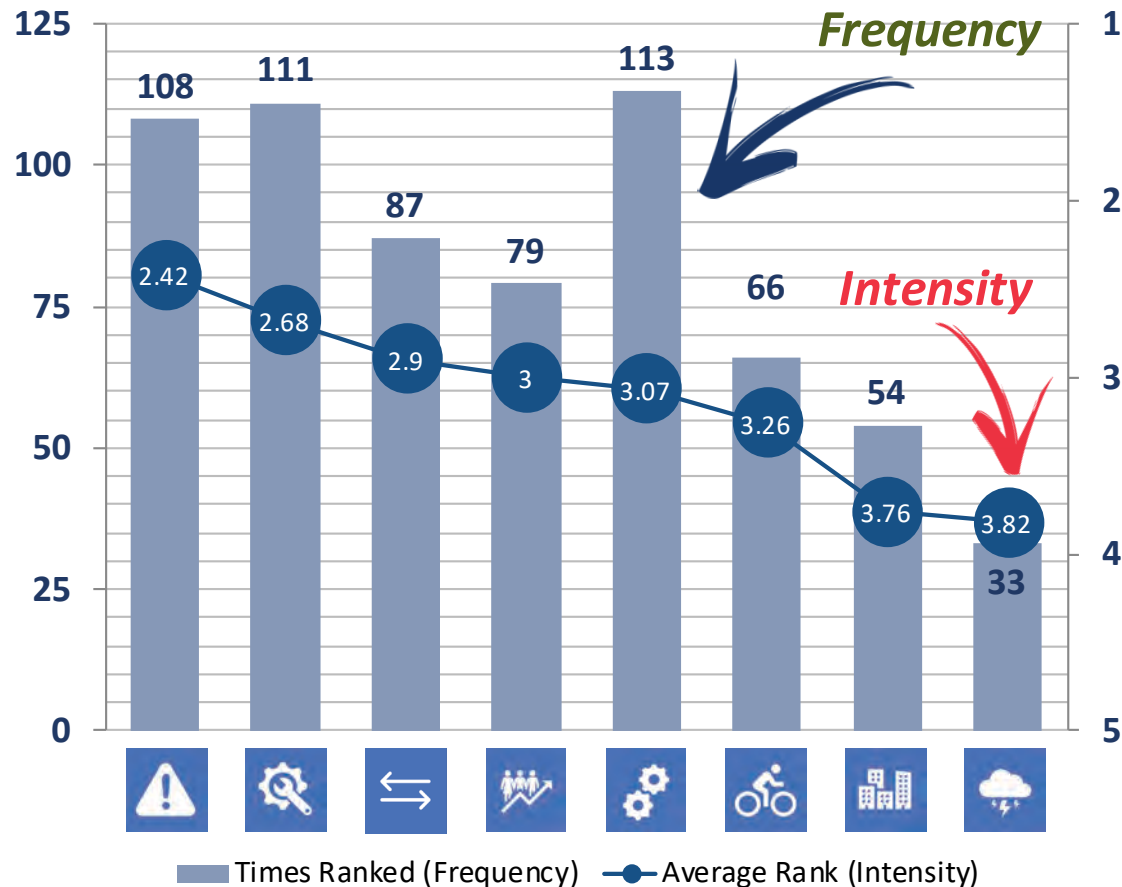
## *Maintenance*

*Extend the life of the transportation system and promote fiscal responsibility by emphasizing maintenance over system expansion.*

# Goal Priorities

MetroQuest Survey

Participants were asked to identify which they believe were important to improving mobility in Hastings.

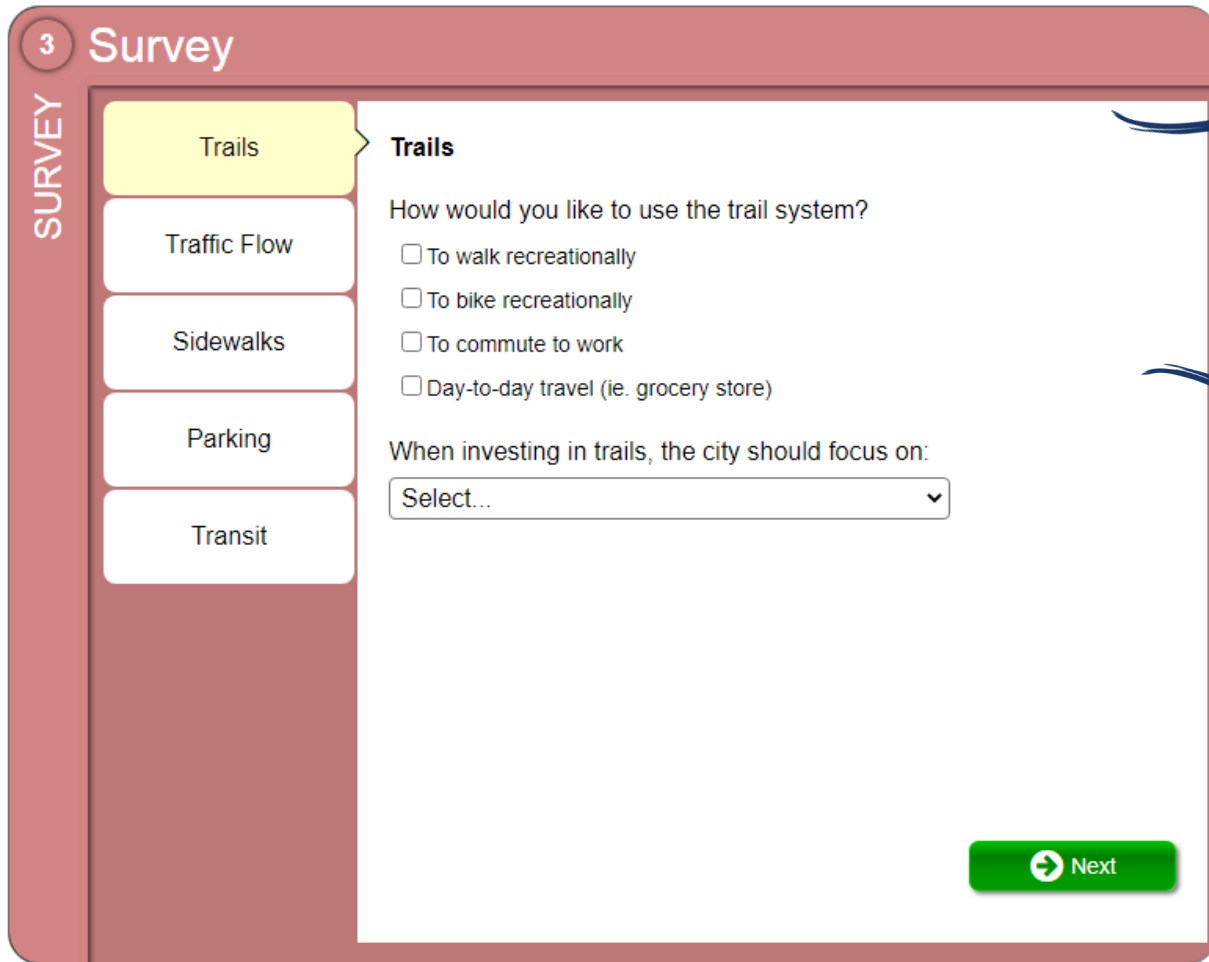


- 1 Safety
- 2 Maintenance
- 3 Connectivity
- 4 Growth
- 5 Efficiency
- 6 Choices
- 7 Integration
- 8 Resiliency

- **Safety** received the highest average score and was among the highest in frequency
- **Maintenance** was second in both frequency and intensity of responses.
- Many thought **Efficiency** was important but the gap between frequency and intensity often not the most important.
- There's a distinction in the frequency of responses between the top 3 categories and the other five categories.
- It is clear that **Resiliency** is not widely thought of as a priority

# Survey

The Survey Screen asked participants to respond to questions pertaining to various topics. Topics included Trails, Traffic Flow, Sidewalks, Parking, and Transit.



**3 Survey**

**SURVEY**

- Trails
- Traffic Flow
- Sidewalks
- Parking
- Transit

**Trails**

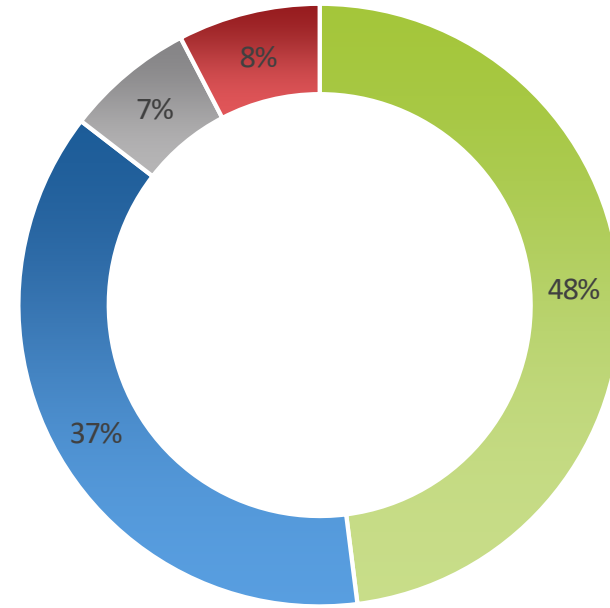
How would you like to use the trail system?

- To walk recreationally
- To bike recreationally
- To commute to work
- Day-to-day travel (ie. grocery store)

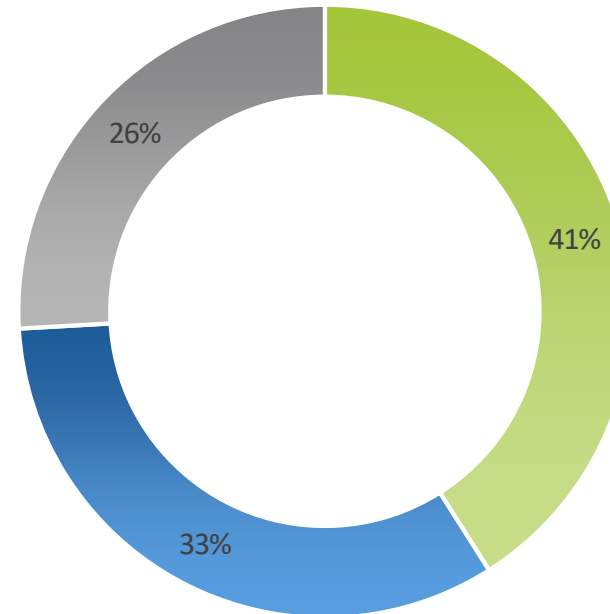
When investing in trails, the city should focus on:

Select...

**Next**



- To walk recreationally
- To bike recreationally
- To commute to work
- Day-to-day travel (ie. grocery store)



- Connecting existing trails to make a network
- Connecting existing trails to more destinations
- Providing trails where there are none currently

# Survey

The Survey Screen asked participants to respond to questions pertaining to various topics. Topics included Trails, Traffic Flow, Sidewalks, Parking, and Transit.

### 3 Survey

**SURVEY**

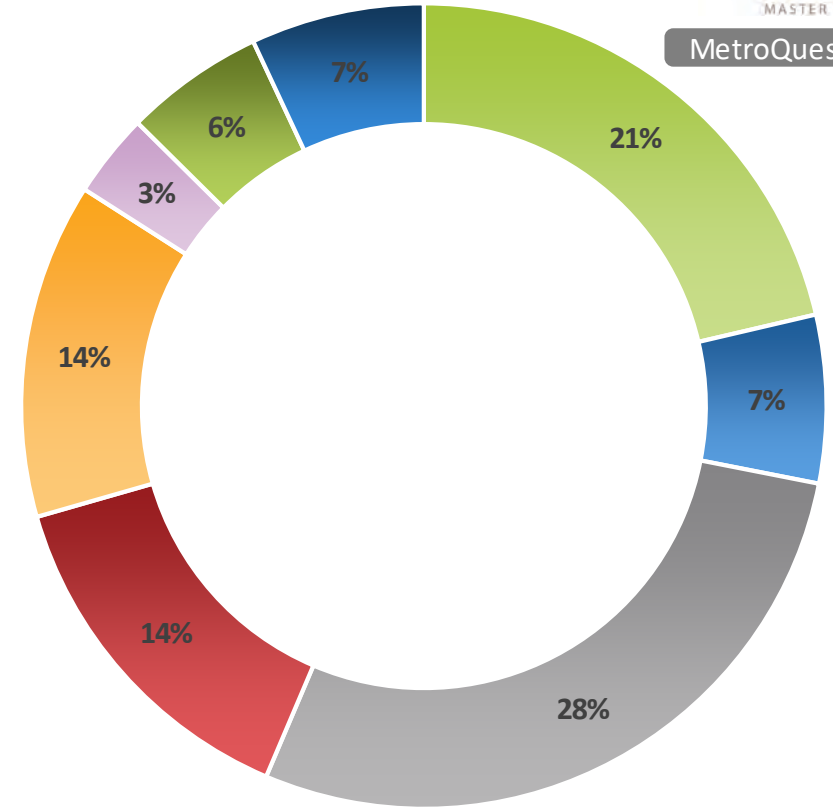
- Trails
- Traffic Flow**
- Sidewalks
- Parking
- Transit

#### Traffic Flow

What street improvements should the city focus on most? (Select 3)

- Traffic Congestion
- Traffic Speed
- Street Maintenance
- Pedestrian & Bike Safety
- Street Network & Connectivity
- Way-finding and Signage Clarity
- Streetscape & Beautification
- One-Way to Two-Way Street Conversion

[Next](#)



- Traffic Congestion
- Traffic Speed
- Street Maintenance
- Pedestrian & Bike Safety
- Street Network & Connectivity
- Way-finding and Signage Clarity
- Streetscape & Beautification
- One-Way to Two-Way Street Conversion

# Survey

The Survey Screen asked participants to respond to questions pertaining to various topics. Topics included Trails, Traffic Flow, Sidewalks, Parking, and Transit.

3

## Survey

SURVEY

Trails

Traffic Flow

Sidewalks

Parking

Transit

**Sidewalks**

What should the City prioritize most in the sidewalk network? (select 2)

Safety

Connectivity

Equity

Health

Accessibility

What ways should the City explore to assist/encourage sidewalk repairs?

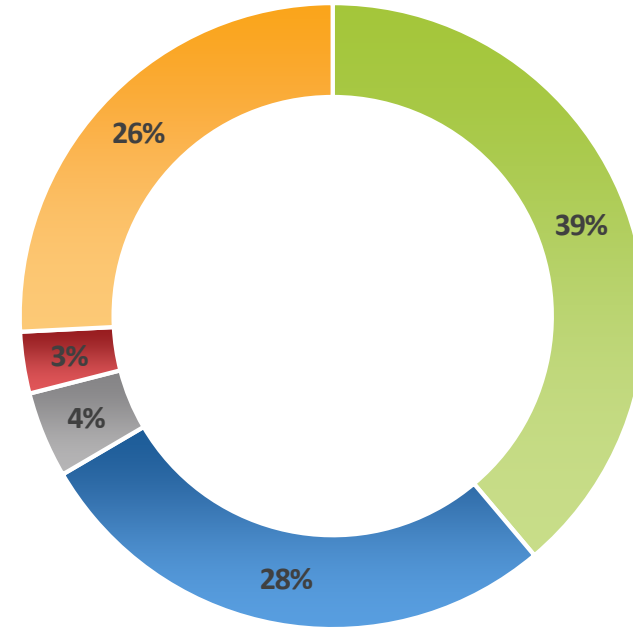
Local tax with the City leading repairs

Local tax with the City refunding repairs made

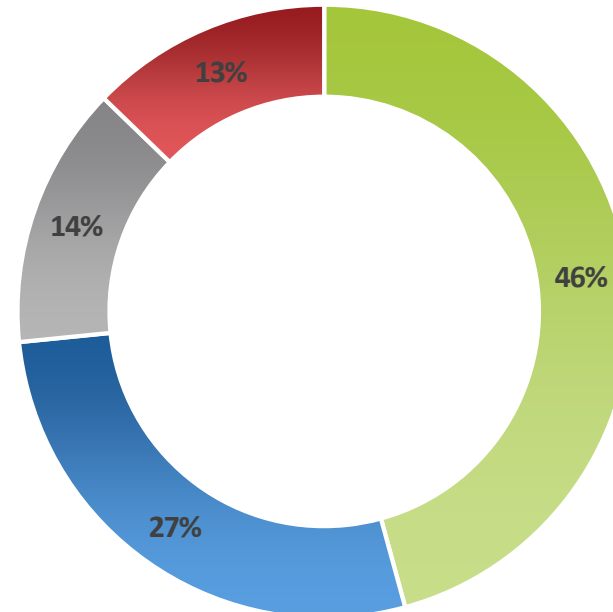
Educational campaign towards the benefits of high-quality sidewalks

Continue current protocol (solely the property owner's responsibility)

Next



- Safety
- Connectivity
- Equity
- Health
- Accessibility



- Local tax with the City leading repairs
- Local tax with the City refunding repairs made
- Educational campaign towards the benefits of high-quality sidewalks
- Continue current protocol (solely the property owner's responsibility)

# Survey

The Survey Screen asked participants to respond to questions pertaining to various topics. Topics included Trails, Traffic Flow, Sidewalks, Parking, and Transit.

3

## Survey

SURVEY

Trails

**Parking**

Traffic Flow

Sidewalks

Parking

Transit

**Parking**

Why do you visit downtown Hastings? (select all that apply)

I attend events downtown

I am a patron of downtown restaurants, bars, and/or entertainment

I shop downtown

I go to public spaces (ie. Courthouse, library, city hall, etc.)

I have regular business or meetings downtown

I work downtown

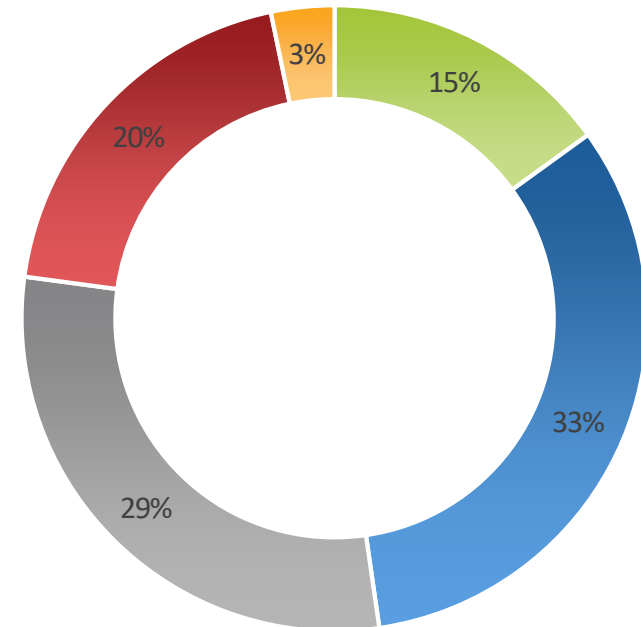
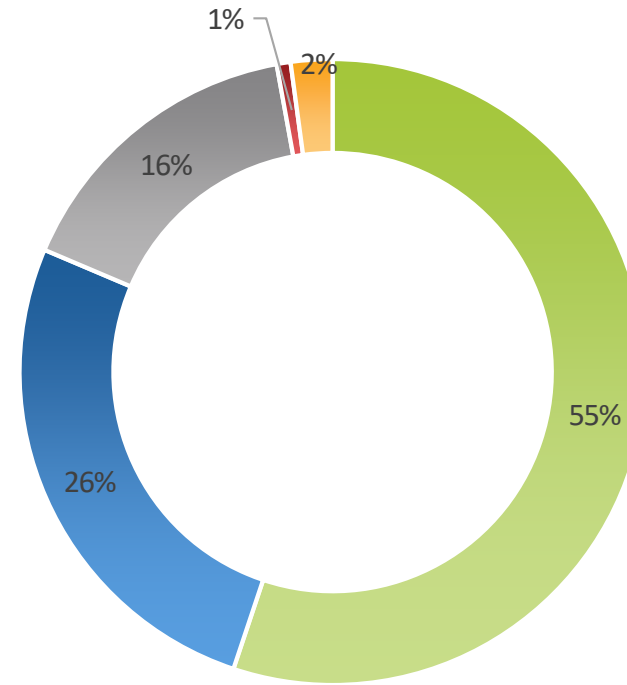
I live downtown

Other

How would you describe your experience accessing downtown parking?

Select... ▼

➔ Next



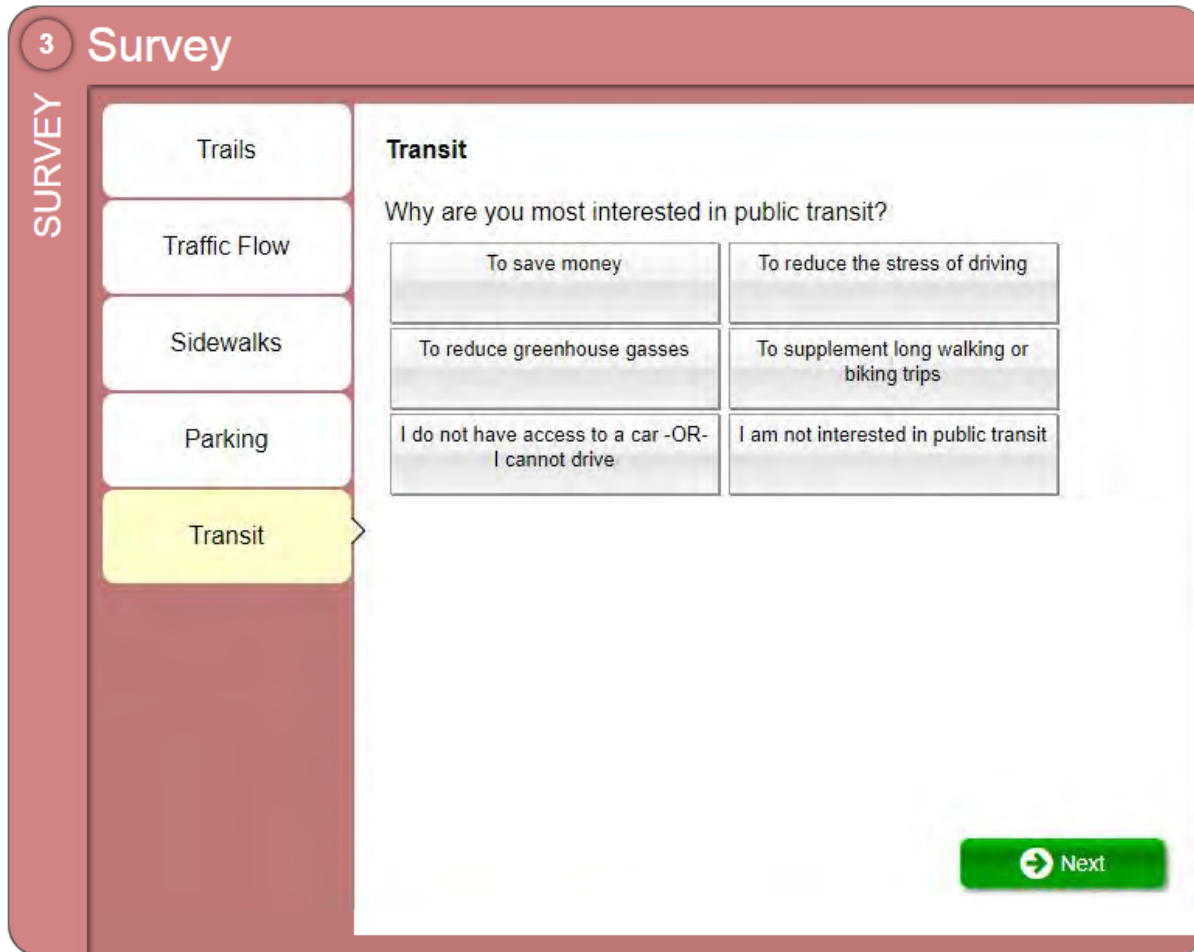
MetroQuest Survey

- Entertainment
- Shopping
- Work
- Live
- Other

- Very Positive
- Somewhat Positive
- Neutral
- Somewhat Negative
- Very Negative

# Survey

The Survey Screen asked participants to respond to questions pertaining to various topics. Topics included Trails, Traffic Flow, Sidewalks, Parking, and Transit.



**3 Survey**

**SURVEY**

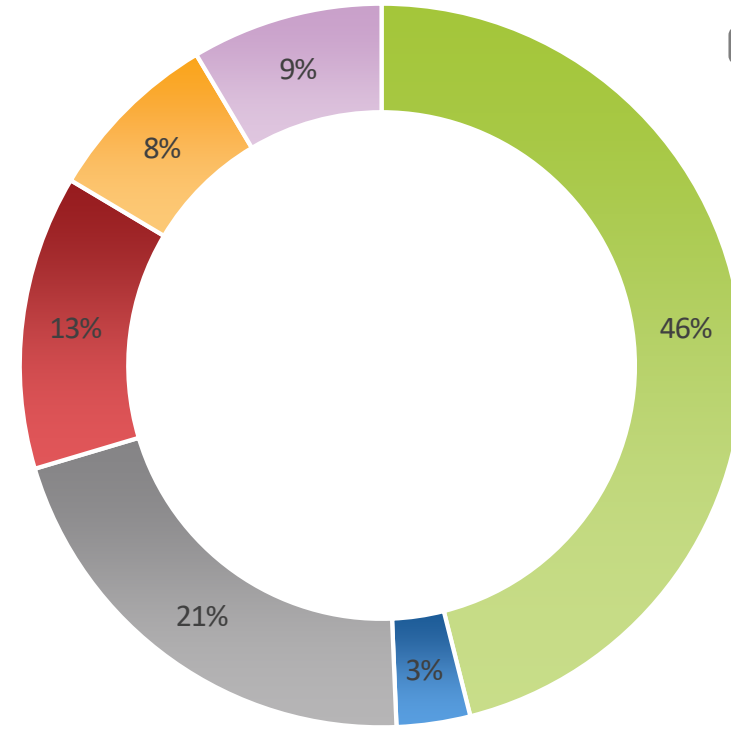
- Trails
- Traffic Flow
- Sidewalks
- Parking
- Transit**

**Transit**

Why are you most interested in public transit?

To save money	To reduce the stress of driving
To reduce greenhouse gasses	To supplement long walking or biking trips
I do not have access to a car -OR- I cannot drive	I am not interested in public transit

[Next](#)



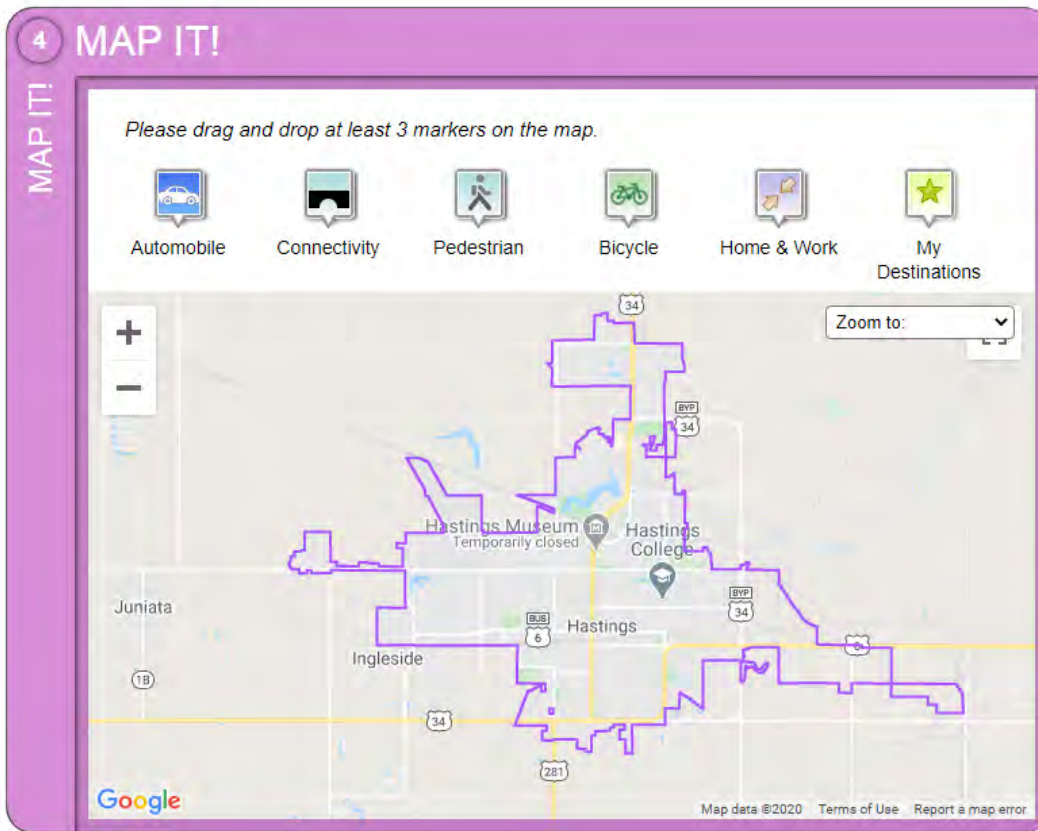
- I am not interested in public transit
- I do not have access to a car -OR- I cannot drive
- To reduce greenhouse gasses
- To reduce the stress of driving
- To save money
- To supplement long walking or biking trips



# Mapping

MetroQuest Survey

The Map Markers Screen asked participants to pinpoint problems along the corridor by dropping map markers on a Google map interface. Optional dropdown questions were asked for each map marker dropped. The summary that follows shows the density of map markers dropped by marker type.



## TOTALS

514 Markers

402 Issues & Concerns

1,797 Marker Attributes

406 Written Comments

236 Automobile Markers

69 Connectivity Markers

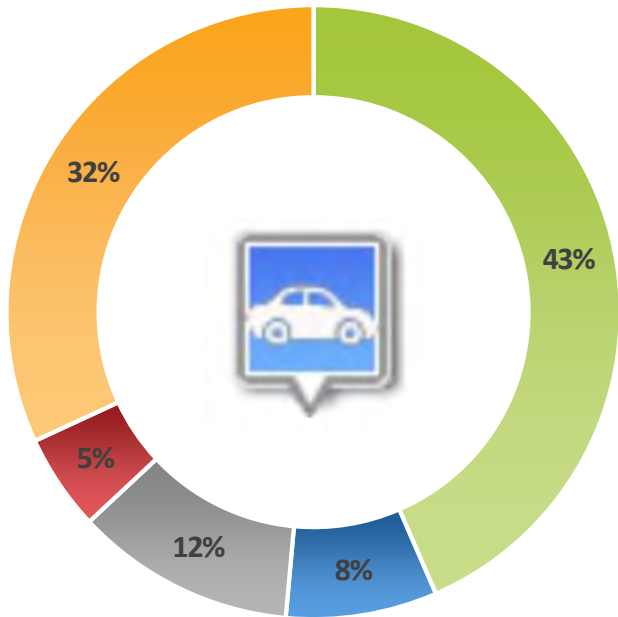
60 Pedestrian Markers

37 Bicycle Markers

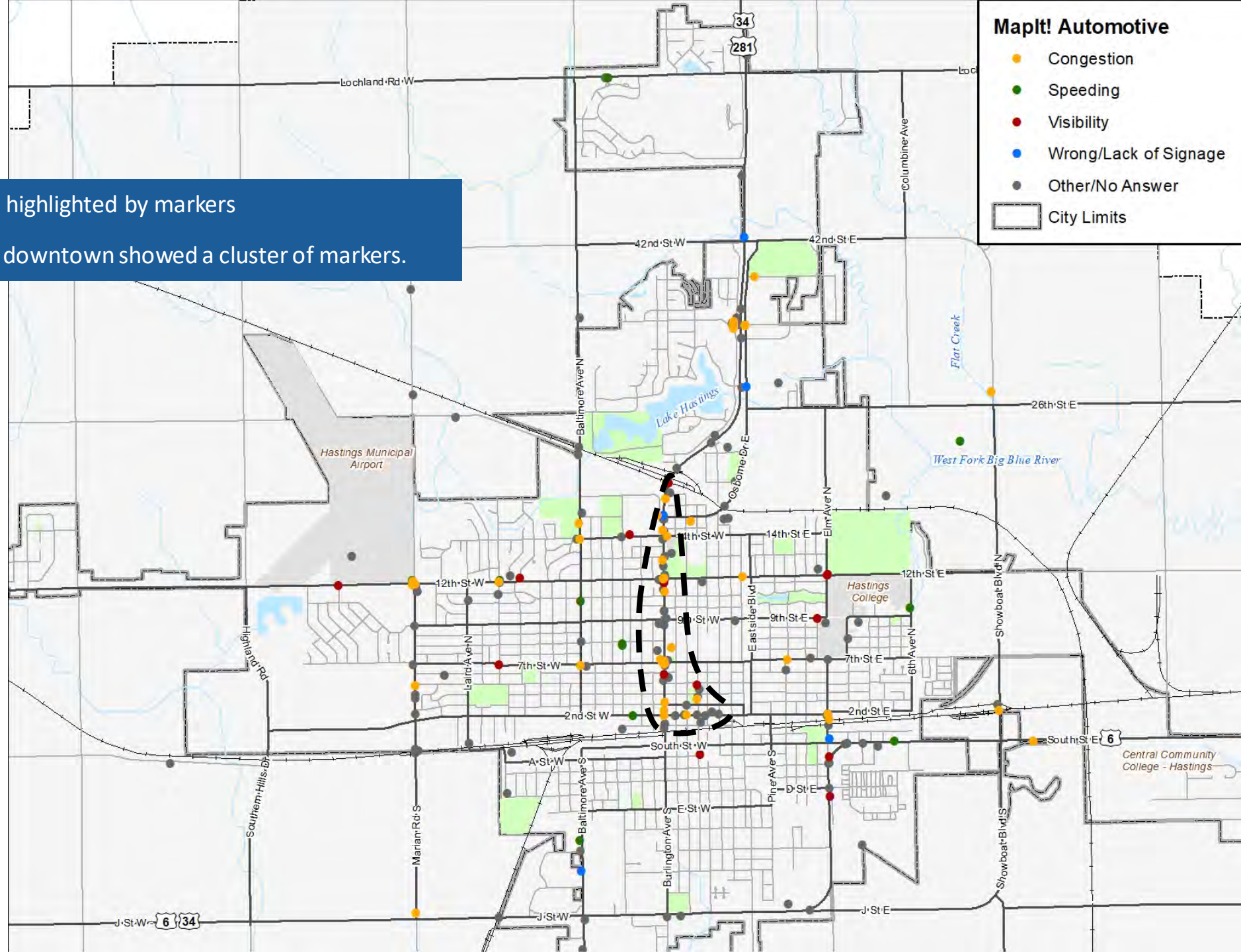


# Mapping

- Congestion was the biggest issue highlighted by markers
- The Burlington Ave. corridor and downtown showed a cluster of markers.

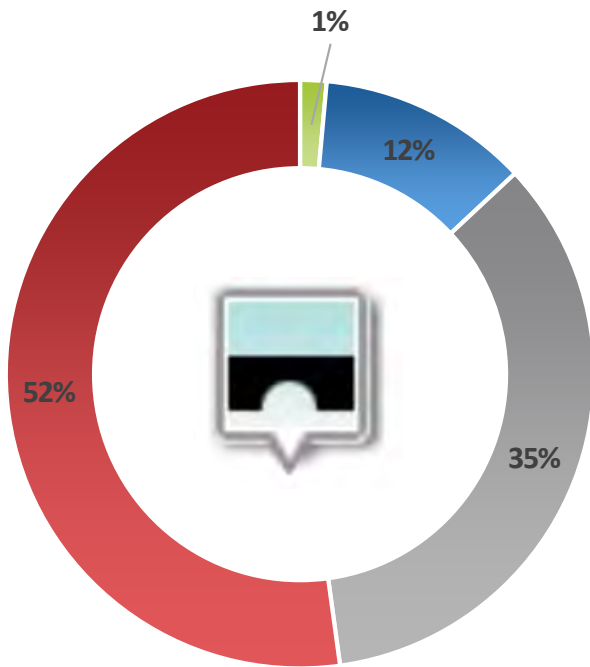


- Congestion
- Speeding
- Visibility
- Wrong/Lack of Signage
- Other/No Answer

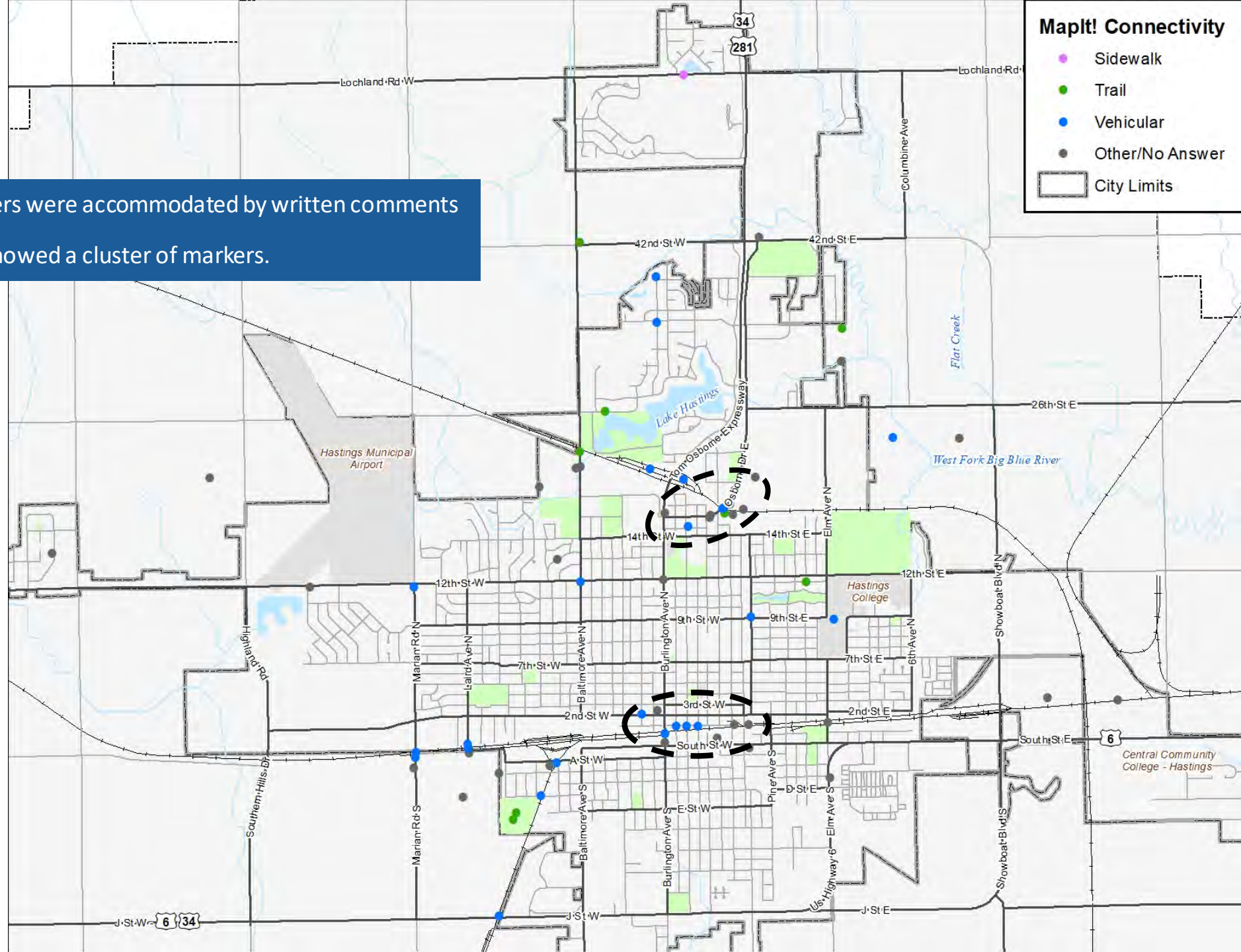


# Mapping

- A majority of Connectivity markers were accommodated by written comments
- Downtown and Osborne Drive showed a cluster of markers.

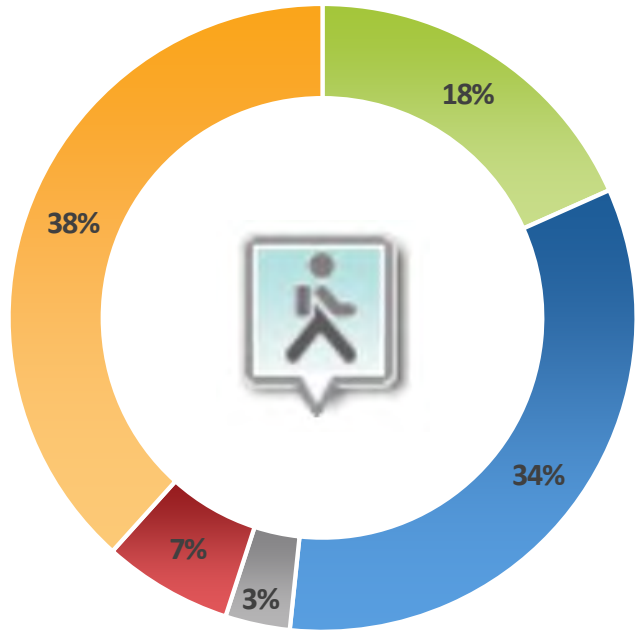


- Sidewalk
- Trail
- Vehicular
- Other/No Answer

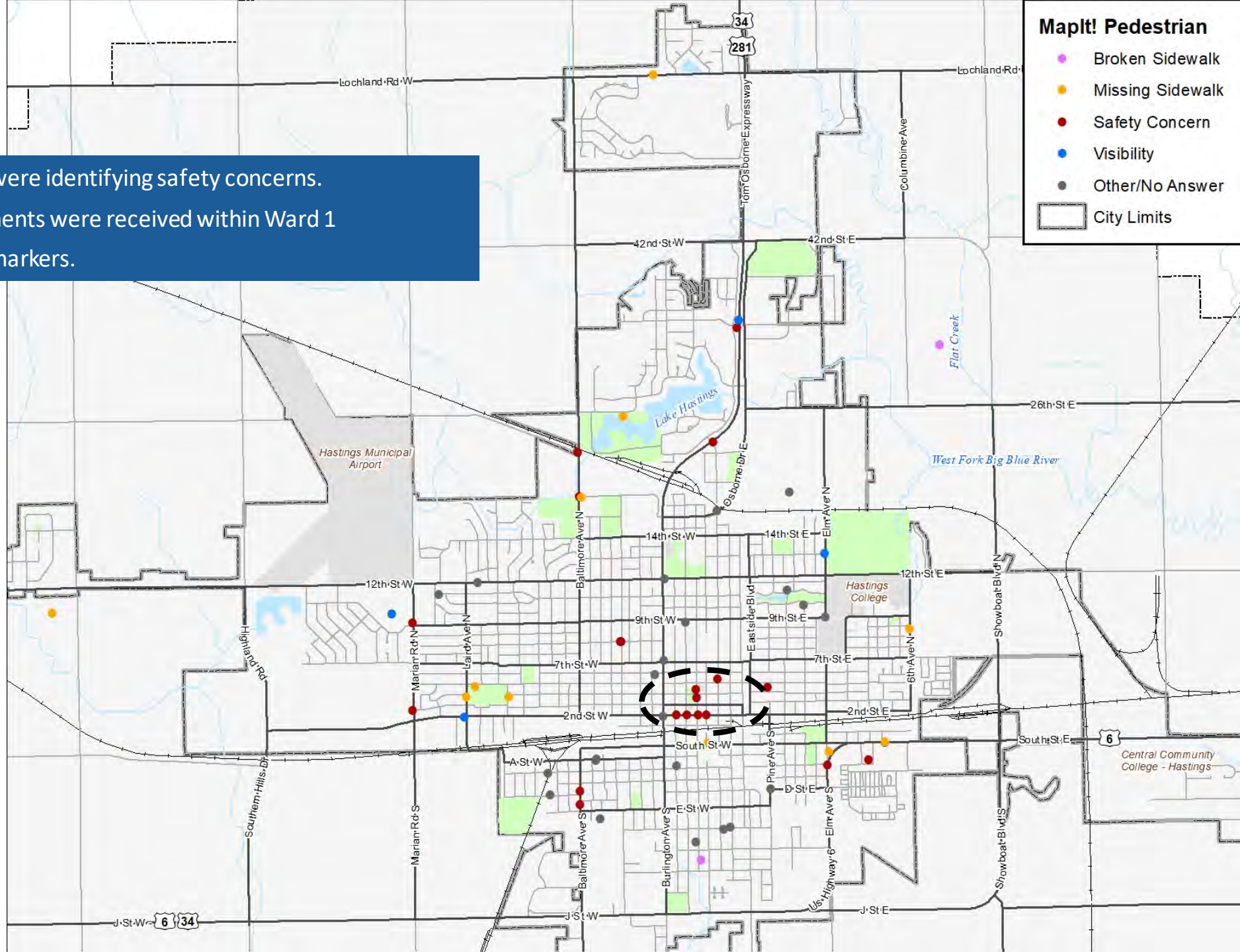


# Mapping

- Over 1/3 of Pedestrian markers were identifying safety concerns.
- A number of markers with comments were received within Ward 1
- Downtown showed a cluster of markers.



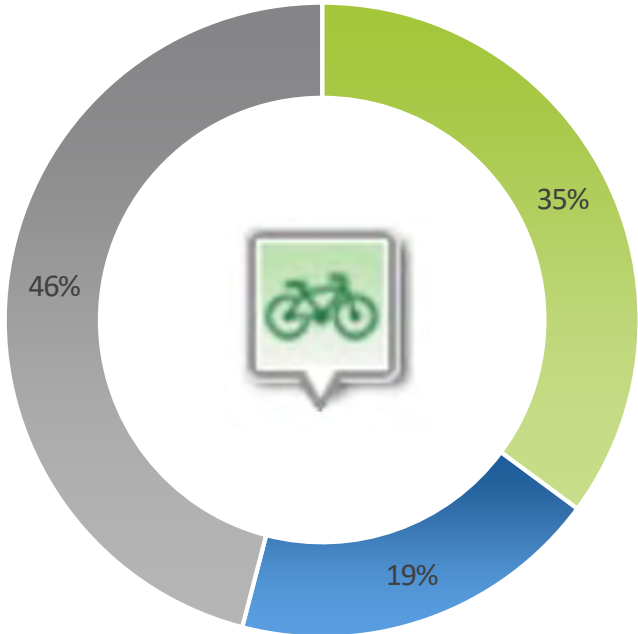
- Missing Sidewalk
- Safety Concern
- Broken Sidewalk
- Visibility
- Other/No Answer



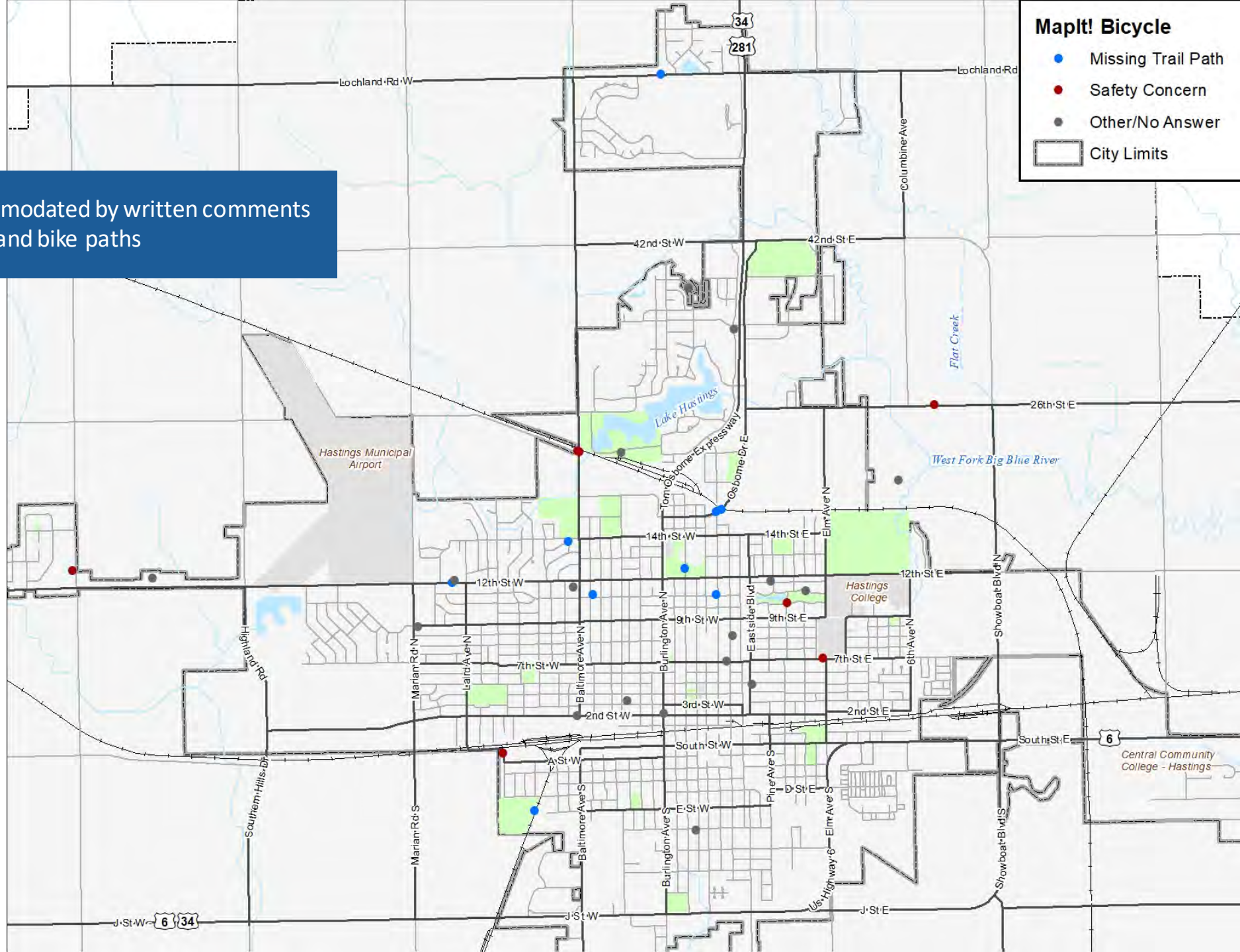
- MapIt! Pedestrian**
- Broken Sidewalk
  - Missing Sidewalk
  - Safety Concern
  - Visibility
  - Other/No Answer
  - City Limits

# Mapping

- Many Trails markers were accommodated by written comments highlighting potential bike lanes and bike paths



- Missing trail path
- Safety Concern
- Other/No Answer

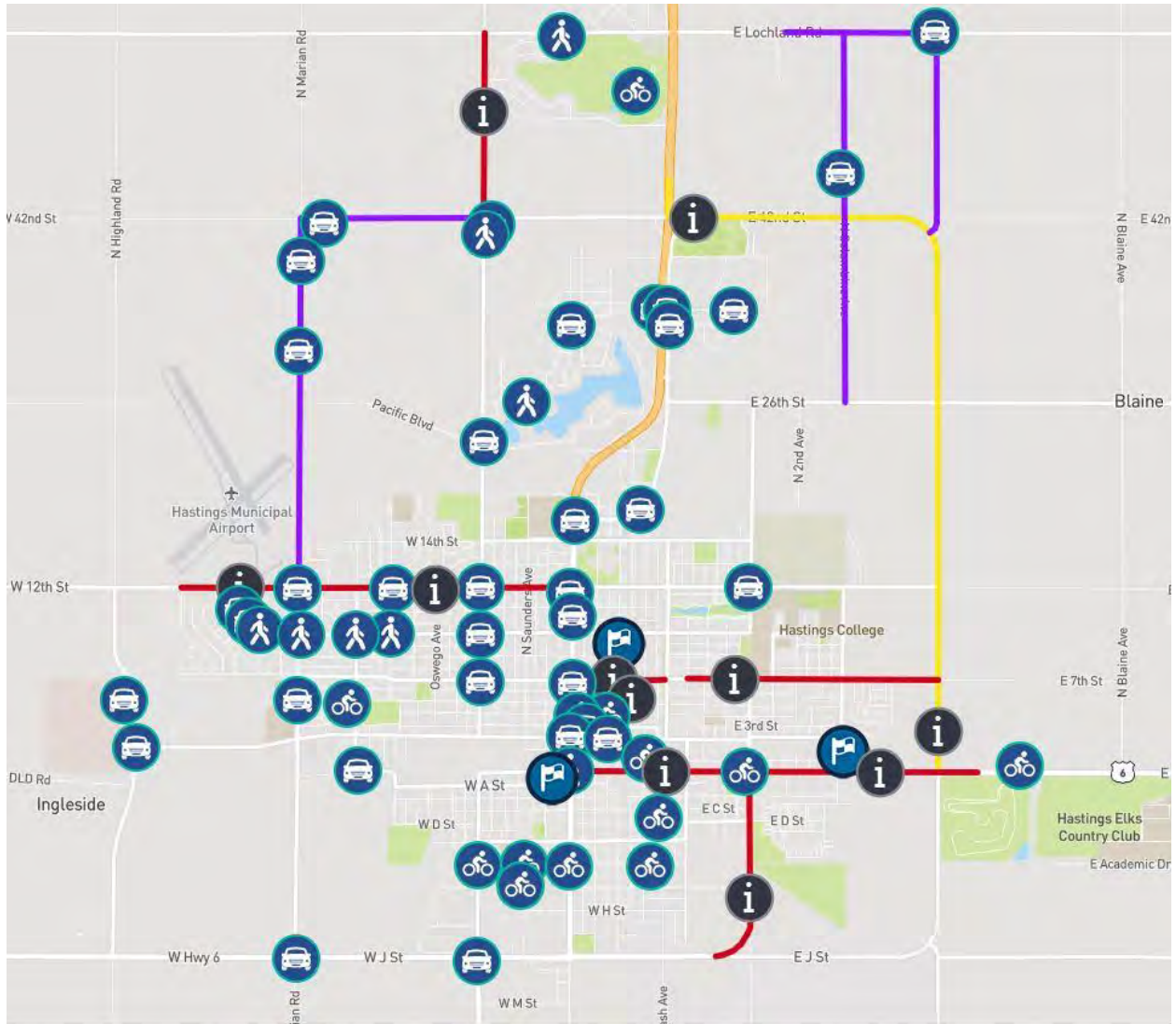


## MapIt! Bicycle

- Missing Trail Path
- Safety Concern
- Other/No Answer
- City Limits

# Projects Survey Results

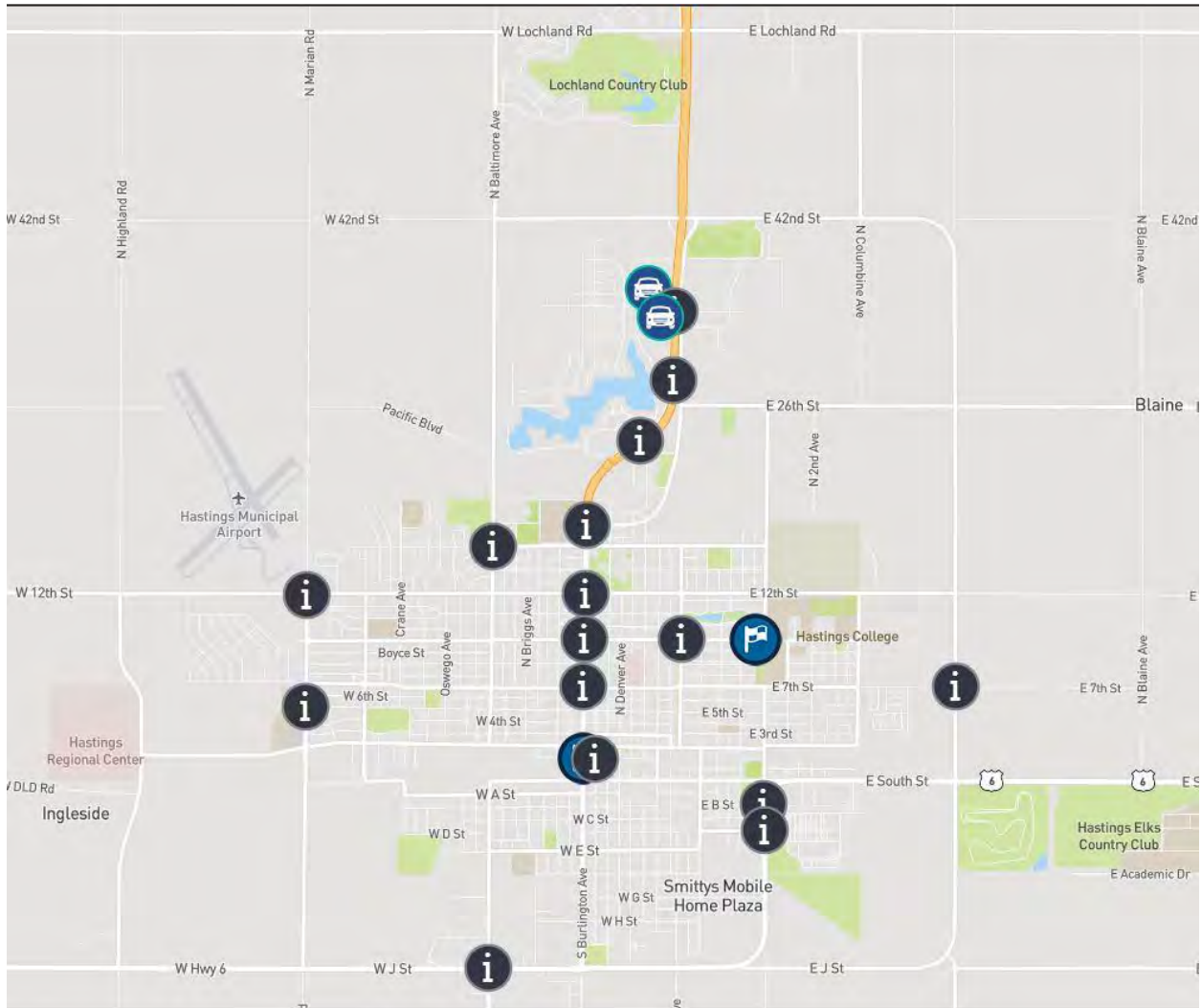
# Existing Road Comments



## Legend

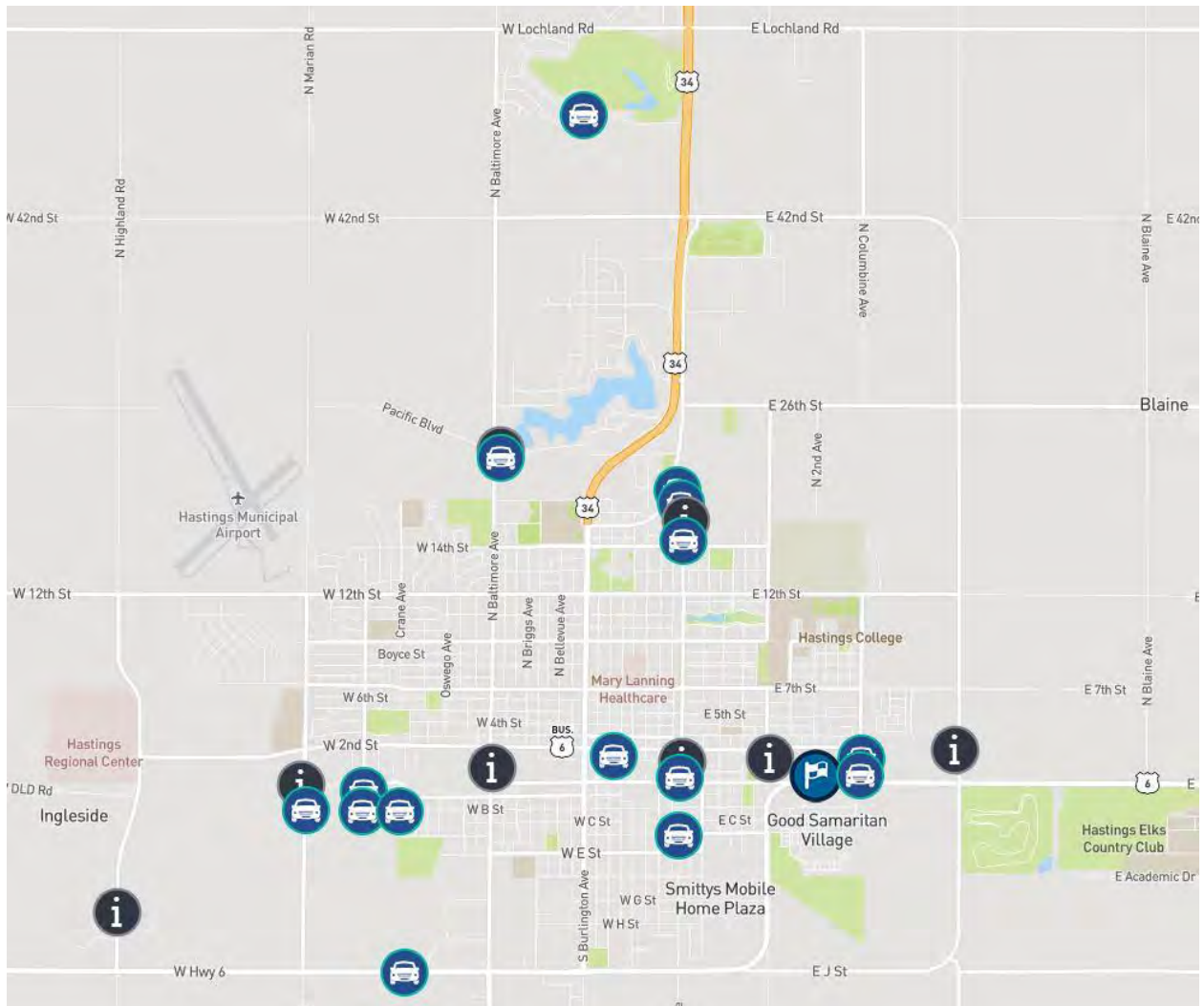
-  Paving Projects
-  Road Reconstruction
-  Improved Signage

# Intersection Comments

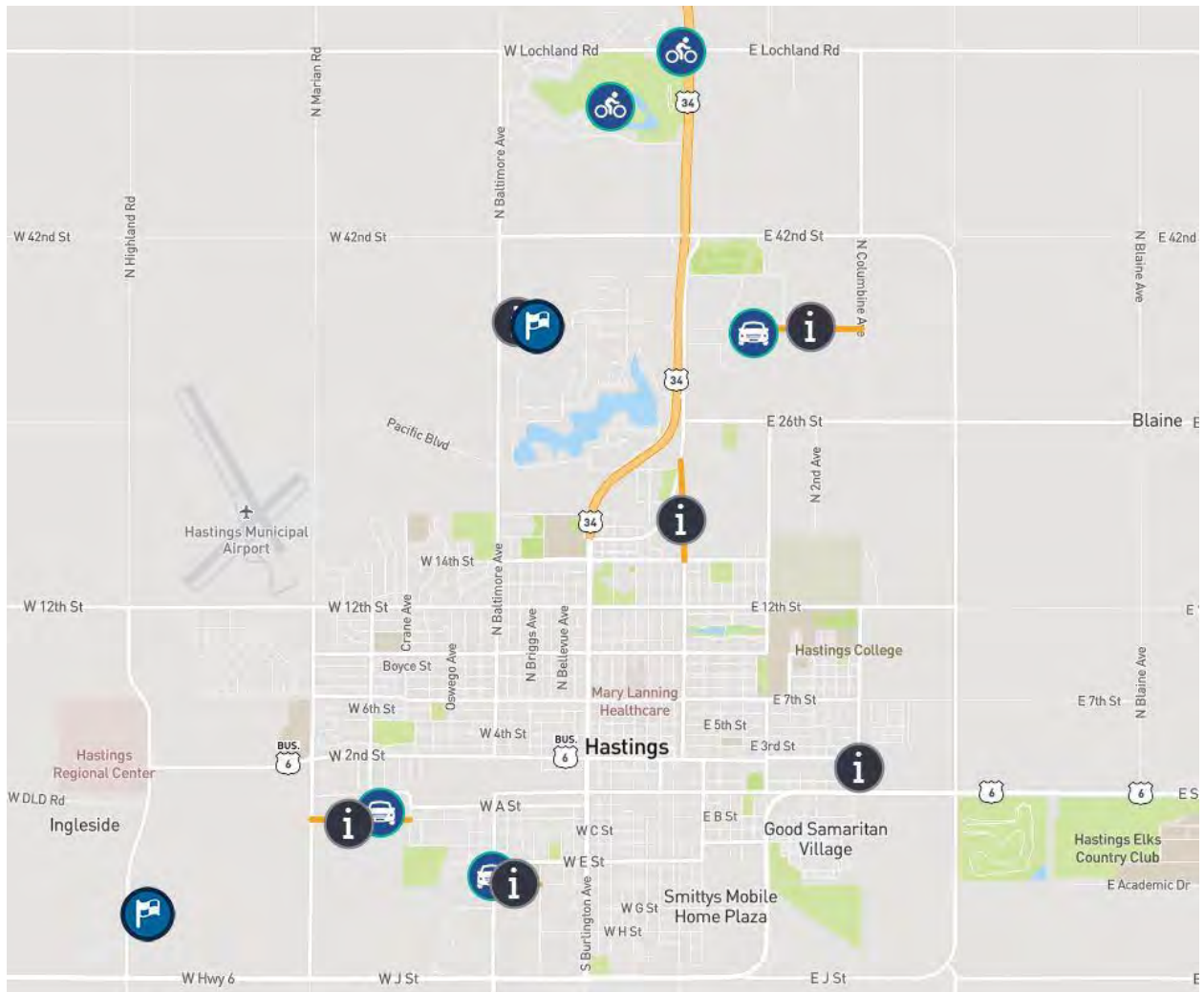




# New Bridge Comments



# New Roadway Comments



ID	MarkerType	Response1	Theme	Comment	Latitude	Longitude
0	Automobile	Congestion	Signal	No left turn lights mean that cars sometimes wait two whole light cycles before getting a gap to turn.	40.58975957	-98.39235034
1	Automobile	Visibility	Visibility	Shifted intersection makes it difficult to see vehicles coming, and many don't realize this is a four-way stop.	40.58986692	-98.41107914
4	Pedestrian	Missing Sidewalk	Sidewalk	Park side needs a sidewalk not just grass.	40.5880777	-98.41370589
5	Pedestrian	Missing Sidewalk	Sidewalk	needs a side walk on this side	40.58715674	-98.41476427
6	Pedestrian	Missing Sidewalk	Sidewalk	needs side walk on other side	40.58712637	-98.40994659
8	Automobile	Other comment below	Connection	needs to have the over pass replaced or fixed traffic is	40.6054265	-98.39169671
9	Automobile	-----	Parking	Parking around courthouse and library tends to be crowded and dangerous for cars and pedestrians	40.58746407	-98.388439
13	Automobile	Visibility	Signal	Need a light here	40.58878234	-98.39237952
14	Automobile	Congestion	Signal	need a green arrow here	40.58968351	-98.3923299
15	Pedestrian	Visibility	Sidewalk	Can't see Elm traffic on 13th street without cars pulling into crosswalk	40.59899271	-98.3738536
16	Automobile	Visibility	Visibility	can't see 12th street traffic without pulling into intersection	40.59717208	-98.3736311
26	Pedestrian	-----	Sidewalk	I live on E st. And Hastings Ave. And walk along E st. I have 4 small children but some of the sidewalks are not handicap accessible or there is no sidewalk at all along F st from Hastings Ave to Colorado st. Or along Denver St. From F st to H st. It is	40.57424067	-98.38897039
36	Pedestrian	Safety Concern	Sidewalk	Lack of sidewalk along much of PRR tracks is needed, the sidewalks along Burlington and on the Elm bridges are narrow for a family bike ride north to Dairy Queen, Hasting Lake, etc.	40.58109836	-98.36930716
39	Automobile	Other comment below	Railroad	Rail Conflict, create overpass to keep traffic moving.	40.58566133	-98.3546814
42	Bicycle	Missing trailpath	Trail	Would be nice if a trail existed along, or a few blocks off of 12th Street for hike/bike,	40.59709993	-98.41608253
51	Bicycle	Missing trailpath	Trail	A safe hike/bike trail from this area to Heartwell/downtown would be helpful/useful for exercise and possible access to food/entertainment.	40.59561537	-98.38615404
52	Connectivity	Trail	Trail	A trail connection across the PRR tracks is needed, the sidewalks along Burlington and on the Elm bridges are narrow for a family bike ride north to Dairy Queen, Hasting Lake, etc.	40.6026771	-98.3851824
68	Connectivity	Trail	Trail	This would be an ideal time and place to create a long running/biking trail similar to the Mopac trail in Lincoln.	40.61846688	-98.37155425
69	Automobile	-----	Signal	need a turning light instead of stop sign at intersection	40.61909173	-98.38394966
70	Bicycle	Missing trailpath	Sidewalk	If viaduct is tore down a walking or biking path would be safer than needing top use 281 to get across tracks	40.60283507	-98.38603569
85	Automobile	Congestion	Signal	Needs a left turn signal	40.60256285	-98.39280253
86	Automobile	Congestion	Signal	Left turn signal in all diections	40.590108	-98.39273244
87	Automobile	Other comment below	Connection	Needs an overpass or something for kids to get safely to the middle school.	40.58315144	-98.41465556
91	Connectivity	-----	Connection	Overpass to connect to East Side Blvd	40.60296318	-98.38301557
92	Connectivity	-----	Connection	Underpass to connect South-side with North-side on East Side Blvd (later to Wabash)	40.58429054	-98.38286536
93	Connectivity	-----	Connection	Extend East Side Blvd to Wabash from FULL South-to-North connector.	40.58233499	-98.38286536
94	Connectivity	-----	Trail	Extend B-Street to Marion Road. Add bike trail beside it.	40.58050976	-98.41131824
95	Connectivity	-----	Connection	Connect Marion Road to B-street. Long-term plan to build Overpass above train-tracks to connect city, allowing West-side by-pass along with already existing East-side by-pass; and along with Burlington Central-West, and East-Side Blvd Central-East connec	40.58109645	-98.42100038
96	Bicycle	-----	Trail	Add North-side Heartwell park bike-trail.	40.59578053	-98.37611093
108	Automobile	-----	Misc	Very Rough RR crossing	40.58271586	-98.42083322
111	Pedestrian	Missing Sidewalk	Sidewalk	Where are the sidewalks along South Street?	40.58278686	-98.3874454
112	Automobile	-----	Signal	need a turn arrow on 12th St	40.59723643	-98.39212387
113	Automobile	Other comment below	Signal	Need a turn arrow on Burlington to turn into HHS. The Green light isn't long enough for the on coming traffic to go by and then make a left turn.	40.60225445	-98.39216678
116	Automobile	WrongLack of Signage	Signage	More signage about the bypass around Hastings.	40.62651273	-98.38236378
121	Bicycle	-----	Trail	Connecting the Westbrook Subdivision to the City of Hastings with some form of Hike/Bike Trail or shoulder construction on 12th Street.	40.59791457	-98.45012512
123	Automobile	-----	Road	West 12th St should be widened to 4 lanes Burlington to Marian Rd.	40.59549082	-98.41448908
124	Automobile	Other comment below	Connection	Overpass should be repaired or replaced	40.60222992	-98.38473283
132	Automobile	Other comment below	Signal	Please put right hand turn lanes on some of these intersections, doing this would greatly increase traffic flow/ also left hand turn lights would be fantastic on these intersections	40.6066143	-98.39051571
133	Automobile	Other comment below	Signal	Please put right hand turn lanes on some of these intersections, doing this would greatly increase traffic flow/ also left hand turn lights would be fantastic on these intersections	40.60876463	-98.38652458
134	Automobile	Other comment below	Signal	Please put right hand turn lanes on some of these intersections, doing this would greatly increase traffic flow/ also left hand turn lights would be fantastic on these intersections	40.61352115	-98.38296261
135	Automobile	Congestion	Congestion	Right hand turn lane ffs	40.60127078	-98.39227524
142	Automobile	Other comment below	Road	The DLD Road also needs to be paved. This road provides excellent access to Adams Central and Prairie Loft.	40.58186822	-98.44862908
143	Automobile	Congestion	Signal	A stop light or roundabout at this intersection would be really helpful, especially in the mornings.	40.56856886	-98.42107743
144	Connectivity	Vehicular	Congestion	An underpass here would really help congestion levels. The rail system is very slow to clear here.	40.56817766	-98.41163606
145	Bicycle	Missing trailpath	Trail	Adding a bike path that connects CCC to the city would be nice.	40.57631429	-98.32566433
146	Bicycle	Missing trailpath	Trail	Adding a bike path that connects Juniata and Adams Central to the city would be nice.	40.59078532	-98.50299054
147	Bicycle	Missing trailpath	Trail	A bike path that connects Southern Hills / Idewilde to town would be great.	40.55331332	-98.43966152
148	Bicycle	Missing trailpath	Trail	A bike path from the city to Prairie Lake would be nice.	40.53700776	-98.49081662
150	Automobile	Congestion	Congestion	A turning lane only going both directions so cars dont have to slow down	40.60398421	-98.39180543
151	Automobile	Congestion	Signal	Turn signal	40.58978563	-98.39245698
152	Automobile	Visibility	Signal	Turn signal turning off of 12th on to burlington	40.59672618	-98.39215687
164	Automobile	Congestion	Signal	Need turning lights/arrows for E/W bound traffic	40.59713251	-98.39218941
165	Automobile	Congestion	Signal	Need turning lights/arrows	40.58996325	-98.39231815
176	Pedestrian	Safety Concern	Safety	Closing this block would create a safer environment for students.	40.58831249	-98.38621306
177	Bicycle	-----	Trail	A bike lane on 7th Street would allow Hastings College students additional, safer access to the churches and businesses on Burlington and downtown.	40.58986872	-98.38511588
200	Automobile	Congestion	Signal	I avoid this intersection at all costs. Left Turn Signals would help during peak traffic times. 8am, Noon, 5pm.	40.58975755	-98.39236159
216	Connectivity	-----	Connection	16th Street overpass has been closed for over one year creating logistical problems for people & businesses alike. Get the overpass repaired & back into use	40.60247637	-98.38678207
218	Bicycle	Missing trailpath	Trail	I want a RR track crossing here for bicyclists & pedestrians INSTEAD of the overpass. Both bridges are too steep, too near speeding cars. A street-level crossing would be sublimely convenient, much cheaper than new overpass. Also safer for kids cyclin	40.60299159	-98.38544633
219	Bicycle	Safety Concern	Sidewalk	Several very poor sidewalk sections and high curbs along east 7th st.	40.58996325	-98.37425079
220	Bicycle	-----	Sidewalk	2nd Street sidewalks are pretty poor. Bicycling on these or on the street is dangerous. We should encourage Middle School kids to bike to & from school, good exercise, reduces pollution, but roads have to be improved first. I'd also like to ride down	40.5854006	-98.4022316
230	Connectivity	-----	Connection	overpass needs repaired and back in use	40.61563868	-98.37167587
238	Automobile	-----	Signal	need turn signal at 7th and Burlington	40.59087575	-98.39313354
247	Pedestrian	-----	Signal	Safety - would like more light, maybe an emergency phone. It can be awfully isolated.	40.60438386	-98.37775548
248	Connectivity	-----	Trail	Trail seems to just end here - would be nice to connect with the Southern part of town for some added distance	40.58434277	-98.38453611
251	Automobile	Other comment below	Road	Marion road north of 12th needs paved	40.61341746	-98.42032165
253	Automobile	Other comment below	Road	hiway 6 needs resurfaced	40.56510992	-98.40219523
287	Automobile	Visibility	Visibility	The paint on the lines is not visible in hours of darkness, dusk or inclement weather signifying a solid line or dashes indicating that a driver can change lanes or not. Suggest more reflectivity of paint or markers used for lane markings.	40.60537474	-98.39142817
294	Automobile	Congestion	Congestion	lanes for turning so traffic flows better especially in the morning with school traffic	40.5972848	-98.4206835
303	Automobile	-----	Connection	Put the overpass on Baltimore Ave. in lieu of repairing or replacing the one 2 blocks from Burlington. With 42 nd street paved this would eliminate a lot of traffic from Burligton.	40.61980837	-98.40120163
304	Automobile	-----	Parking	No parking on west side.Calif. 7th to 2nd str.	40.58901301	-98.37861899

305	Automobile	-----	Signal	Protected turn arrow light	40.59309567	-98.39228757
306	Automobile	-----	Signal	Protected turn arrow light	40.58973905	-98.39220174
310	Automobile	-----	Congestion	There should be an overpass in this area connecting to A street to ease congestion and stop train blockage	40.58232738	-98.4098153
314	Automobile	Visibility	Visibility	There needs to be a protected left hand turn from 12th onto Burlington. Emergency vehicles struggle here with limited visibility and no protected lane to turn.	40.59707795	-98.39222347
343	Pedestrian	-----	Sidewalk	There should be side walks/ walking all along 12th street	40.59606656	-98.41771247
344	Automobile	-----	Signal	Turn signal at traffic light for southbound traffic	40.56772053	-98.4018851
346	Pedestrian	-----	Sidewalk	No sidewalks from Minnesota to Burlington on South Street.	40.57870279	-98.38050881
358	Automobile	-----	Connection	Trains stop me much too frequently. An overpass is long overdue.	40.56803283	-98.41160869
359	Connectivity	Vehicular	Connection	This area of town needs to connect to 281 better. A business loop connecting north and south would be a great addition.	40.59675557	-98.42059677
360	Automobile	Other comment below	Signal	The left lane turns into a turning lane in both directions at the school. Cars in the left lane are forced to merge and it has nearly caused accidents.	40.58743533	-98.42072552
361	Connectivity	Trail	Trail	Brickyard Park, and this side of town in general, need more hike/bike trails connected into an overall trail system.	40.57648403	-98.40986794
362	Connectivity	Vehicular	Connection	Keep this crossing open! It's a great way to access Brickyard Park.	40.58269494	-98.41473726
366	Automobile	-----	Railroad	rail road crossing needs to be a overpass on Baltimore	40.60795012	-98.40171661
369	Automobile	Congestion	Signal	It would be nice to have turn arrows at both west/east and north/south intersections of 7th and Burlington	40.58991004	-98.39238577
370	Automobile	Visibility	Signal	Turn arrows are needed at the west/east intersection of 12th and Burlington. When turning, it is difficult to see the oncoming traffic to know when it is safe to turn across traffic to the north/south.	40.59711189	-98.39217119
377	Automobile	-----	Signal	Need a turn signal, which would allow cars turning North onto Burlington from West 12th Street	40.59616778	-98.39231944
378	Automobile	-----	Signal	Need a turn signal for cars turning left from Burlington onto 7th Street	40.58854582	-98.39189028
379	Automobile	-----	Signal	Need a stop light to control traffic flow at 12th and Marian	40.59636695	-98.42018466
389	Connectivity	Vehicular	Signal	Change north/south streets in the downtown area to 2-way and get rid off traffic signals and replace with 3-way or 4-way stops signs. Traffic signals cause vehicles to speed up to get thru the signal rather than calming traffic.	40.58428433	-98.39115944
405	Connectivity	-----	Trail	Extend trails to the west of Hastings. Currently to use the trails you have to drive to get there.	40.5969486	-98.43241115
408	Bicycle	-----	Sidewalk	Need sidewalks on northside of heartWell park , pedestrians have to be on street to walk or bicycle	40.59672462	-98.38008054
413	Automobile	Other comment below	Parking	Very dangerous to have cars parked on south side of 9th, off Burlington heading west on 9th, large trucks / vehicles have trouble turning on 9th when cars are parked there and cars are heading east on 9th; vehicles need to back up in order for them to ma	40.59361489	-98.39201498
414	Connectivity	Vehicular	Signal	not sure if this is correct marker to use, but there have been multiple accidents / NEAR accidents at 9th and Eastside ... people don't see stop sign frequently. Maybe a flashing light on Eastside?	40.59361997	-98.38239789
416	Automobile	-----	Signal	Four way stop near high school needs a light. Too many people don't treat it lik four way and scared for the kids to cross near it	40.6006717	-98.40199009
422	Automobile	-----	Signal	need stoplight going into entrance of Good Samaritan Village	40.57370764	-98.37030455
427	Automobile	Congestion	Congestion	A turning lane would be very helpful here.	40.58971566	-98.40184543
428	Automobile	-----	Signal	Turning lanes and lights for turning in all 4 directions	40.59700971	-98.39224821
429	Automobile	-----	Signal	Turning lights all directions	40.60243973	-98.39219833
430	Automobile	-----	Signal	Turning lights and lanes all 4 directions	40.59336463	-98.39231227
431	Automobile	-----	Signal	Turning lights and lanes all 4 directions	40.58970119	-98.3923928
432	Automobile	-----	Congestion	Maybe a round about to keep traffic flowing	40.61886105	-98.38375741
434	Automobile	Congestion	Signal	Needs turning light.	40.59709953	-98.39223612
435	Automobile	Congestion	Signal	Needs turning light.	40.58980885	-98.39242178
440	Automobile	-----	Signal	A turn light is needed to 7th street	40.58957799	-98.39229375
442	Pedestrian	-----	Sidewalk	No sidewalk on north side of Heartwell	40.59589424	-98.37819901
444	Automobile	-----	Signal	Turn lights	40.58981653	-98.39235151
445	Automobile	-----	Signal	Turn lights	40.59699847	-98.39226338
453	Pedestrian	Safety Concern	Sidewalk	No Handicap Ramps and people that use them. On all four corners	40.59168482	-98.3970777
455	Pedestrian	Safety Concern	Sidewalk	No Handicap Ramps and People that use them	40.59170628	-98.39711363
468	Connectivity	Trail	Trail	The sidewalk ends at the corner of Baltimore and Pacific Blvd and Pedestrians walking on the trail must not only cross the busy street but go across railroad tracks to get to the other part of the trail. It is close to 90 yards from where the one sidewal	40.60821898	-98.40145973
470	Pedestrian	Missing Sidewalk	Sidewalk	There is no sidewalk available and pedestrian and handicapped in wheelchairs have to walk through the grass.	40.58183995	-98.37379006
471	Pedestrian	Safety Concern	Signal	There is no crosswalk or light for individuals who live at Good Samaritan or Autumn Park Apartments to safely cross Hwy 6 to Get to Casey's.	40.58068288	-98.37395636
474	Automobile	Other comment below	Signal	Needs to have turning signals/lights. Safety concern trying to turn off Burlington onto 7th street.	40.58980863	-98.39237333
475	Automobile	Other comment below	Signal	Needs to have turning signals/lights. Safety concern trying to turn off Burlington onto 9th street.	40.59354017	-98.39226334
476	Automobile	Other comment below	Signal	Needs to have turning signals/lights. Safety concern trying to turn off Burlington onto 16th street.	40.60231703	-98.39210292
480	Automobile	-----	Signal	Need a turn signal light	40.59701032	-98.39217469
481	Automobile	-----	Road	Rough road conditions	40.59701306	-98.39280617
491	Automobile	-----	Signal	Need turning light	40.59004654	-98.39190753
492	Automobile	-----	Signal	Need turning light 9th	40.59428301	-98.39220794
493	Automobile	-----	Signal	Need turning light 9th	40.59428301	-98.39220794
508	Bicycle	-----	Trail	Need to connect 7th and 9th with a bike trail east and west to the middle school.	40.59201576	-98.38437805

HASTINGS



TRANSPORTATION  
AND PARKING  

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MASTER PLAN

# Appendix B

## Mobility Audit



# MOBILITY AUDIT

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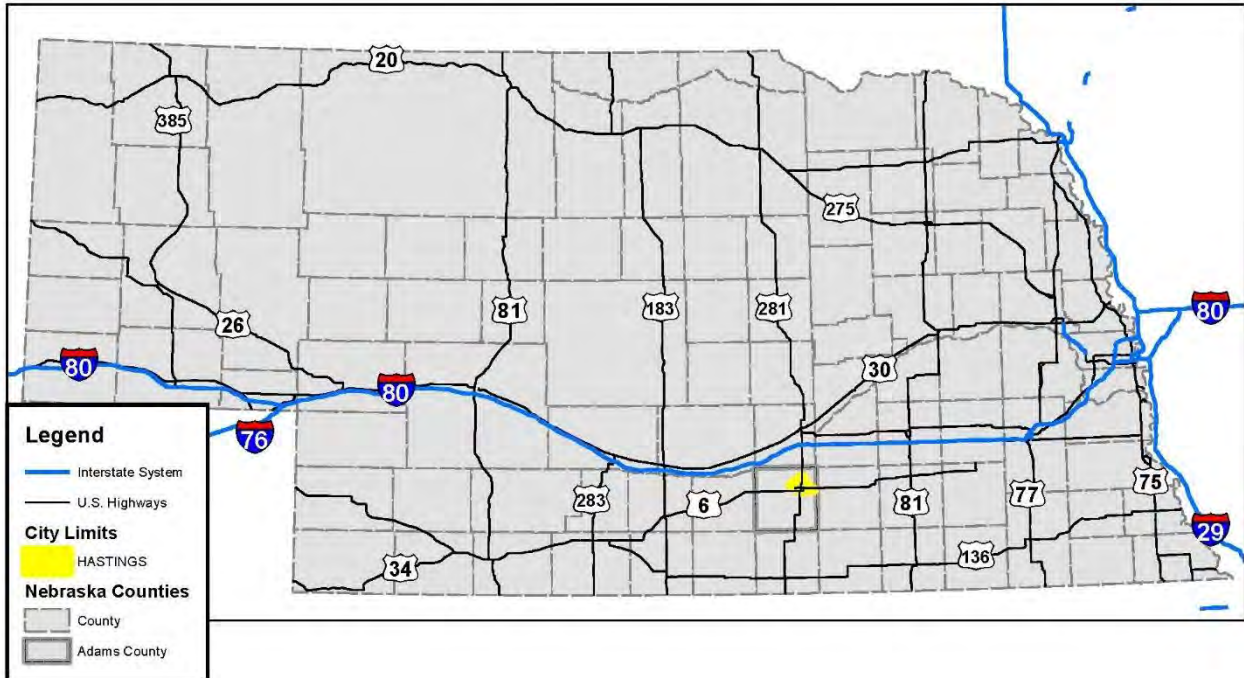


# Introduction

## City of Hastings Context

Hastings is in Adams County, south of Interstate 80 near the center of the state. The city is one of the “Tri-Cities” with the two other larger municipalities in the center of the state, Kearney, and Grand Island. The was founded in 1872 at the intersection of the Burlington and Missouri River Railroad and the St. Joseph and Denver City Railroad, which cut through the middle of the current day city.

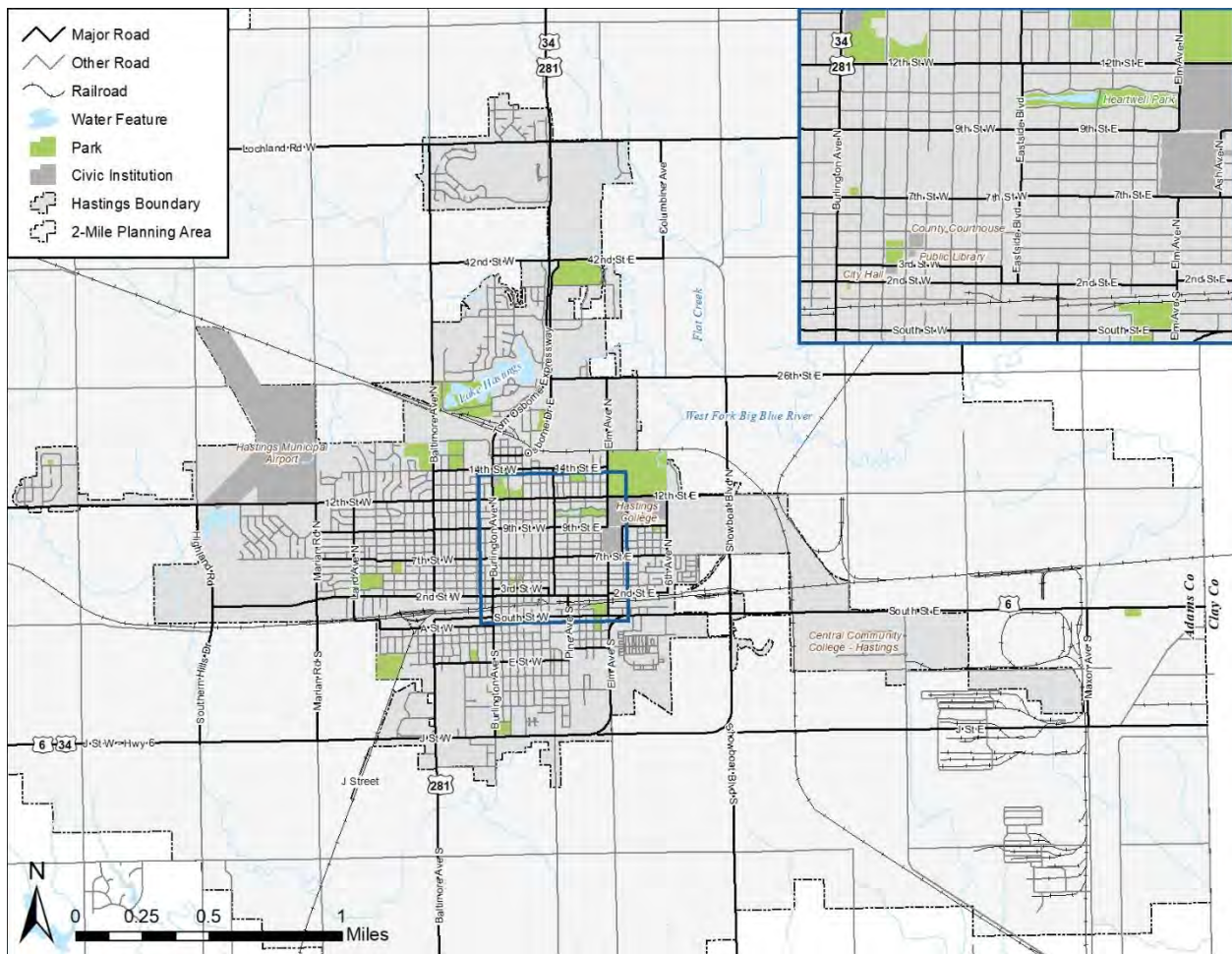
**MAP I: CITY OF HASTINGS LOCATION**



This Mobility Audit serves as the existing conditions assessment and is a portion of the larger Transportation & Parking Master Plan (TPMP), which defines the City’s strategy for creating a transportation system that accommodates the current mobility needs of residents, businesses, and visitors while also looking to the future.

This assessment provides the foundational state of the components of the transportation system, including its use and efficiency, condition, and safety features. This assessment also highlights demographic trends which have direct impacts on transportation demand, particularly land use characteristics such as location, density, and type of development. The existing conditions highlighted in this document inform the creation of the regional transportation strategy throughout the remainder of the planning process.

MAP 2: CITY OF HASTINGS



### Why A Transportation and Parking Master Plan?

A TPMP is a strategic document that guides transportation decisions the City will make with its limited local, state, and federal funding opportunities. The process is based on foundational community values and specific policies and expectations outlined in the City’s Comprehensive Development plan, Imagine Hastings, along with other visionary plans that have been produced in Hastings. The TPMP will help to set a vision for how investments are made, across all transportation modes, that balance the City’s small-town character with growth and mobility needs by identifying transportation improvements that are consistent with the core values of the community.

## Recent Planning Initiatives

The following subsections provide a high-level overview of the recent planning initiatives that impact the City of Hastings and the surrounding areas. It is important to review these studies to better understand the existing conditions and future development goals for the community.

### HASTINGS WALKABILITY AND CONNECTIVITY STUDY (2019)

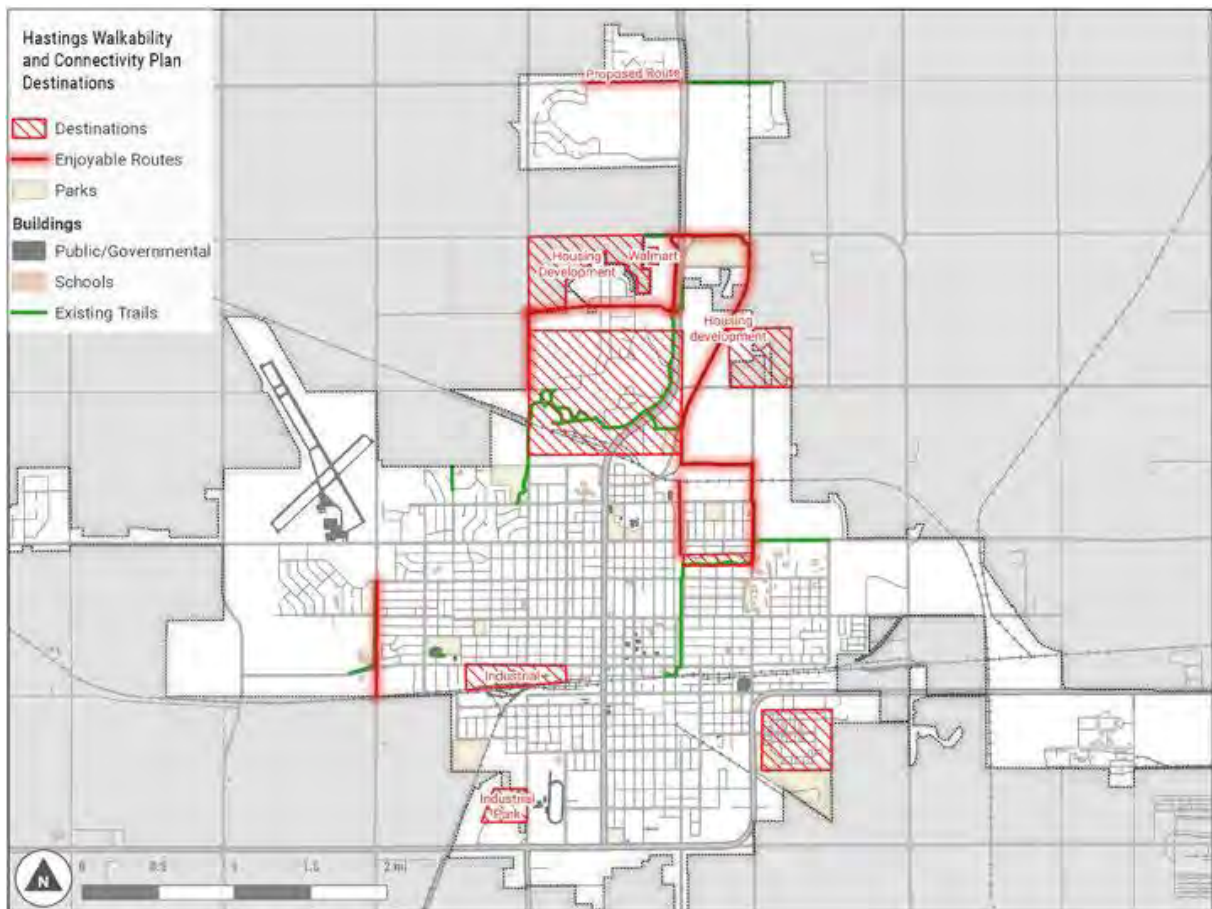
The Hastings Walkability and Connectivity Study involved four phases, Profile (data collection), Envision (stakeholder outreach), Achieve (identify and prioritize needs), and Implementation. The purpose of the study

is to understand the existing conditions and opportunities to enhance the non-motorized transportation network in Hastings. Through goals to enhance non-motorized transportation there is also a focus on prioritizing vibrant public spaces and complete street strategies. The main themes discussed in the study include:

- Access to the downtown core and business district
- Access to schools and parks
- Managing recreation routes and transportation routes
- Enhancing the city with trail development
- Achieving or improving compliance with the Quiet Zone Plan
- Improving pedestrian facilities and ADA accessibility.

The study identifies where there are existing sidewalks and trails in the city, where sidewalks are missing, and where proposed sidewalks and trails are located. Areas of interest for the study were identified through data collection, analysis, and community input. **Figure 0.1** shows popular destinations, existing trails, and enjoyable routes that residents typically take.

**FIGURE 0.1: STAKEHOLDER'S DESTINATIONS + ENJOYABLE ROUTES, FIGURE 8 OF HASTINGS WALKABILITY + CONNECTIVITY STUDY**



Source: *Hastings Walkability and Connectivity Study (2019)*

This map was used in conjunction with findings from a sidewalk improve priority ranking system that calculated locations in Hastings with the most demand, and therefore the most need, for non-motorized improvements.

The Implementation phase of this project identifies six projects that surround the core of the city. These projects promote connectivity in key areas of Hastings that improve access to businesses, schools, parks, and more. The projects focus on pedestrian and bicycle improvements, such as sidewalk and trail construction, or adding connections between existing trails. In addition, the project identifies key locations for wayfinding signage. Overall, the six identified projects were estimated to cost slightly less than \$3.5 million dollars over the 10-year planning horizon. While the study highlights needs over the next 10 years, the city intends to review the plan annually.

## HASTINGS BARRIERS TO UNIVERSAL MOBILITY PLAN (2019)

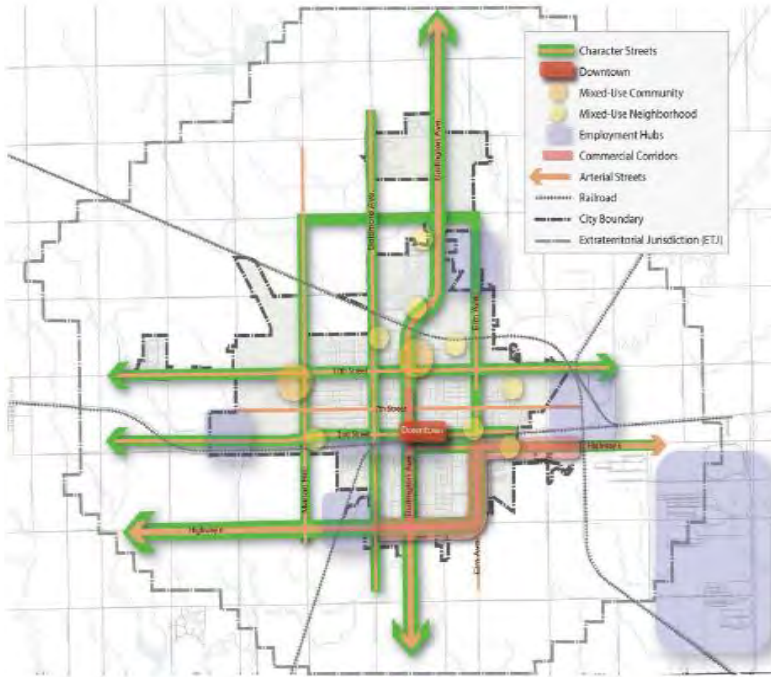
The City of Hastings conducted the Barriers to Universal Mobility Plan in 2019 to identify what the existing barriers to mobility are in the municipality, particularly in terms of nonmotorized transportation and ADA accessibility. The plan uses results of a citywide surveying effort that assessed the city's existing conditions and public input to identify the locations of mobility barriers and to develop strategies to address these issues. As a "universal mobility" study, the plan is focused on how residents move around the city and focuses on residents with ADA accessibility needs. Barriers to mobility were identified on crosswalks, ramps, and sidewalks throughout the city, leading to gaps in ADA accessible routes. The initial and high-level takeaways from the universal mobility assessment is that there is a need to develop a clear, consistent, and feasible program for sidewalk and curb ramp improvements, and implementing pedestrian focused improvements in high traffic areas of the network is recommended. However, the issue of enforcement also needs to be addressed because there were significant universal mobility issues pertaining to blocked sidewalks due to parked vehicles, motorists not yielding to pedestrians, and improper Handicapped placard placement on vehicles. An infrastructure plan and a long-term sidewalk improvement program were established as a result of the universal mobility plan. Members of the community also play a role in improving universal mobility, as many sidewalks are the responsibility of the adjacent property owner. This is a challenge however, because private landowners with limited resources may have a difficult time financing their own sidewalk improvements, an estimated cost of \$1,375 for sidewalk replacement on a typical 1/8-acre lot. In addition to identifying areas of concern for universal mobility, this plan also identifies several next steps that will support improvements to universal mobility into the future. These next steps include developing a Central Hastings Core Street Plan and a Public Buildings and Spaces Transition Plan, using design standards for all development, enforcing sidewalk and parking ordinances, and assessing ADA/van accessible parking availability. The primary focus is on improving sidewalks and ramps adjacent in the downtown core, adjacent to civic assets on a four-block radius. There are also recommendations to improve sidewalks and ramps at schools and improving connectivity within a 1/4 mile of the city park. It is anticipated to cost approximately \$1.5 million to obtain 100% connectivity and replace sidewalks on a 25-year life cycle.

## HASTINGS COMPREHENSIVE DEVELOPMENT PLAN (2009)

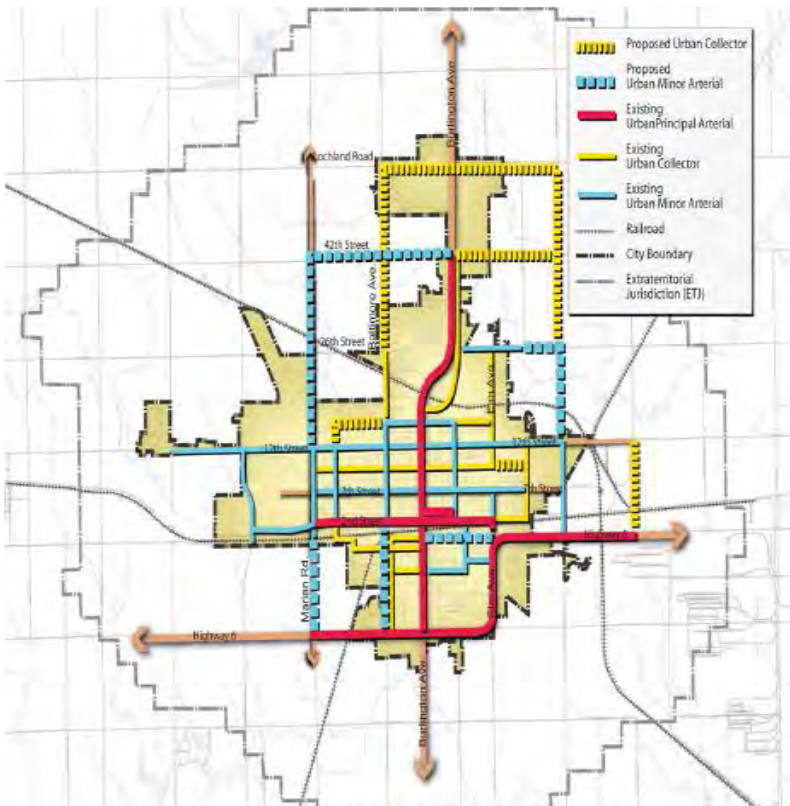
The current comprehensive plan for Hastings was completed in 2009 and covers a wide breadth of topics. General best practices and techniques to manage city growth and investments provided the framework for the transportation system over the past decade. The plan describes the street hierarchy and in particular highlights the need for greater pedestrian mobility:

*A system of sidewalks runs throughout Hastings along some of the arterial roads. However, many of these pedestrian routes are disconnected and are in need of repair. Collector and local streets throughout Hastings often do not have a pedestrian route. Where sidewalks exist, there are often obstructions such as trees and utility poles that limit the width of the walkway.*

The following maps are found within Imagine Hastings and detail the transportation investment desires throughout the city in 2009.



**FIGURE 0.2: CHARACTER STREETS MAP**



**FIGURE 0.3: PROPOSED FUNCTIONAL CLASS**

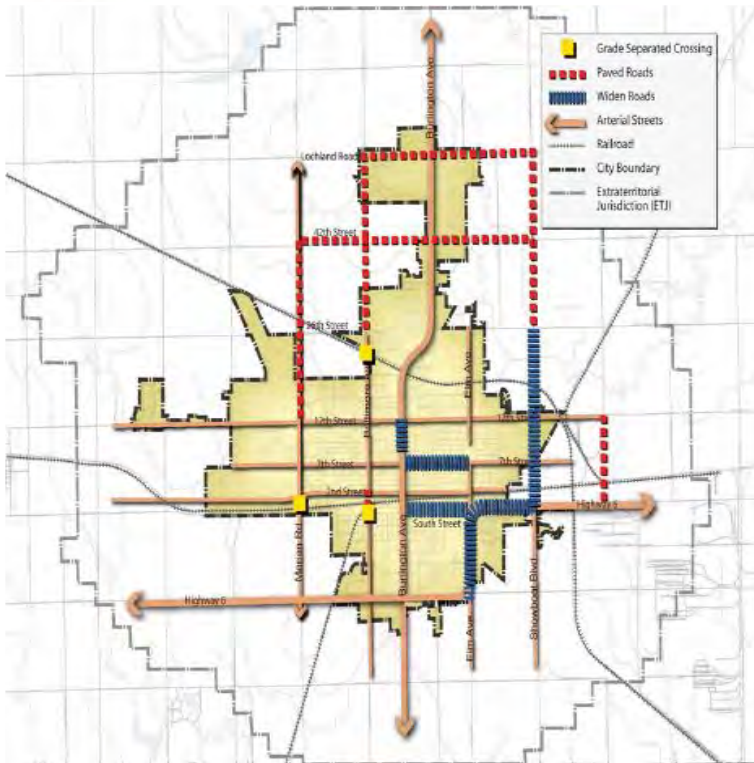


FIGURE 0.4: STREET IMPROVEMENT PROJECT MAP

### Mobility Goals

The following are a sample of the goals identified in Imagine Hastings that had explicit transportation impacts.

*M.1 Maintain and expand the connected street network to provide movement throughout the community.*

*M.2 Establish where practical the Character Street System that provides an enhanced transportation framework to connect activity and employment centers.*

*M.3 Design Streets that are appropriate to the adjacent development or natural context of the area while supporting the capacity of traffic it serves.*

*M.4 Accomplish trail network goals as described in the Parks and Recreation section of the Build Environment.*

*M.5 Create a defined and connected pedestrian network throughout Hastings.*

*M.6 Encourage bus transit use between employment and activity Centers*

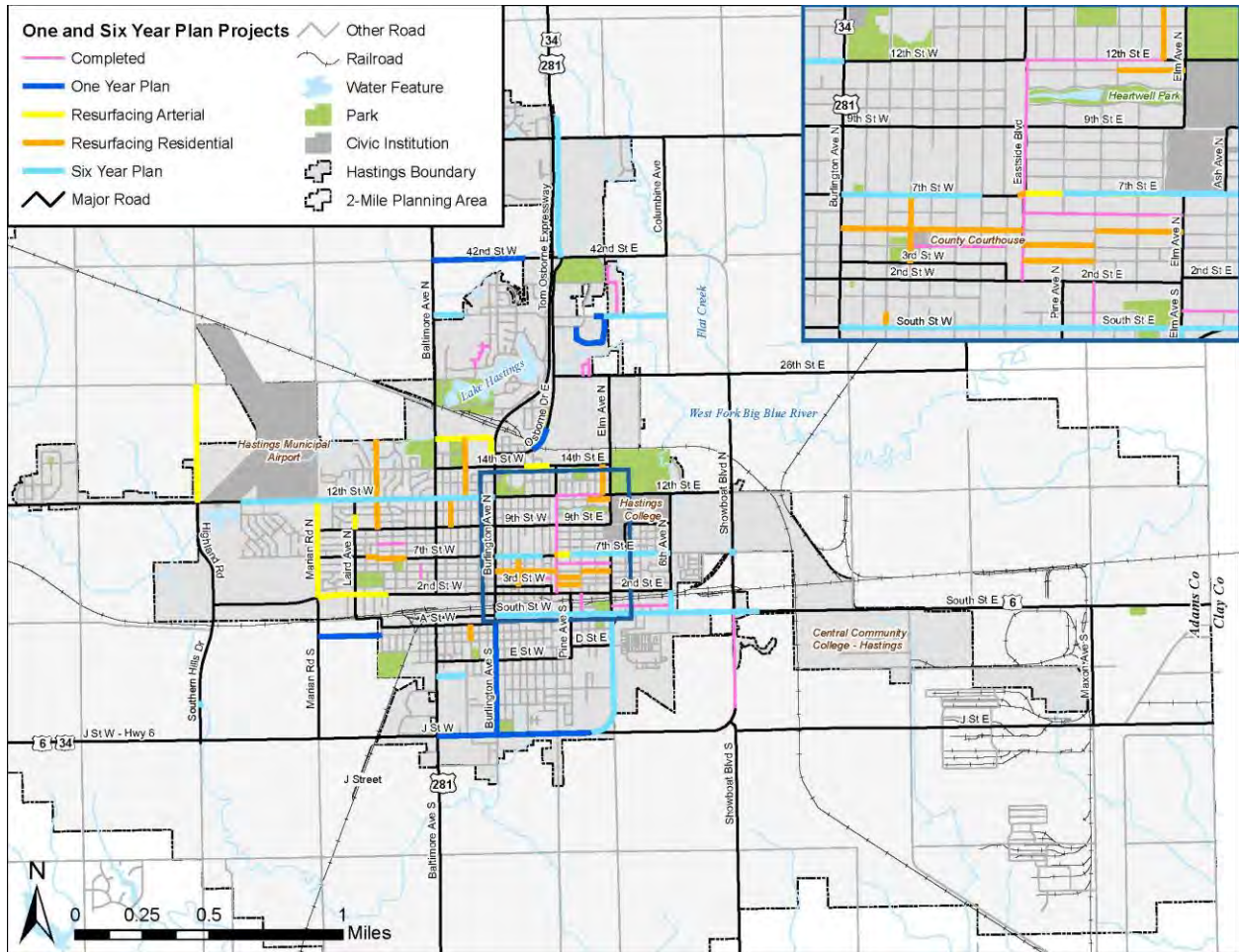
*Goal PR. 2 further states the need for a trail network: Create a comprehensive recreational trail network that connects the community through the parks, open and recreational spaces as well as the civic uses.*

*Goal PR. 4 expands trails beyond recreational use and notes the need for greater pedestrian mobility: Create an integrated pedestrian network of sidewalks, trails, and parks within the community.*

*Goal FLU.3 Encourage efficient development patterns that promote alternative modes of mobility such as walking, bicycling and transit.*

### HASTINGS ONE- AND SIX-YEAR PLAN (2019)

The City of Hastings has determined which roadways will need improvements starting in year 2019 to year 2026. The priority has been shown in the map below of the one-year plan and the six-year plan along with the roadway improvements that have been already completed. The roadway improvements range from widening pavement, to resurfacing, and intersection improvements. These improvements will assist in the future planning and development for the City of Hastings.



### CENTRAL BUSINESS DISTRICT ONE-WAY TWO-WAY CONVERSION (2005)

This study was conducted to evaluate anticipated impacts of converting one-way traffic flow to two-way traffic flow on several streets in the central business district (CBD). Two scenarios were evaluated as a part of this conversion analysis to determine which better suited the town of Hastings and its residents and visitors. The results of the analyses led to an understanding that several geometric and traffic control modifications would need to occur for one-way to two-way street conversion. In both scenarios parking stall modifications and geometric revisions would need to occur, with impacted on-street parking being modified to 45-degree angle parking. In addition to parking redesign, both scenarios would trigger traffic signal modifications, with more involved modifications occurring in the scenario with complete two-way conversion for CBD roadways in the study area. Pedestrian activity was also considered under both conversion scenarios and it was determined that while no facilities presented themselves as needing improvement upon analysis, further pedestrian counts, and traffic studies will be conducted after the conversion is implemented to monitor traffic flow and pedestrian interaction. The estimated cost of the scenario with fewer roadway conversion was just under \$400,000, while

the total conversion scenario was anticipated to cost approximately \$900,000. This study was conducted in 2005 and the cost estimates were developed using 2005 dollars.

## DOWNTOWN REVITALIZATION PLAN (2013)

The City of Hasting's Downtown Revitalization Plan was conducted to determine a set of recommendations and opportunities to enhance the downtown area for residents, visitors, and business development. The plan outlines a community vision and developed short and long-term goals that support their vision. As a part of the plan findings, there are several town landmarks or assets highlighted as opportunities for enhancement or redevelopment. These included the Stein Building, Auditorium Green, block-24 redevelopment, "flex-space" development on public-parking lots, improved way-finding, and public park landscaping, trail-head development, and streetscaping and intersection modification on key downtown corridors. Several strategic tools and catalysts for change were identified, which helped with forming an implementation plan for the downtown vision. The implementation recommendations are divided into two categories: physical investments and strategic motions. Recommendations for each category are listed here:

### Physical Investments:

- Support and promote the redevelopment or renovation of existing buildings
- Invest in public improvements which will help to market the downtown and attract outside visitors.
- Invest in public improvements which will increase connectivity and usability within the downtown district, particularly for pedestrians
- Ensure that any redevelopment or new developments within downtown are physically and programmatically appropriate

### Strategic Motions

- Adopt and implement recommended zoning and design guidelines
- Develop and promote a brand identity
- Develop and invest in critical community partnerships
- Continue to actively recruit businesses, developers, investors, and cultural institutions

The downtown vision, the identification of key assets and improvement opportunities, along with thoughtful implementation recommendations lays out a downtown revitalization plan that is both feasible and impactful to Hasting's residents and visitors.

## OTHER STUDIES

### Grand Island/Hastings/Kearney Intercity Bus Study (2020)

The Grand Island/Hastings/Kearney Intercity Bus Study is a feasibility assessment for an intercity bus service for the communities in this tri-cities area. The feasibility study was a continuation of the Nebraska Mobility Management Program established by the Nebraska Department of Transportation (NDOT). The study identifies the connectivity challenge presented because of a lack of intercity bus service, and highlights some of the opportunities that may exist due to increased interconnectivity between the Grand Island/Hastings/Kearney cities. Benefits to an intercity bus service are economic, through new business development and increased employment opportunities, and environmental, due to potential reduction in single-occupancy vehicle reliance. Moreover, an intercity bus service could promote access to higher education opportunities and critical health care facilities. The plan assesses four different route options that were determined through a series of data collection, analysis, and modelling, and public engagement activities. There is base service and expanded service level for an option with and without demand response – where riders must first call to hail the service. The options range from an estimated annual cost of approximately \$1.4 million to \$2 million, and annual ridership was anticipated between 50,000 and 70,000 depending on the route option selected. Using comprehensive



public feedback, a flexible, fixed-route option without demand response was selected. This route option was selected because feedback indicated the route involved fewer/no transfers, increased connectivity within each community, required a smaller fleet of vehicles, and reduces peak travel demand complications that could exist with a demand response route. An implementation plan for the intercity bus service was developed with project development expected to wrap up in late 2021, and the project team is committed to keeping up momentum on the tri-city intercity bus service.

### **Hastings Railroad Quiet Zone Feasibility Study (2010)**

The Hastings Transportation and Parking Master Plan addresses general information, important facts, and recommendations for Quiet Zones in Hastings. The Quiet Zones can be implemented in a few ways and several improvements or enhancements can be made to existing infrastructure that allow for reduced horn frequency on passing trains. Improvements are necessary within a ½ mile radius of a railway before it meets the requirement of a Quiet Zone. Improvements such as permanent crossing closures, grade separated crossings, and two-way to one-way street conversion, can create a roadway segment that supports Quiet Zone guidelines. In some cases, median construction can occur 100 ft from a crossing gate (or 60 ft if 100 ft intersects with a driveway or intersection) and that brings the roadway crossing into Quiet Zone compliance. It is important to note that these improvements will not eliminate train horns entirely. Federal regulations require train engineers to sound their horns during certain instances, such as an Amtrak train leaving the station, when Railway or Maintenance Workers are present, or whenever there are trespassers or obstructions present on the railway. The City of Hastings has selected nine potential locations for Quiet Zone implementation. Costs for these improvements range from \$14,700 to \$984,000, and these costs were assigned as planning level costs and are therefore estimates subject to change. The City has filed a “Notice of Intent” for proposed quiet zones to support six of the nine recommendations identified.

### **KEY TAKEAWAYS**

The City of Hastings has undergone considerable planning initiatives over the past ten years, which shows commitment to continued improvement of the transportation network, including the adoption of safe street policies and dedication to improving the non-motorized network system. Some of the main themes that were consistent throughout the planning initiatives were:

- Promote safe and efficient multi-modal transportation in key downtown areas
- Increase connectivity for non-motorized transportation, particularly ADA accessibility
- Invest in improvements that attract residents and visitors to Hastings downtown areas
- Continue supporting Complete Street policies
- Continue identifying opportunities for improved transit connectivity for Hastings and the surrounding tri-cities area

## **City Demographics**

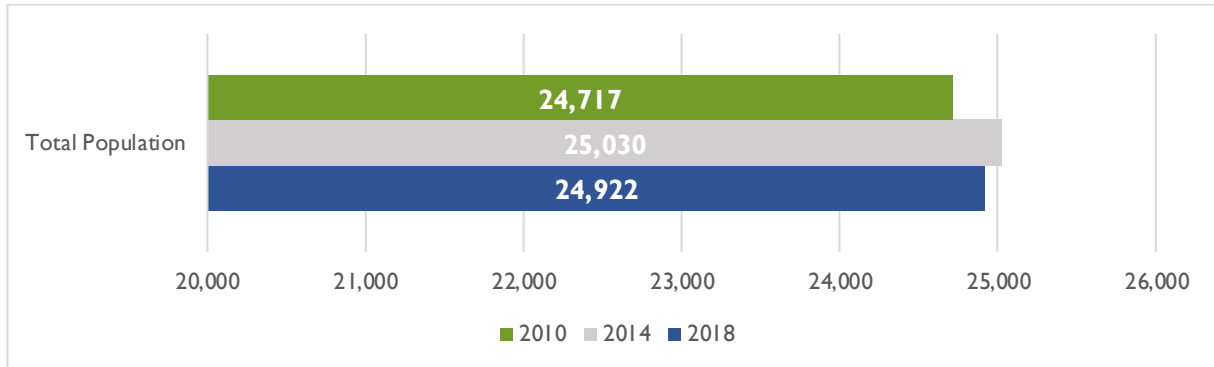
City demographics can provide additional context and be used to identify unique qualities about a locality. This can be helpful from a planning perspective because it can inform recommendations about how the transportation network can better serve the local residents, particularly if a population has experienced significant changes over time. For example, if a community experiences a significant increase or decrease in population, or identifies that their average age is trending up, then those trends may trigger certain planning strategies or practices that can accommodate for population changes. Moreover, it is important to understand how residents in Hastings are commuting to and from their work to better understand the way in which residents use and rely on their local transportation network.

## POPULATION AND HOUSEHOLDS

Using American Community Survey data for 2010, 2014, and 2018 the City of Hastings population by age and household by ownership are presented.

Figure 0.1 shows the total population of Hastings according to American Community Survey data between 2010 and 2018. As the figure shows, there was a significant increase in population between 2010 and 2014, however, the population decreases slightly over the next four years. Overall, the population of Hastings increased by one percentage between 2010 and 2018.

**FIGURE 0.1: CITY OF HASTINGS POPULATION (2010 - 2018)**



Source: American Community Survey 2007-2010, 2011-2014, 2015-2018

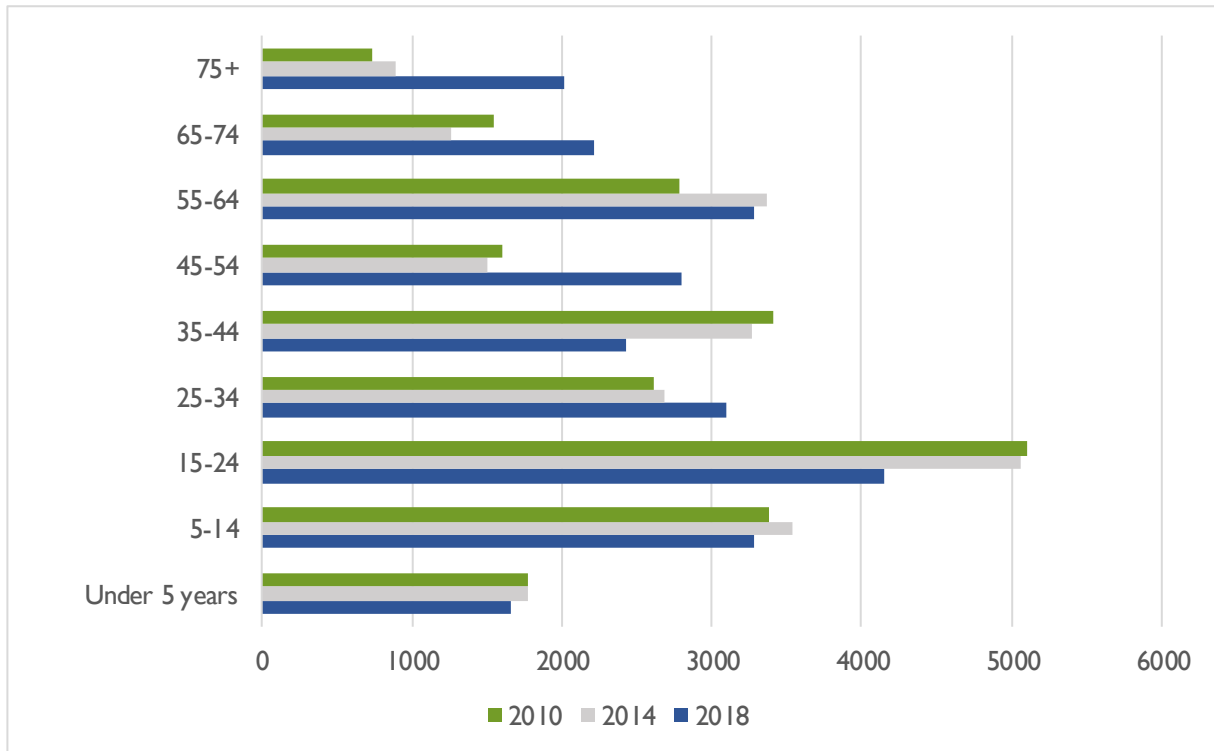
**Table 0.1** and **Figure 0.2** shows the population of Hastings between 2010 and 2018 by age. As the table and figure shows, Hastings is a community with a diverse age group, however it tends to lean young. Most of the population is below the age of 45 in 2010, 2014, and 2018. The largest age group over the study years has consistently been the 15-24 years old group. Residents 75 years or older was the smallest age group in 2010 and 2014, however in 2018 that age group is shown to have more than doubled.

**TABLE 0.1: CITY OF HASTINGS POPULATION BY AGE (2010-2018)**

Age Groups	2010	2014	2018
Under 5 years	1,768	1,779	1,654
5-14 years	3,384	3,535	3,276
15-24 years	5,107	5,055	4,155
25-34 years	2,618	2,691	3,101
35-44 years	3,407	3,271	2,425
<b>Under 45 years</b>	<b>14,611</b>	<b>16,331</b>	<b>12,284</b>
45-54 years	1,601	1,501	2,796
55-64 years	2,779	3,365	3,286
65-74 years	1,551	1,260	2,219
75+ years	733	891	2,010
<b>45+ years</b>	<b>10,311</b>	<b>7,017</b>	<b>10,311</b>

Source: American Community Survey 2007-2010, 2011-2014, 2015-2018

FIGURE 0.2: CITY OF HASTINGS POPULATION BY AGE (2010-2018)

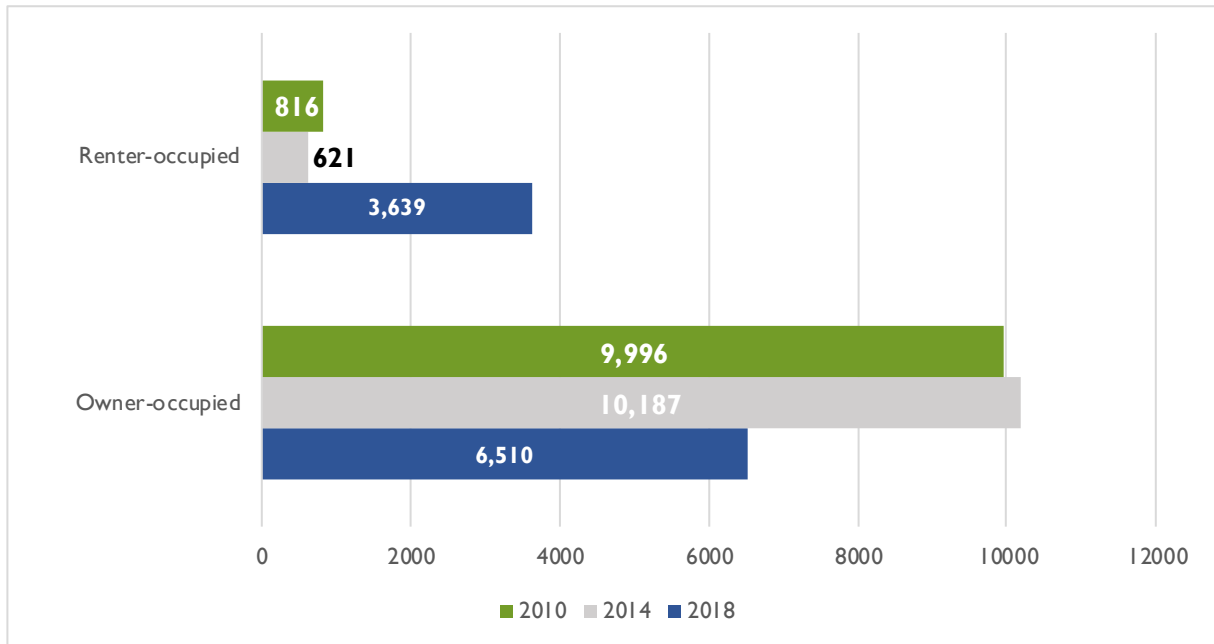


Source: American Community Survey 2007-2010, 2011-2014, 2015-2018

Another important component of better understanding a community is looking at household ownership. A high percentage of renter-occupied housing units to owner-occupied units might present challenges if planning initiatives depend on community engagement and participation. While not always the case, residents who rent may be less likely to invest or participate in their community long-term if their plans are more short term for the area. The number of renters has been increasing on national scale since 2000, and the percent of renters is higher than it has been since the 1960s<sup>1</sup>. This indicates that an increase in renters can be attributed to a national trend. **Figure 0.3** shows the number of owner-occupied and renter-occupied housing units in Hastings between 2010 and 2018. As the figure shows, the renter population more than tripled since 2010 and 2014, while the owner-occupied housing units have experienced a decrease of approximately 30 percent. However, despite the drastic increase in renters, the number of owner-occupied units is almost double the number of renter-occupied units in 2018.

<sup>1</sup> Rentcafe.com, *The Decade in Housing Trends: High-Earning Renters, High-End Apartments and Thriving Construction*, 2019

**FIGURE 0.3: NUMBER OF RENTER-OCCUPIED AND OWNER-OCCUPIED UNITS (2010-2018)**



Source: American Community Survey 2007-2010, 2011-2014, 2015-2018

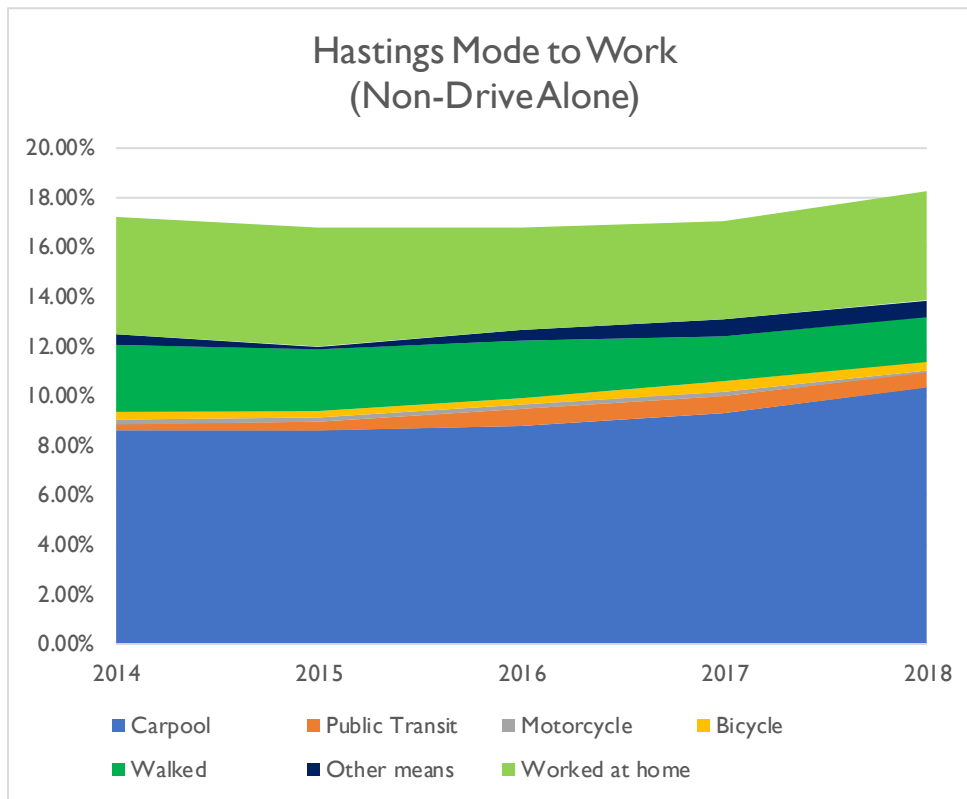
### KEY TAKEAWAYS

- The community of Hastings is home to a diverse mix of older and younger residents
- It is important that the older and younger populations feel that the community is easy and safe to navigate
- There is a growing percentage of renters in the community

### EMPLOYMENT AND COMMUTING

According to 2018 American Community Survey data there are approximately 12,000 employed residents over the age of 16 living in Hastings. The majority of these resident’s commute in their personal vehicle, with approximately 82 percent of commuters driving alone to work. Residents that do not drive alone will typically carpool or walk, with some residents opting to take public transit or other means to work. **Figure 0.4** shows the percentage of non-drive alone commuting choices, with carpool being the most popular alternate mode to work.

FIGURE 0.4: HASTINGS MODE TO WORK (OTHER THAN DRIVE-ALONE)



Source: American Community Survey 2018

Considering that the great majority of commuters rely on their personal vehicles to get them to work it is important that the transportation network is efficient and there is adequate parking for the existing demand. However, it may also be important to encourage alternate modes of commuting to work. An increase in public transit ridership, more car-pooling, and opting to walk or ride a bike to work, can have positive health and safety impacts on a community. Supporting alternate transportation modes through policy and capital projects can incentivize commuters to opt for alternate transportation modes when travelling to and from work.

### KEY TAKEAWAYS

- Over 80% of commuters drive alone, with carpool being the next largest commute pattern.
- Carpool share is growing, while drive alone has remained relatively steady.

## Regional Growth

Hastings prepared a comprehensive plan called Imagine Hastings in 2009 that discusses anticipated growth for the city and the wider region. While the Imagine Hastings plan is about a decade old, it still highlights some key aspects of Hastings and regional growth. According to data collected for the 2009 Imagine Hastings plan, the Hastings community experienced less growth than the neighboring communities of Kearney and Grand Island, which is indicative of forecasted patterns discussed further in this section. However, Hastings' quality of life and strong community make it an appealing place where growth is expected. The Grand Island Area Metropolitan Planning Organization (GIAMPO) covers the Grand Island metropolitan statistical area that includes four

counties: Hall, Hamilton, Howard, and Merrick Counties. The City of Kearney and Hastings are not within the GIAMPO boundary and not affiliated with other MPOs in Nebraska. The following two sections look at population growth estimates for the Hastings area and the surrounding region, to include Kearney and Grand Island communities.

## HASTINGS GROWTH

**Table 0.1** shows the population and compound annual growth rate (CAGR) for Hastings, and its associated county, Adams County. Since 2000, the city of Hastings experienced population growth at a compound annual growth rate (CAGR) of 0.1% and the surrounding Adams County experienced a CAGR of 0.6% over the same two decades.

**TABLE 0.1: HASTINGS AND ADAMS COUNTY HISTORICAL POPULATION DATA, 2000-2010**

Locality	2000 Population	2010 Population	2020 Population*	2000-2020 Growth Rate
City of Hastings	24,703	25,181	24,972	0.1%
Adams County	27,301	28,554	30,985	0.6%

Sources: United States Census Data 2000-2010; Worldpopulationreview.com; Kimley-Horn, 2020

Notes: \* 2020 population data sourced from estimates provided on Worldpopulationreview.com

Using the CAGR calculated in table above an estimated population projected out until 2030 and 2040 is shown in **Table 2**. The population is expected to exceed 25,000 by 2030 and continue growing to reach approximately 25,250 by 2040. Adams County is expected to reach close to 35,000 by 2040 as well.

**TABLE 0.2: HASTINGS AND ADAMS COUNTY FORECASTED POPULATION DATA, 2020-2040**

Locality	2020 Population*	2000-2020 Growth Rate	2030 Population Estimate	2040 Population Estimate
City of Hastings	24,972	0.1%	25,108	25,244
Adams County	30,985	0.6%	32,895	34,923

Sources: Worldpopulationreview.com; Kimley-Horn, 2020

Notes: \* 2020 population data sourced from estimates provided on Worldpopulationreview.com

It is important to note that while Hastings is growing slowly, the surrounding county's growth will impact the transportation network in Hasting and should therefore be considered during planning decisions.

## REGIONAL GROWTH

Kearney, Buffalo County, and Grand Island, Hall County, are within the surrounding region of Hastings, and make up the region's tri-cities area. It is important to monitor growth on a regional level when assessing transportation needs to identify long term needs and opportunities for connectivity across a region. Of the tri-cities, Grand Island is the most populated and is the only one that belongs to an MPO. As **Table 0.3** shows, Kearney and Grand Island, as well as each city's surrounding county, is expected to experience an increase of population of 0.7% CAGR or higher. The City of Kearney is anticipated to experience the most growth, based on 2000-2020 data, with a growth rate of 1.1%.

**TABLE 0.3: REGIONAL HISTORICAL POPULATION DATA, 2000-2020**

Locality	2000 Population	2010 Population	2020 Population*	2000-2020 Growth Rate
City of Kearney	27,576	30,994	34,301	1.1%
Buffalo County	42,336	46,174	49,841	0.8%
City of Grand Island	43,590	48,816	51,440	0.8%
Hall County	53,559	58,800	62,067	0.7%

Sources: United States Census Data 2000-2010; Worldpopulationreview.com; Kimley-Horn, 2020

Notes: \* 2020 population data sourced from estimates provided on Worldpopulationreview.com

Using the growth rates from the above table, an estimate of the population for Kearney, Grand Island, and their respective counties, was developed for 2030 and 2040. Kearney is expected to increase by slightly over 8,000 people in the next twenty years and Buffalo County’s total population is estimated to reach almost 60,000 in the same period. Grand Island’s population is estimated to exceed 60,000 people by 2040 and the Hall County population is estimated to be almost 72,000 people.

**TABLE 0.4: REGIONAL FORECASTED POPULATION DATA, 2020-2040**

Locality	2020 Population*	2000-2020 Growth Rate	2030 Population Estimate	2040 Population Estimate
City of Kearney	34,301	1.1%	38,256	42,666
Buffalo County	49,841	0.8%	54,079	58,676
City of Grand Island	51,440	0.8%	55,880	60,704
Hall County	62,067	0.7%	66,815	71,927

Sources: Worldpopulationreview.com; Kimley-Horn, 2020

Notes: \* 2020 population data sourced from estimates provided on Worldpopulationreview.com

Hastings is less than an hour drive to both Kearney and Grand Island, which makes it within a reasonable daily commute for certain employment, errands, recreational opportunities, access to health care and more. For this reason, it is important to look at how the region is growing, because this regional growth will impact Hastings in several ways, including putting more demand on the transportation network. The **Grand Island/Hastings/Kearney Intercity Bus Study (2020)** section relates to the topic of regional growth because it discusses the potential for an intercity bus service that serves the tri-city area. More details about that study and the potential for an intercity bus is discussed above. As growth in the region continues, solutions such as the intercity bus system, are needed to improve and promote access between these communities.

## Roadway System Assessment

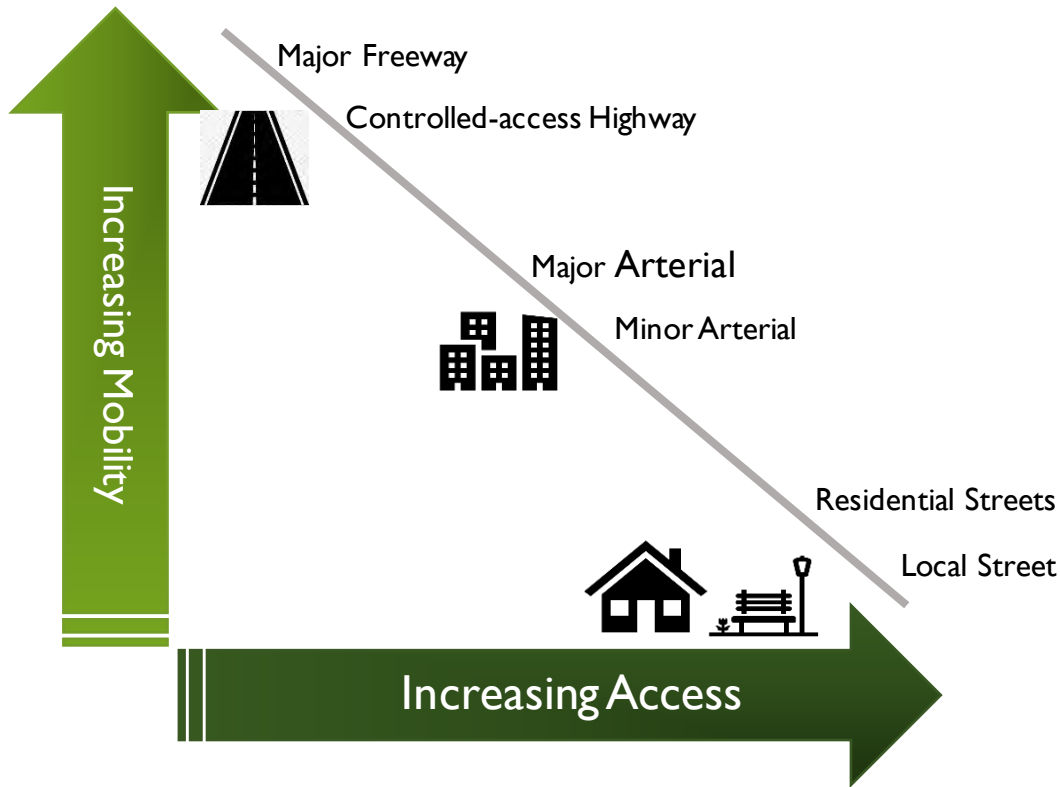
### FUNCTIONAL CLASSIFICATION

Functional classifications are a helpful planning tool because they can be used to identify appropriate design components depending on typical roadway use. Often, roadways are classified based on the priority for access or mobility.

Roadways that need to increase mobility are generally heavier trafficked and may be considered freeways and major highways. Roadways that are designed to increase mobility are typically more continuous, more interconnected, and have higher traffic speeds. These roadways typically promote traffic flow between major cities and states. On the other hand, roadways that need to increase access are typically considered local or residential streets and minor arterials, where traffic speeds are lower and volume may be less. These roadways may have more frequent stops, are less interconnected, and promote access within or between neighborhoods and residential areas.

**Figure 0.1** provides an overview of the relationship between mobility and access and the different functional classifications that can serve those priorities.

FIGURE 0.1: RELATIONSHIP OF FUNCTIONAL CLASSIFICATIONS



Source: Kimley-Horn, 2020

The City of Hastings is one of the tri-state cities in the Nebraska, the other two cities that make up the tri-state cities are Kearney and Grand Island. Hastings is located within Adams County and has a population of 25,000 people. Being a lively and progressive city, the existing roadways provide sufficient access between communities and neighborhoods. There are over 50 miles of roadway in the City of Hastings, and these roadways are comprised of expressways, major and other arterials, collectors (residential streets), and local roads. While some of these roadways may experience heavier volumes or higher speed traffic, all classifications must be considered vital to promote an effective roadway network. **Table 0.1** shows the mileage of different classifications within Elbert County.

TABLE 0.1: HASTINGS ROADWAY CLASSIFICATIONS

Functional Classification	Approximate Mileage
Expressway	6 miles
Major or Principal Arterials	5 miles
Other Arterials	25 miles
Collectors (Residential Streets)	15 miles
Local Roads	2 miles

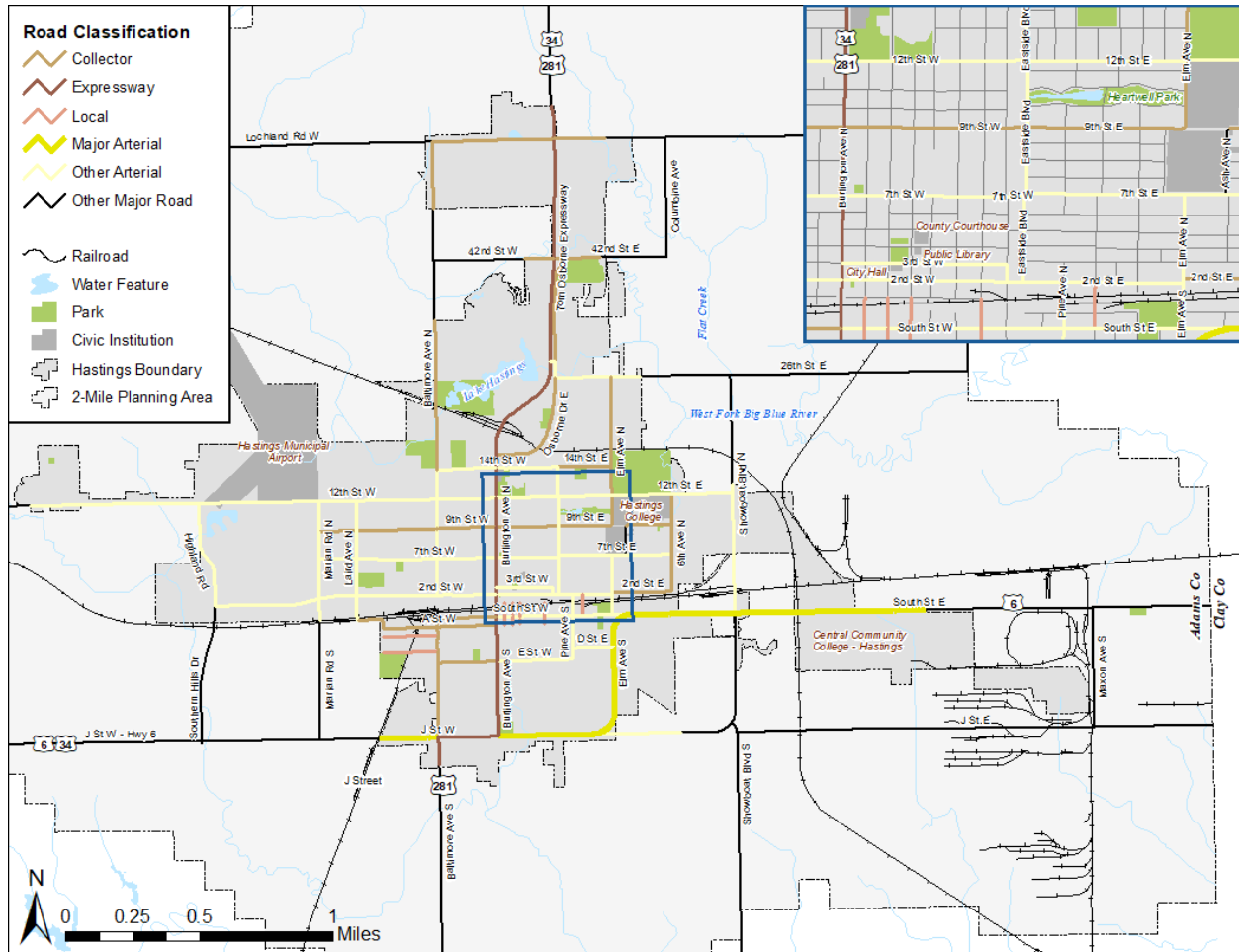
Source: Nebraska Department of Roads – Hastings, 2015; Kimley-Horn, 2020

As the table shows, most roadways in Hastings are considered other arterial roads and collector roads which support intercity access. The 6 miles of expressway is made up of N Burlington Avenue and parts of US 281 (S Baltimore Avenue) and US 34 (W J Street), while the major arterial is made up of US 34 (W J Street) which turns into US 6 (S Elm Street) to E South Street.



**Map 3** illustrates the functional classifications of the City of Hastings roadway system, with roads ranging from local roads to expressways. As shown, most roadways in Hastings are either other arterial or collectors, shown in light yellow and red colors, respectively. The expressway of YS 34 (Burlington Avenue), shown in dark brown, runs north-south and serves as the singular expressway in Hastings.

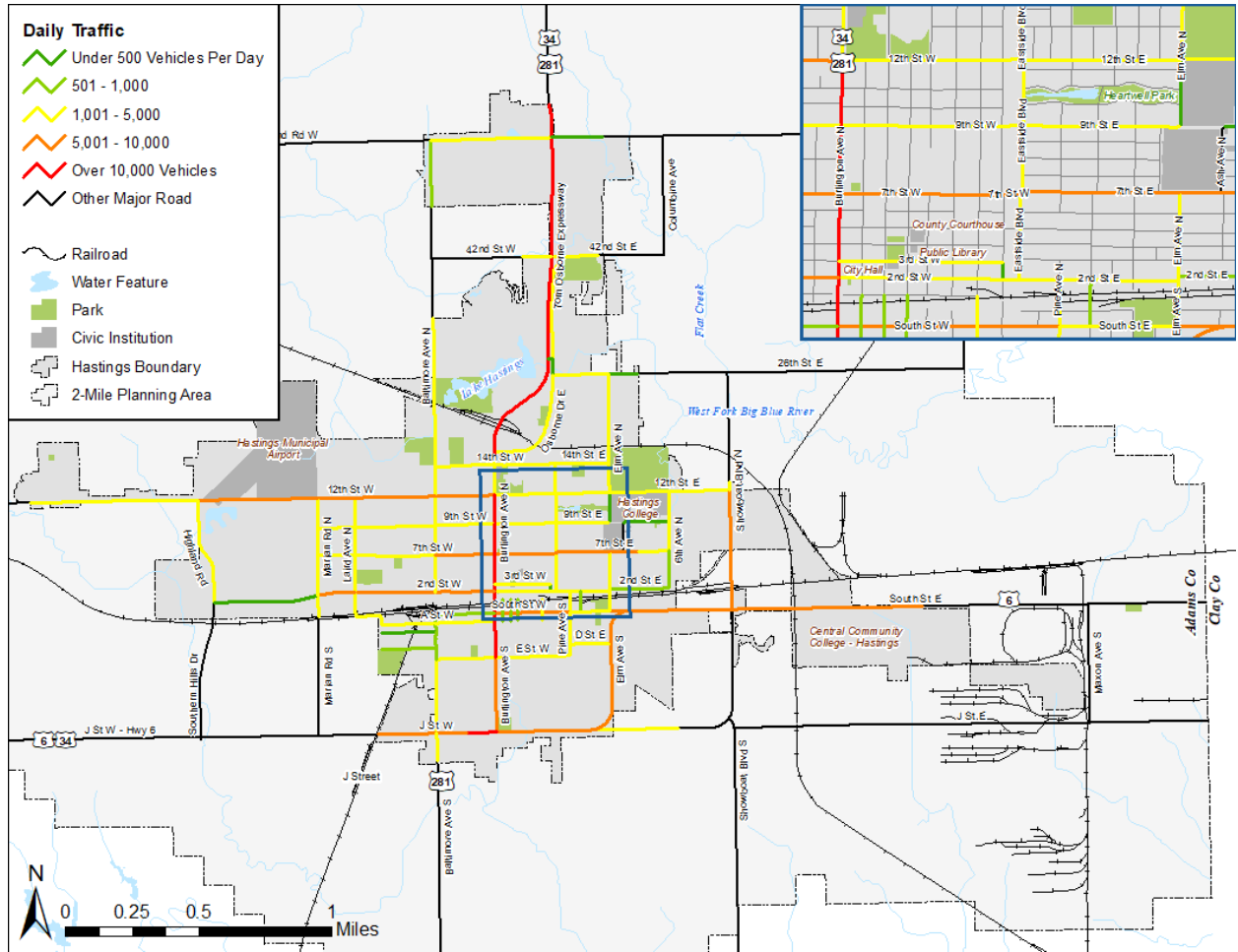
**MAP 3: ROADWAY FUNCTIONAL CLASSIFICATIONS**



**TRAFFIC VOLUMES**

**Map 4** is a visual representation of traffic volumes within the City of Hastings. Roadways colored in green are indicating traffic volumes of 1,000 vehicles or less per day with red supporting more than 10,000 vehicles per day. The highest traffic volumes in the City are along US 34 (Burlington Avenue). Most other roadways in Hastings experienced fewer than 5,000 vehicles per day, as indicated in yellow.

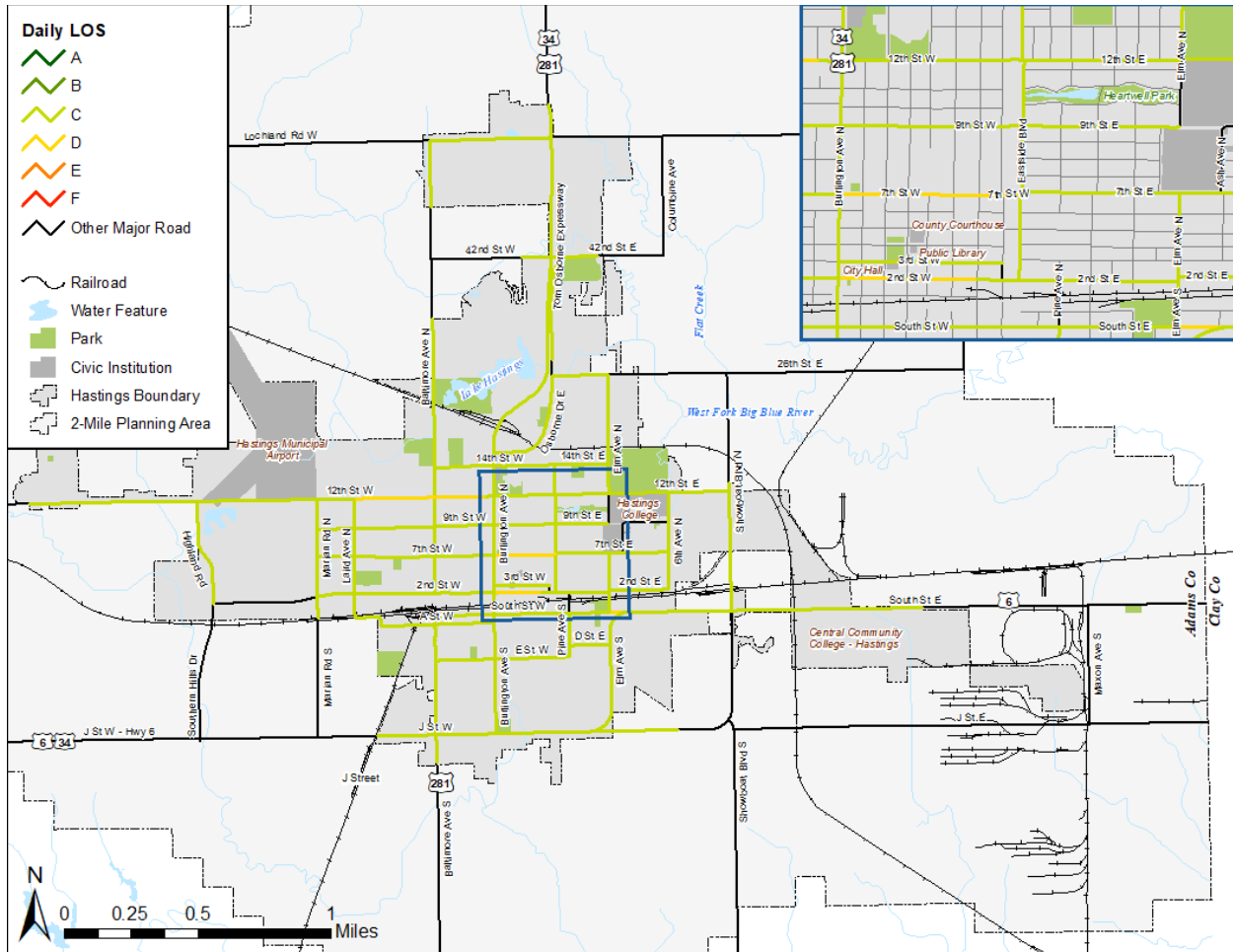
MAP 4: EXISTING ANNUAL AVERAGE DAILY TRAFFIC



TRAFFIC CONGESTION

Capacity analysis results are listed in terms of Level of Service (LOS). LOS is a qualitative term describing operating conditions a driver will experience while traveling on a particular street or highway. It ranges from A (very little delay) to F (long delays and congestion). Based on the Florida Department of Transportation, the LOS service volumes were based on the number of lanes a roadway segment had and the existing average daily traffic volume. **Map 5** illustrates the traffic congestion within the City of Hastings. As shown in the map, most roadways will operate with little to no congestion, indicated in green.

MAP 5: EXISTING TRAFFIC CONGESTION



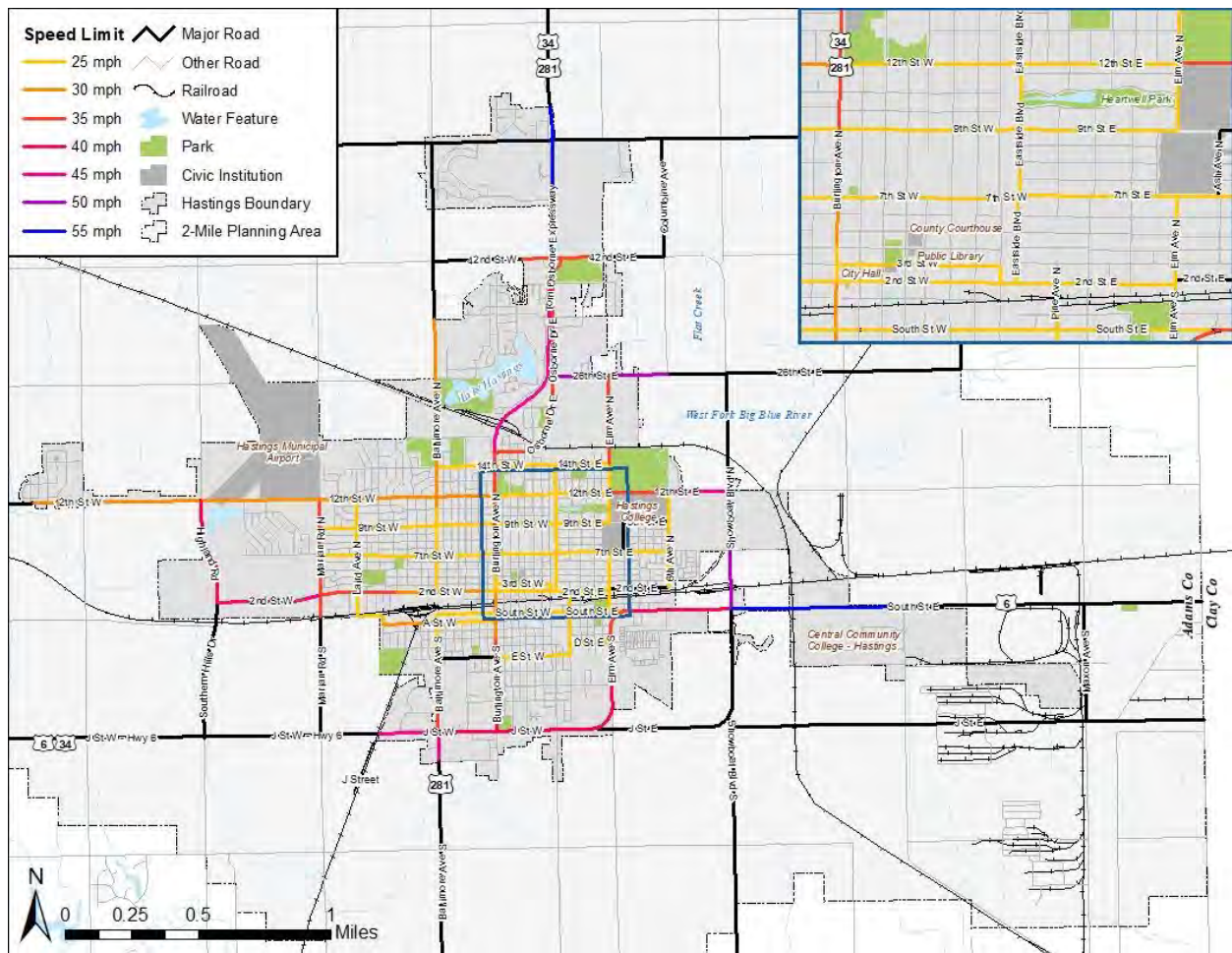
The level of service determination is based on the Florida Department of Transportation Quality Level of Service Handbook, 2020. This handbook is widely used and adopted by most jurisdictions to development and review roadway capacities.

## TRAVEL SPEEDS

An important factor in a safe transportation network is creating an efficient network that is context sensitive. Therefore, the travel speeds for different road segments should align with the types of activities or uses present in the area. For example, a dense residential area with local streets will have a lower travel speed than a major arterial intended to connect residents between or across a community.

**Map 6** shows the travel speeds for Hastings, with yellow and orange colors indicating slower speeds and colors within the pink and blue range indicating faster travel speeds. As the figure shows, most roads in the more densely developed civic, business, and residential areas are marked with 25-30 mph travel speeds, while the roads leading out of the downtown core and toward less densely populated area are marked with faster travel speeds.

**MAP 6: HASTINGS TRAVEL SPEEDS**

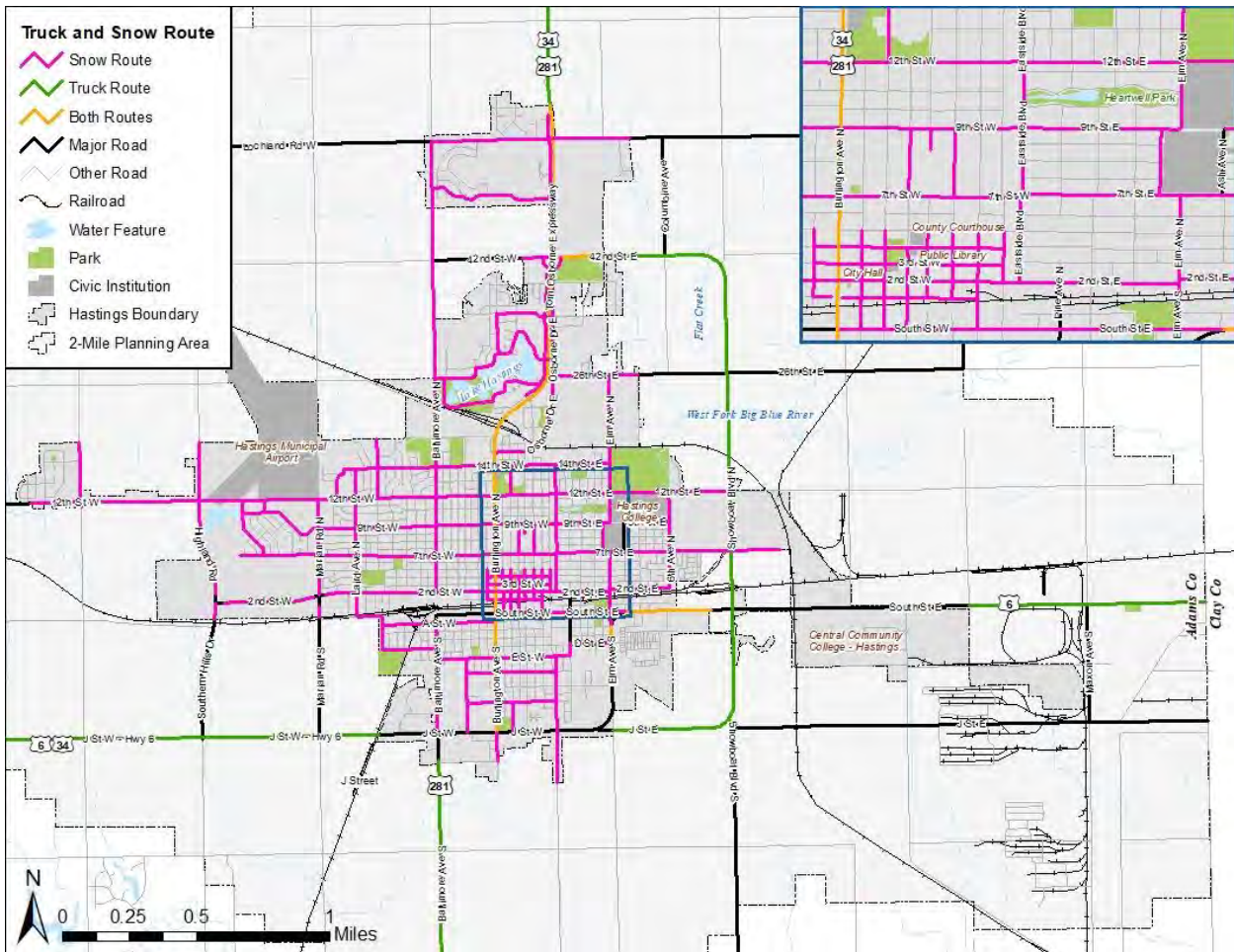


## TRUCK & SNOW ROUTES

Demarcating truck and snow routes is important to a safe and efficient transportation system. Snow routes are the first to be ploughed in snowy conditions as these are determined to be the primary routes within the community and are therefore the highest priority. Truck routes are identified so that large truck traffic is moving throughout the community on roads that are equipped to handle their weight and capacity. Often, narrow streets or tight intersections can be difficult for truck drivers to navigate, so it is important to highlight routes that are easily navigable and efficient.

**Map 7** shows the snow and truck routes in Hastings. Snow routes are shown in pink and truck routes are shown in gold.

**Map 7: Snow and Truck Routes**



**PAVEMENT AND BRIDGE CONDITIONS**

The Hastings Transportation Master Plan reviews a study by Engineering Specialists, Inc. (ESI) who conducted a site evaluation of the Hastings Viaduct originally constructed in 1936. The site assessment was conducted because, despite partial repairs in 1985, the structure was closed to traffic in May 2019 due to its condition, and the city council voted to demolish the viaduct. However, the final vote to determine if the structure will be demolished was postponed until November 2020. The ESI findings indicate serious deficiencies in the viaduct, with the viaduct’s substructure being deemed in “critical condition”. The viaducts columns need to be rehabilitated, however that project is not feasible without removing the superstructure above. The sublayer of the concrete drive deck was determined to be beyond functional rehabilitation despite the top layer of the deck being in “fair condition”. ESI developed cost estimates for several options, which are summarized in the table below.

**TABLE 0.2: VIADUCT REPLACEMENT OPTIONS AND COSTS**

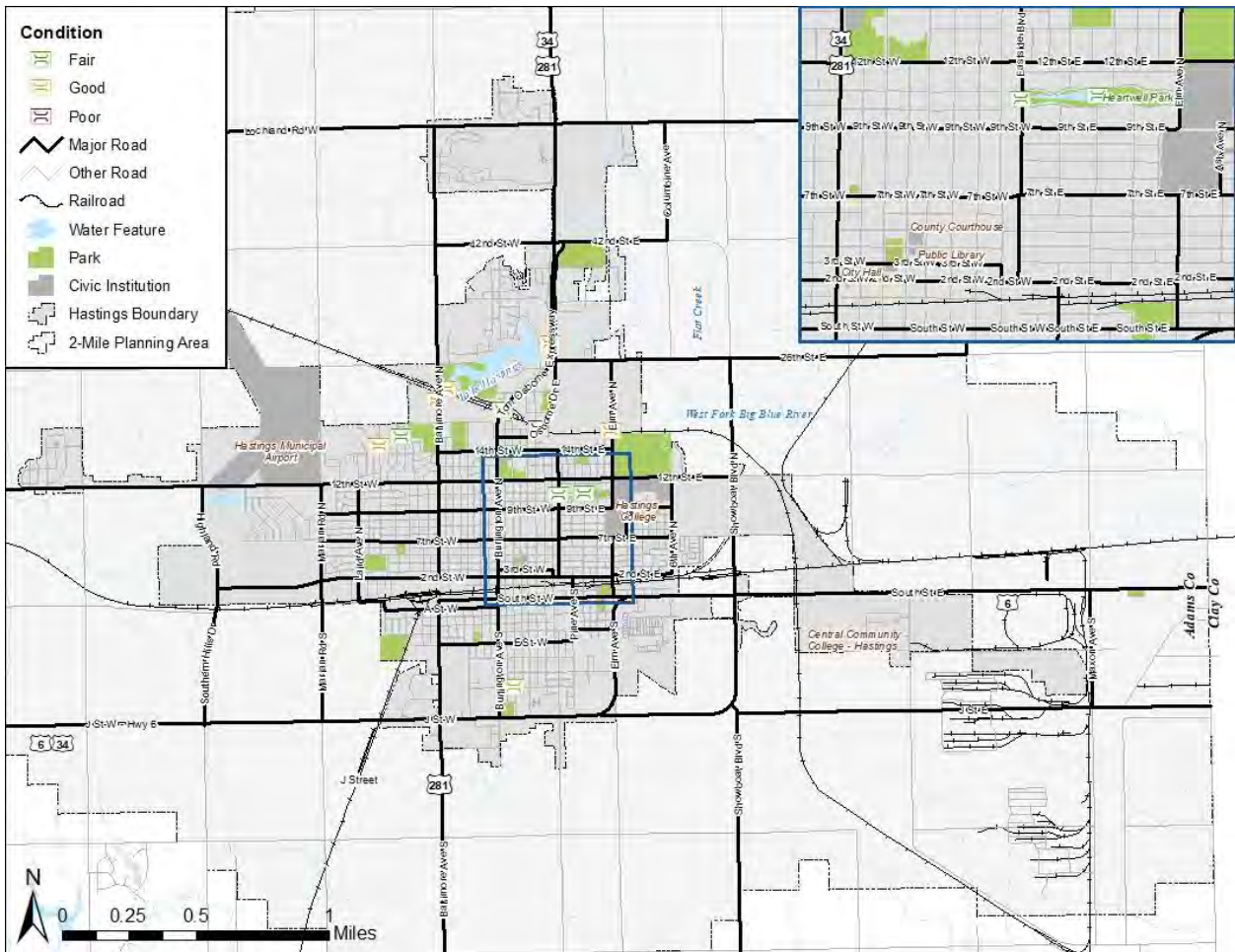
Project Description	Estimated Cost
New 4-lane bridge including demolition	\$6,838,000 - \$7,062,000

Architectural and Engineering design	\$513,000 - \$530,000
Replacement Cost Only (2-lane)	\$7,351,000 - \$7,592,000
Demolition Only	\$1,452,000

Source: Engineering Specialists, Inc. (ESI) (2020)

The City of Hastings is responsible for operating and maintaining 12 major structures, 7 of which are culverts, 4 of which are bridges, and 1 is a slab. Three out of the four bridges are elevated over railroad tracks while the culverts are placed under roads that cross streams or rivers. Almost all major structures except one is north of Downtown Hastings. **Map 6** illustrates the major structures located within the City of Hastings and the condition the structure is in; with green being good and dark red being poor.

**MAP 6: BRIDGE CONDITIONS**



Source: Bridgereport.com

**KEY TAKEAWAYS**

The existing transportation network that serves Hastings is diverse and designed to meet the needs of residents and visitors. Traffic volumes and congestion occur mostly in the downtown core and on major/minor arterials. The speed limits align with the purposes of the roadway and are designed to fit the context of their environment, which contributes to a safe transportation network. Snow and truck routes are appropriately

demarcated to prioritize major and minor arterials for snow removal and allow trucks to more safely and efficiently navigate in Hastings.

## Parking System Assessment

Convenient, safe, and accessible parking resources are a critical component of any effective transportation and mobility system. In Hastings, like many communities, much of the parking inventory is provided by private businesses for use by their customers, employees, and tenants. Within the downtown core, some the publicly-available parking is also provided by the City in the form of on-street stalls (both time-limited and unrestricted) and several public parking lots.

Within City government, responsibility for the management, maintenance, and administration of the public parking system is spread across several departments including Development Services, the Police Department, and Public Works/Streets.

This Plan will focus primarily on the downtown public parking system and the handful of public lots outside of the downtown. This assessment will evaluate current usage and make recommendations to address the following critical questions:

- How can the public parking system be managed effectively to best support the needs of businesses, residents, and visitors?
- Are any additional public resources needed to support future growth and re-development goals?
- Does the City have appropriate systems and methods in place to effectively manage and maintain the public parking assets over the long-term?

### STUDY AREA

The study area for data collection for this project will generally include the “Mixed-Use Downtown” core as identified in Imagine Hasting Comprehensive Development Plan. Data collection efforts may also be expanded one block to the north to include the Adams County Courthouse and Auditorium blocks, and to the south to include parking along the railroad tracks, as needed.

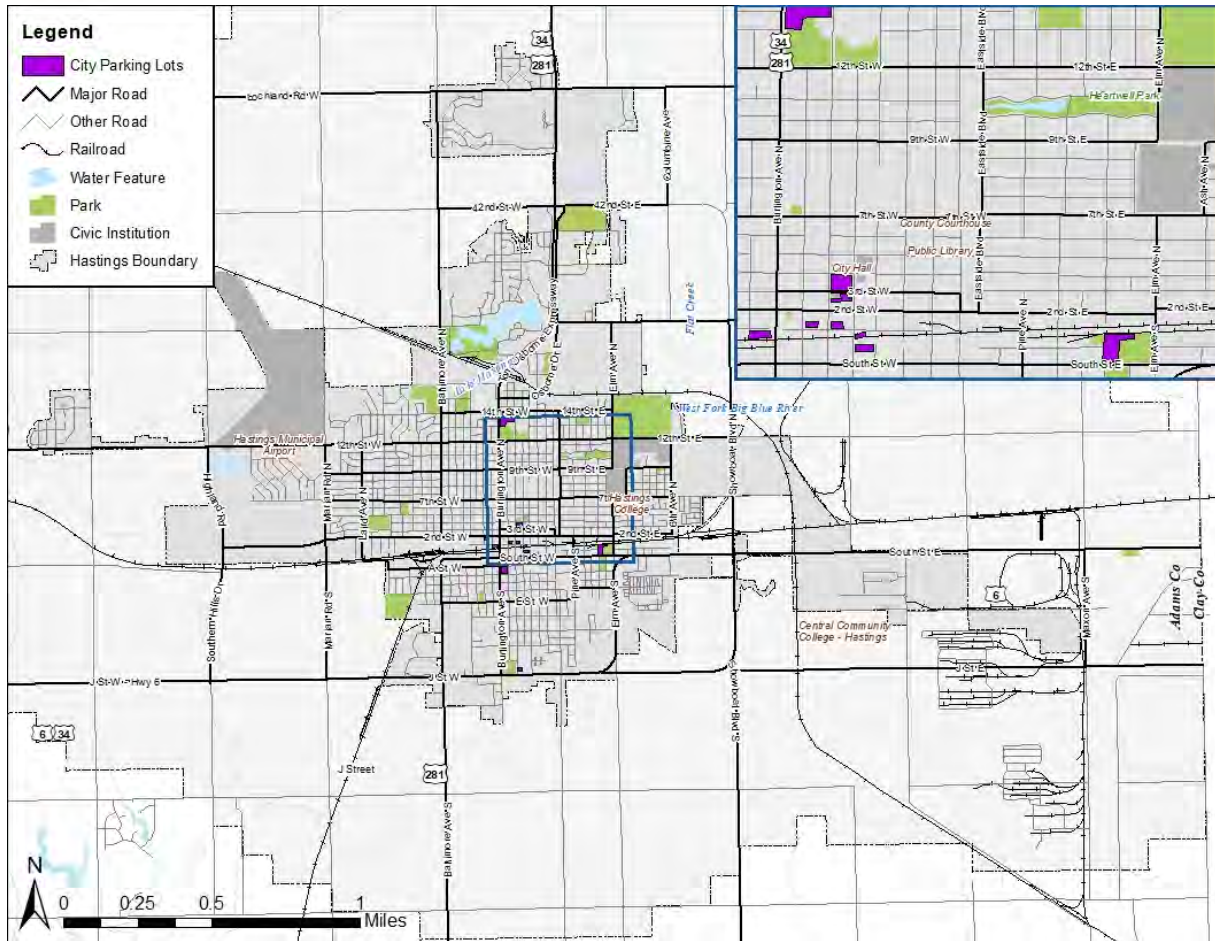


Source: Imagine Hastings, Comprehensive Development Plan, 2009 (Figure 2.9 Downtown Design Map)

Some of the parking policies addressed in this Plan will also apply to public parking lots that are owned and/or management by the City and located both within and outside of the downtown core. These lots include the following facilities (list provided by City staff); these locations are shown on the map below:

- Fire Station Lots (2)
- Police Station
- Parking Plaza (North of City Hall)
- City Hall
- 2<sup>ND</sup> str. & Bellevue Ave. (Clock Tower)
- 1<sup>ST</sup> str. & Hastings Ave. (West side of Eagles)
- 100 blk So. Denver Ave. (Bruckman rubber)
- 800 blk West 1<sup>ST</sup> str. (West of Murphy's)
- 1<sup>ST</sup> str. & Lexington Ave. (West of underpass)
- 1<sup>ST</sup> str. & Denver Ave. (West of Amtrak Depot)
- Duncan Field
- Museum
- Taylors Steakhouse





## DATA COLLECTION

Due to the impact of COVID-19, baseline parking occupancy surveys have been rescheduled for later in the project. Any data collected this summer would likely be substantially impacted by the state and local “stay at home” madidates, and the general shift in public behavior. The consultant team is currently in discussions with City staff as and DDA members to reschedule data collection efforts for later this fall or in Spring of 2021. To the extent possible, any baseline data collected will be calibrated (using advanced traffic modeling software) to estimate pre-COVID downtown supply and demand conditions.

Our future data collection effort will include the following:

- Parking inventory and occupancy data will be collected within the downtown study area (roughly 30 blocks) for all public, commercial (private but open for customers), and on-street parking resources
- Inventory details will include a survey of the number of stalls, posted restrictions, general condition, etc. for each facility. All time limited parking will be noted to confirm and update accurate maps for the downtown
- Occupancies will be collected during one typical weekday and one typical weekend during typical peak hour conditions
- Data will be summarized in graphic formats such as heat maps, tables, and charts.

## KEY TAKEAWAYS

Parking inventory and occupancy key findings will be provided after data collection efforts and analysis is complete.

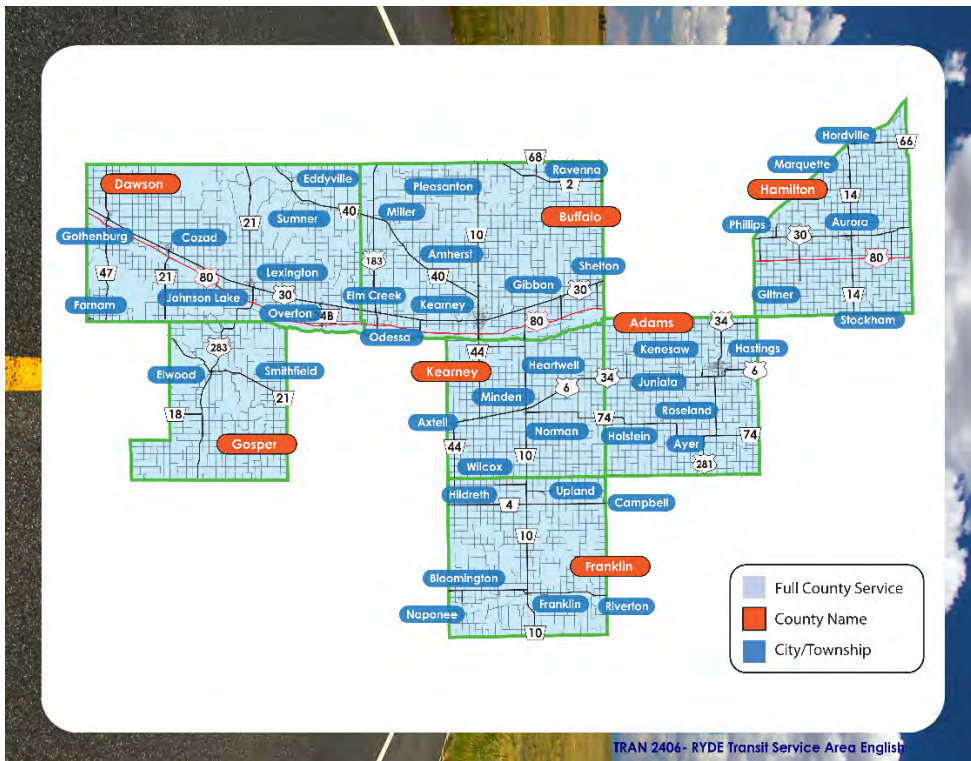
# Transit System Assessment

There are very limited public transportation options in Hastings, especially since the loss of the Greyhound service that served the tri-cities area of Hastings, Kearney, and Grand Island. Vacant infrastructure from these services still exists in the downtown core of Hastings. The Nebraska Department of Transportation (NDOT) conducted a feasibility study to determine the best route forward in re-establishing an intercity bus service for the tri-city area. This bus service would promote equitable access and mobility between the three cities and could have environmental and economic benefits to the region. More information on the feasibility study is provided in the **Recent Planning Initiatives** section above. Other than the potential for an intercity bus service, Hastings residents and visitors have a few different transit options available to them, and those are reviewed in the following subsections.

## R.Y.D.E. SERVICE

R.Y.D.E Transit is provided by the non-profit organization, Community Action Partnership of Mid-Nebraska, that provides on-demand transportation service to the residents of Adams, Buffalo, Franklin, Gosper, Hamilton, and Kearney Counties. The service has a fleet of over 40 vehicles ranging from small buses to ADA accessible minivans, and provides transportation starting at \$2. Rides are offered from 6am to 6pm on a demand-response schedule and will take the rider to local appointments, events, activities, and so on. Riders are asked to call and reserve a pick-up time 24 hours in advance and wait times will vary when a rider calls for a return trip depending on demand. R.Y.D.E continues to expand their service area to better serve the communities within their boundaries. Figure 0.1: R.Y.D.E Service Area **Figure 0.1** shows the service area map published by R.Y.D.E.

FIGURE 0.1: R.Y.D.E SERVICE AREA



Source: R.Y.D.E Website

### Ponca Express

The Ponca Express is funded and operated by the Ponca Tribe of Nebraska (PTN) Transportation Department and provides transportation services for community members within a three-hour radius of the PTN facilities located in Norfolk, Niobrara, Sioux City, Lincoln, and Omaha. The service runs on an on-demand and first come/first serve schedule. There are two routes serviced by the Ponca Express, one serves the rural communities in Norfolk and Niobrara, while the metro route serves the metropolitan areas of Omaha, Lincoln, and Sioux City. Hours of operations vary for each route and region; however, most routes operate between 7am and 530pm.

### HASTINGS COLLEGE

Hastings College supports two transportation options for students or staff, the Bronco Bus which shuttles around campus and downtown on Friday and Saturday from 10pm to 2am, and a Safe Ride Program that provides 24/7 escorted transportation services with Safety Officers.

### AMTRAK

Amtrak is a passenger rail service that provides train transit across the United States. There is an Amtrak station in Hastings, and four others in Nebraska. The Amtrak line that travels through Nebraska reaches as far west as San Francisco and east to Chicago, connecting in Chicago and continuing east to New York City. The Amtrak is a more of an interstate, or even cross country, travel option and does not service daily or routine transportation needs within a certain locality.

### KEY TAKEAWAYS

Transit opportunities in Hastings are limited and are only provided on an on-demand basis. While, transit may be limited, the city and the state are dedicated to improving connections for individuals who need to, or would

like to, use transit services to navigate Hastings and outlying communities. Currently, the R.Y.D.E service is the most comprehensive transit option for the area; however, the nature of the demand-response service can mean delays or long wait times. The intercity bus route assessed in the NDOT feasibility study is a step toward enhancing connectivity in the region, and in Hastings.

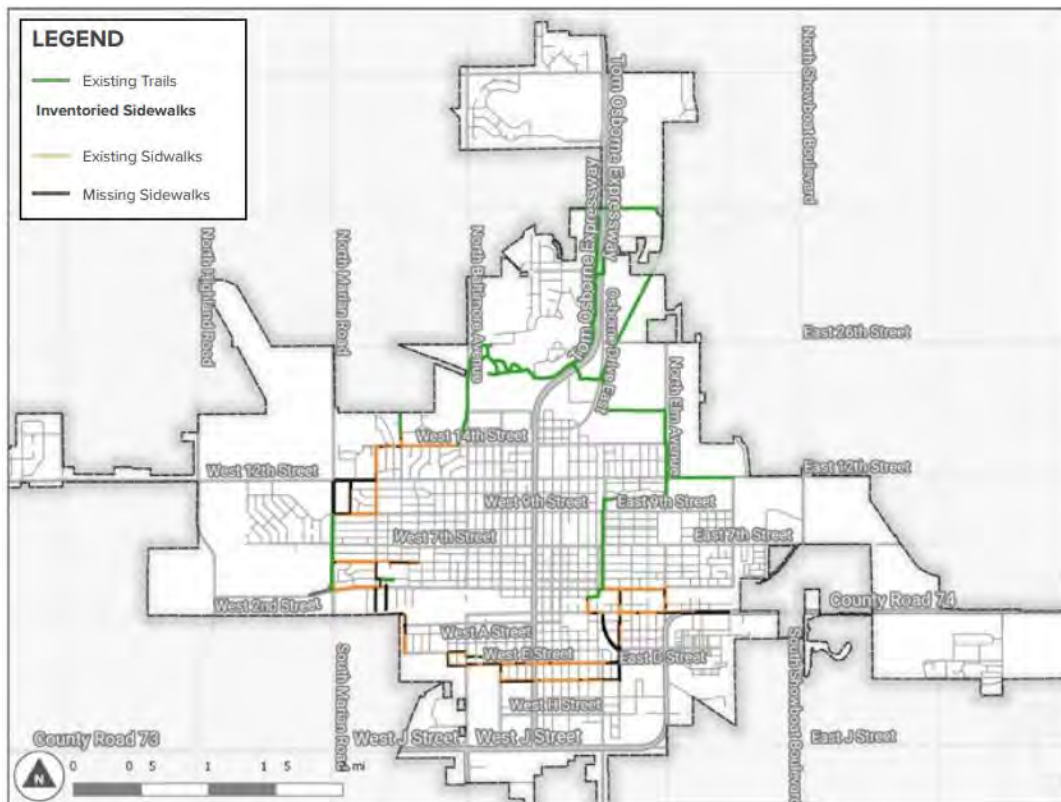
## Non-Motorized Network Assessment

The City of Hastings adopted a Complete Streets policy in 2013 and has been committed to improving the non-motorized transportation network and enhancing public spaces ever since. The city has long-term goals for the intermodal network for their region with a Complete Street vision to provide a safe and efficient transportation system for all modes that creates inclusive access and mobility for all city residents and visitors. The Complete Street vision is focused on improving connectivity by enhancing pedestrian and bicycle facilities across the city and improving public spaces to generate “foot-traffic” in core business or recreational centers.

### SIDWALK COVERAGE

Sidewalk coverage in Hastings is limited, however, as discussed in the Recent Planning Initiatives section, there are plans in place to continue expanding this coverage into the future. According to the Connectivity and Walkability study produced by the City of Hastings in 2019 there are existing sidewalks intermittently throughout the city, and some existing trails as well. **Figure 0.1** shows the existing conditions map produced for the Connectivity and Walkability study, with existing and missing sidewalks identified in the image.

**FIGURE 0.1: EXISTING INVENTORY OF SIDWALKS AND TRAILS IN HASTINGS**



Source: *Hastings Connectivity and Walkability Study, 2019*

More information about the future enhancements planned for sidewalks and trails in Hastings is included in the Recent Planning Initiatives section.

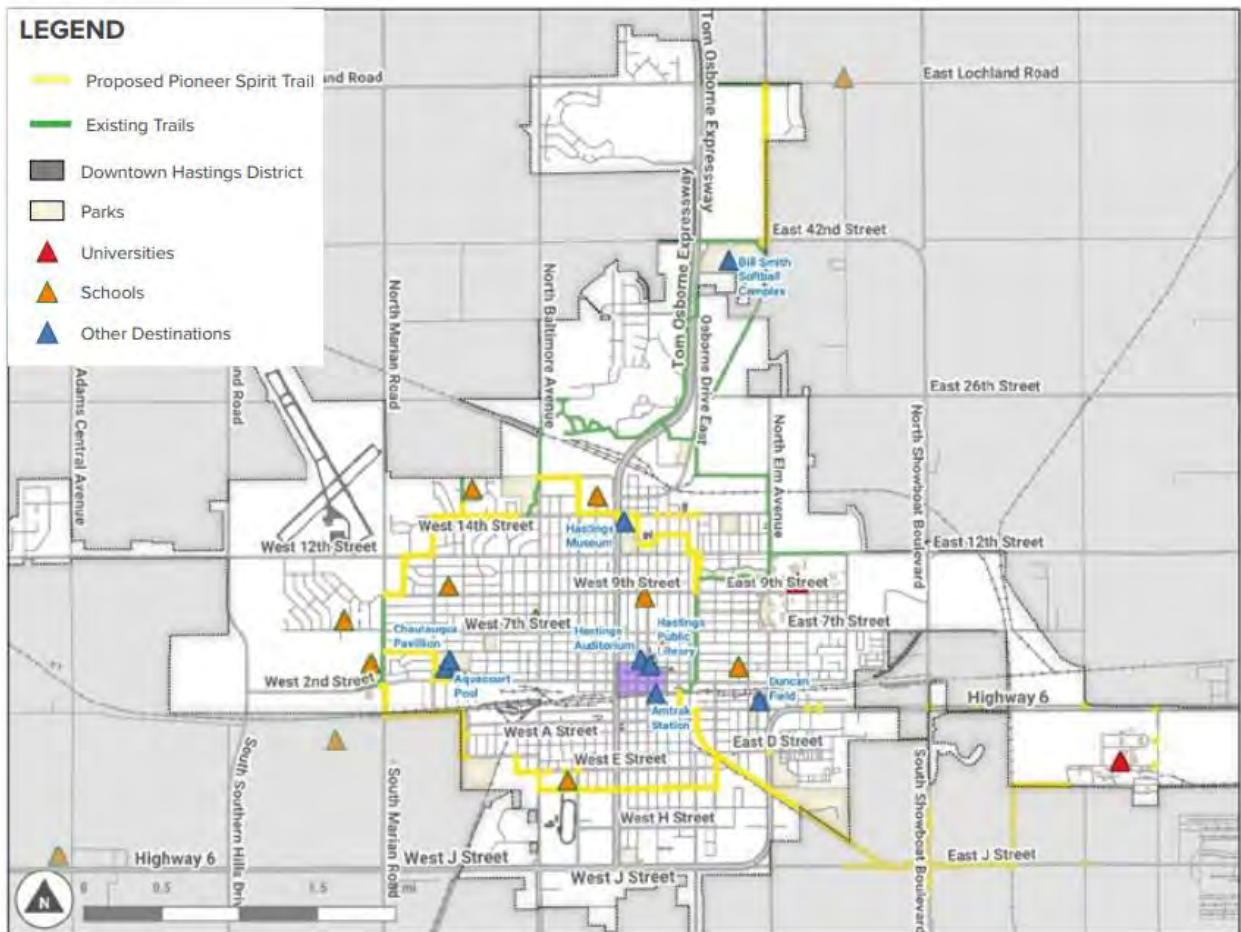
## TRAILS AND BICYCLE FACILITIES

The Hastings Transportation and Parking Master Plan addresses the city’s trail system, both in terms of where there are gaps and opportunities to enhance their non-motorized network. The Trail Master Plan developed as a part of this long-range planning effort, identifies proposed trail development opportunities that are supported by federal funding, when it becomes available. The City’s Pioneer Spirit Trail project provides a trail network suited for pedestrian and bike use that serves as a transportation and exercise route between recreational and business destinations across the city. The following is a list of priority proposed trail development projects outline in the Master Plan:

- Southern Crosstown Connection (2.16 miles)
- West South Street Path (1.0 mile)
- Northern Crosstown Connection (2.16 miles)
- Chautauqua Park Connection (0.53 miles)
- 14<sup>th</sup> Street Link (1.93 miles)
- Prairie Ride Park Connection (0.34 miles)

**Figure 0.2** shows the existing and proposed segments of trails for the Pioneer Spirit Trail System. As shown, the proposed trail network provides connectivity surrounding the core downtown area as well as north and south of the city.

**FIGURE 0.2: EXISTING AND PROPOSED TRAIL SEGMENTS**



Source: Source: Hastings Connectivity and Walkability Study, 2019

Costs for these projects range from slightly more than \$1 million to about \$150,000. The average cost of one of the priority capital projects is approximately \$600,000. Beyond these proposed connections, the city intends to continue support Complete Street improvement projects and looks to property owners and developers to accommodate and support these efforts.

### **Bicycle Facilities**

In addition to the continued improvement of bicycle friendly trails, the city has a selection of bicycle facilities to highlight. Such as the bike share program offered through Hastings College, which has a fleet of 10 bicycles that can be used students or staff. In addition, the college offers year-long bicycle rentals for \$30 per year.

### KEY TAKEAWAYS

While the City of Hastings may have limited non-motorized transportation opportunities at this time, the City is committed to enhancing this network over the next ten years. There are segments of the city that support walking and biking; however, the identified areas of improvement and proposed projects will create a more connected city. The proposed improvements will not only increase non-motorized accessibility, but also improve safety for those who opt to walk or bike throughout the city.

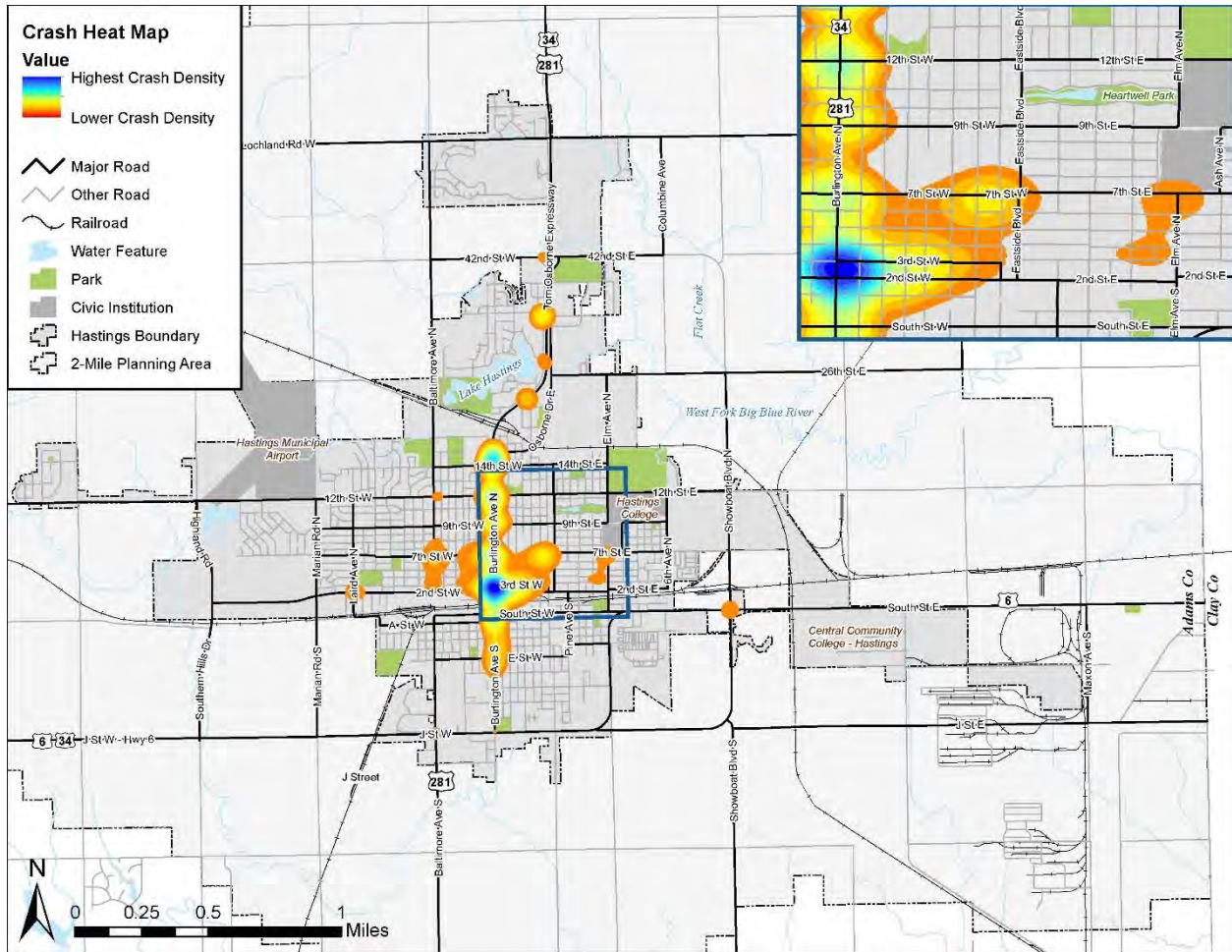
## Transportation Safety Assessment

### NDOT CRASH DATA

A common way to evaluate the safety of a transportation network is to assess where vehicle accidents are occurring, the severity of the accidents, and the type of accidents that occur. Patterns can emerge in traffic data that can inform planning recommendations or initiatives to improve safety.

Five Year Crashes

MAP 7: HASTINGS 5-YEAR CRASH HISTORY HEATMAP

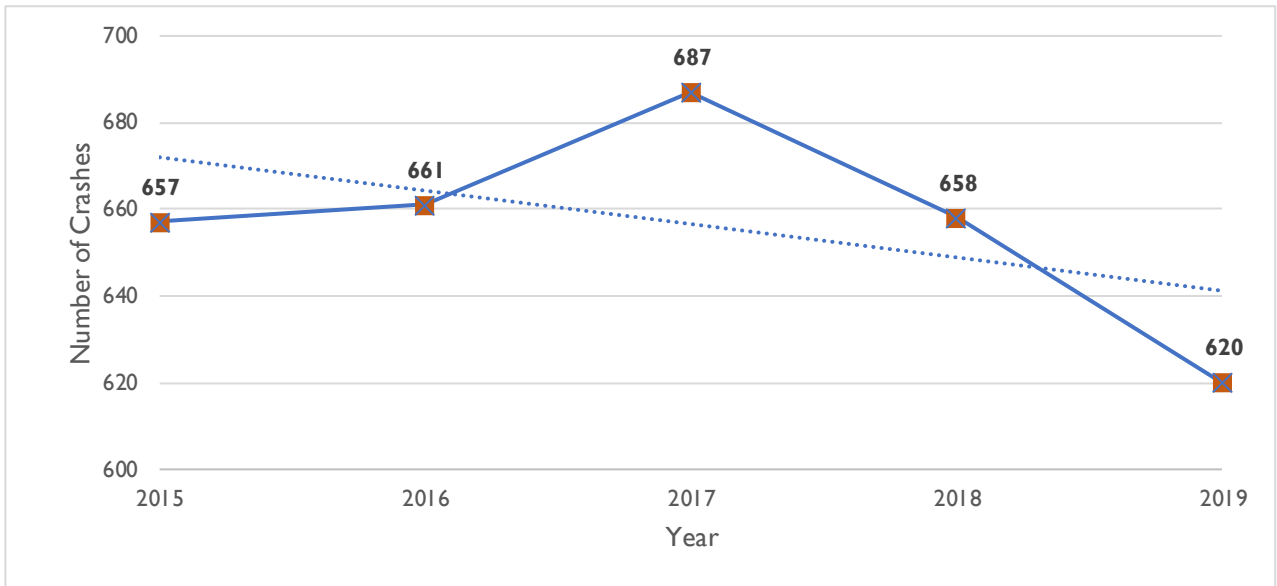


Crashes by Year

**Figure 0.1** shows the total crashes per year in the past five years (2015-2019). Over the past two years between 2017 and 2019 there was a 5.0% decrease in total vehicles crashes in Hastings.



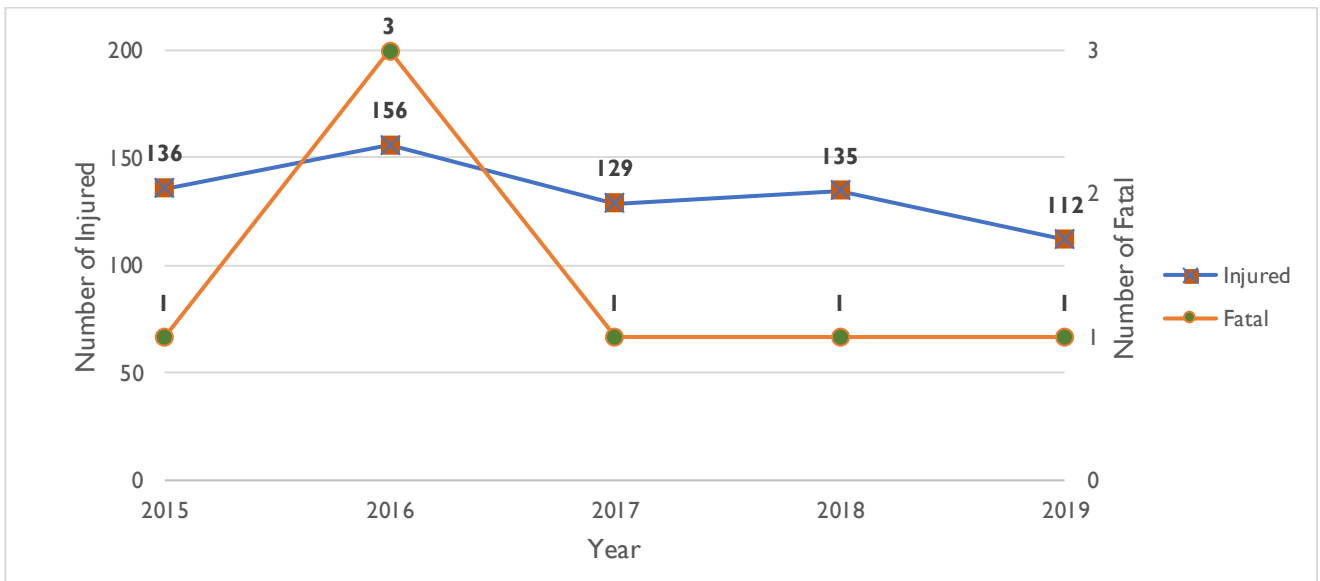
**FIGURE 0.1:VEHICLE CRASHES BY YEAR (2015-2019)**



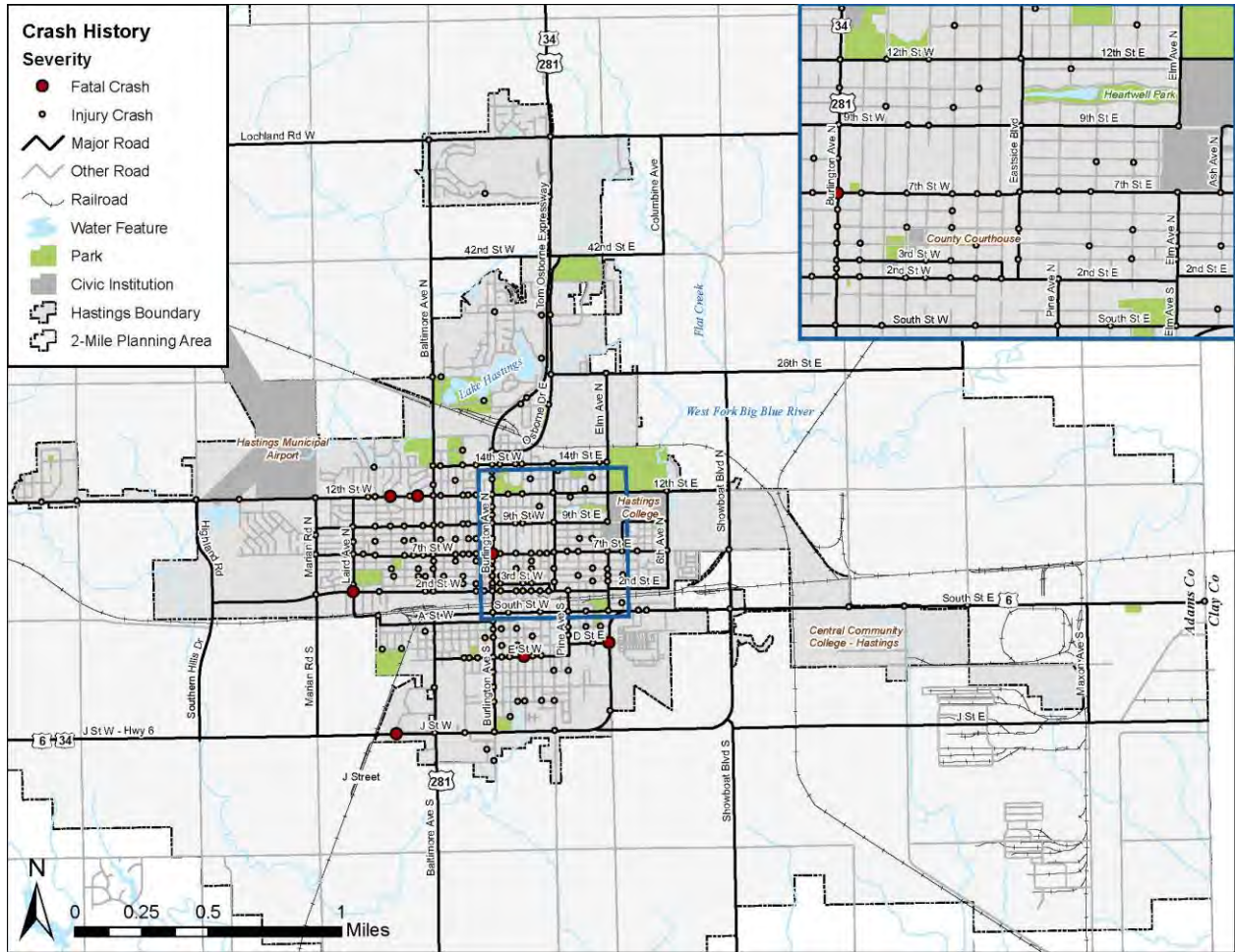
**Crashes by Severity**

**Figure 0.2** shows the severity of the crash broken into the number of injured people and the number of fatalities per year in the past five years (2015-2019). The blue line graph illustrates the number of injured people and the orange line graph illustrates the number of fatalities. Over the past three years between 2016 and 2019 there was a 10.5% decrease in the number of injured people and a 31% decrease in the number of fatalities.

**FIGURE 0.2:VEHICLE CRASHES BY SEVERITY (2015-2019)**



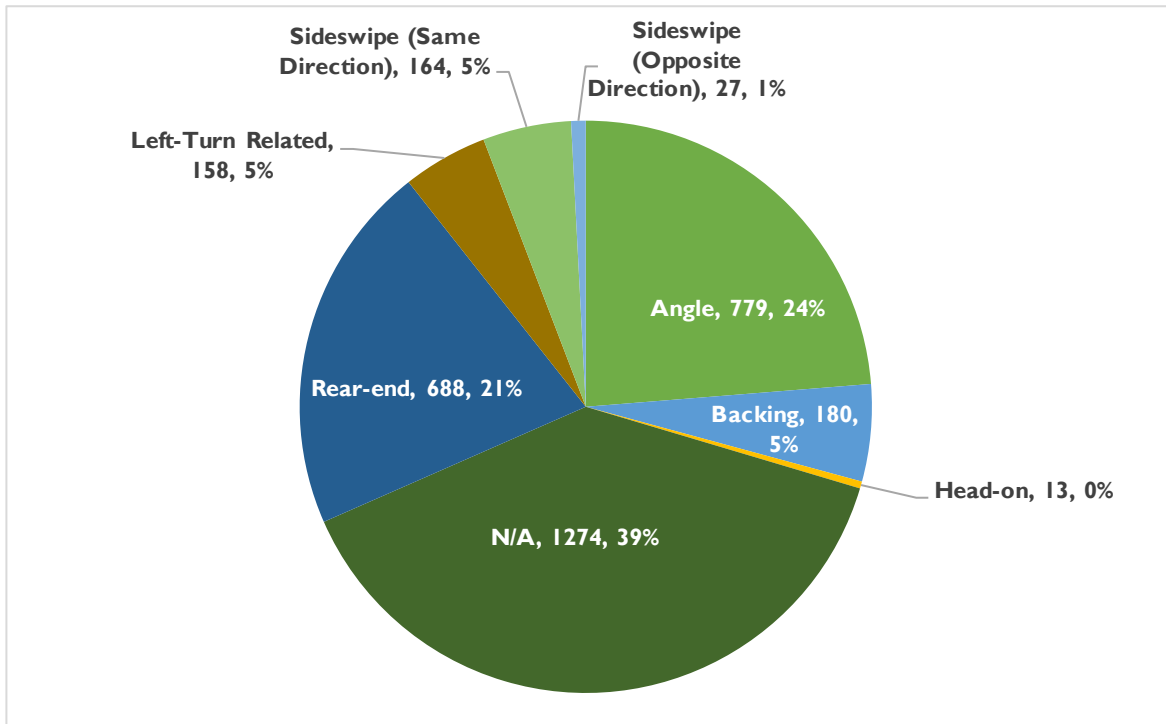
## MAP 8: 5-YEAR SEVERE CRASH HISTORY



### Crashes by Type

**Figure 0.3** shows that most of the crashes are either undetermined (39%), an angle collision (24%), or a rear-end collision (21%). The undetermined (N/A) crashes were made up of single vehicle collisions with a stationary object such as a tree, parked car, or light pole, a collision with a bicycle, or an animal.

FIGURE 0.3: VEHICLE CRASHES BY TYPE (2015-2019)



KEY TAKEAWAYS

- Crash data for Hastings indicates that the intersections in the immediate area of Burlington Ave N and E 2<sup>nd</sup> St experience the highest number of traffic accidents. This is likely due to the congestion and high volumes on these roads in the downtown core.
- 2017 experienced the highest number of accidents for the crash history analyzed, with rear-end and angle accidents being the most common.
- The most severe accidents occurred in 2016.

## Transportation Policy Alignment Assessment

### City of Hastings Complete Streets Policy (2013)

A Complete Street is designed to be a transportation corridor for all users: pedestrians, cyclists, transit users, and motorists. Complete streets are designed and operated to enable safe continuous travel networks for all users, pedestrians, bicyclists, and motorists of all ages and abilities can safely move from destination to destination along and across a network of complete streets. Elements of Complete Streets include street and sidewalk lighting, pedestrian and bicycle safety, access to streets and sidewalk, street trees and landscaping, drainage, parking, and street amenities. The vision of the City of Hastings is to provide a safe and efficient motorized and non-motorized transportation system that creates access to businesses, schools, parks, and neighborhoods, promotes health and mobility, and takes into consideration all citizens and all modes of transportation.

The purpose of this policy is to provide a network of interconnected local and collector streets that supports walking and bicycling for all citizens of Hastings, Nebraska. This will be accomplished because all street projects—including design, planning, reconstruction, rehabilitation maintenance, or operations—shall be executed in a way that takes into consideration ways to accommodate and encourage travel by bicyclists and pedestrians of all ages and abilities.

### **Parking Management & Policies**

The City accurately states in their general “Parking Guidelines” that effective parking management is important to the community. This is especially true in the downtown core where many businesses rely on the public parking supply to meet the needs of their customers and employees. Effective management of the downtown public parking system is a proven economic strategy that generally allows for greater development density, higher land values, increased foot traffic, and expanded opportunities for infill and re-development.

The overall parking management approach generally starts with policy (defined by City code) and then how effectively that policy is implemented. The following City parking policies were identified as important components to how the current system operates; several notes have been added based on our initial meetings with City staff and stakeholders:

- Off-street parking requirements for private development are defined under Article III, Section 34-308 of the Hasting Municipal Code; land uses within the Downtown Central Business District (C-2 zoning) are exempt from providing parking. Note that this is a typical best practice to allow for development within a Central Business District but does mean that more of the burden falls to City-managed parking resources to meet the needs of downtown uses.
- Parking within City lots is restricted to 72 hours, meaning that these lots are not intended for long-term vehicle storage, though this is an issue in several locations.
- There is currently no formalized process within the code for overnight or residential permit parking within City-owned facilities; likewise, requests for curb-management zones, valet parking requests, parking for oversized vehicles or food trucks, and other needs are generally not addressed in the code.
- Much of the downtown on-street parking is time limited and posted for 2-hour or 3-hour parking; Community Service Officers (CSO's) are tasked with enforcing these regulations; much enforcement is currently in response to complaints, with less pro-active enforcement than prior years.
- Parking lot snow removal, repaving and some maintenance items are handled through Public/Works Streets.
- Other management responsibilities including signage, permit management, and administration generally fall to Development Services but are not clearly defined by the City ordinances.

### **KEY TAKEAWAYS**

Several parking policy challenges from the list above were mentioned repeatedly by different stakeholder groups. These issues generally limit the effectiveness of the downtown parking system. Recommendations in the next phase of the Transportation and Parking Master Plan will likely focus on the need for a more organized and comprehensive approach to downtown parking management, and the need for long-term funding sources for downtown parking assets. These challenges and potential solutions will be discussed with the community in the coming months.

## **Public and Stakeholder Engagement**

### **PROJECT ADVISORY COMMITTEE**

The Project Advisory Committee (PAC) exists to ensure the project direction, methods, and outcomes are consistent with the expectations and understanding of the community. As such the committee is comprised of individuals from various areas of Hastings, spatially and background.

## FOCUS GROUP INTERVIEWS

The project team set up four meetings with the four voting wards of the city. These meetings were focused on gathering detail and differences between the wards to help understand the transportation challenges for each ward. The 1-hour meetings were conducted at the auditorium, as they occurred during the COVID pandemic and needed to provide social distancing.

Each ward was asked to provide feedback on the state of the city, what they thought was going well, what needed improvement, and what they valued as citizens. These comments were collected across all the wards, in addition to a larger open house style meeting that was made available to anyone who could not attend their individual ward meeting. The summary on the next page is the key outcomes from this outreach.



## FOCUS GROUP OUTREACH

The city hosted five focus group interviews, one for each of the four voting wards plus a city-wide meeting. These meetings gave 37 participants the opportunity to discuss transportation topics and aspirations with the project team. Below is a summary of themes heard in those conversations.



### What's Important?

**SAFETY**



Safety—from crashes to crime—is a core value for Hastings residents.

**CHARACTER**



Small town character and cleanliness add to the charm of Hastings.

**COMMUNITY**



Hastings has friendly neighbors who volunteer their time and work together.

### What Do We Like?

**TRAILS**



The growing trail system is great for families and community health!

**MAINTENANCE**



Upkeep and repairs are done in a timely fashion.

**PLACES**



From the colleges to water parks, Hastings has interesting places that add to its appeal.

### What Could Use Improvement?

**TRAFFIC FLOW**



Traffic signals and limited cross-town routes cause congestion, particularly around schools.

**RAILROAD QUIET ZONES**



Train horns regularly impact resident's quality of life and as well as disturb downtown visitors.

**MODAL OPTIONS**



Desire for more hiking and biking trails, sidewalk continuity, and public transit.

## ONLINE COMMUNITY ENGAGEMENT

Following the focus group interviews, the first round of full public and stakeholder engagement process was largely focused on allowing residents to:

- Decide what should be prioritized in this Transportation Master Plan;
- Weight trade-offs in how to use the County’s limited transportation funding; and
- Map strengths, weaknesses, and opportunity areas in the County’s transportation system.

Due to the Covid-19 pandemic and associated guidance for the public to stay at home as much as possible, this round of engagement was conducted completely virtually. A robust and interactive survey using the MetroQuest platform was developed to obtain similar input to a public open house. A total of 359 respondents completed the survey.

The MetroQuest survey is divided into five pages; a detail of each page and the results are provided below:

### SURVEY PAGE 1. WELCOME

FIGURE 4. METROQUEST WELCOME PAGE



**Purpose.** Provides an overview of the survey and the TMP planning process.



SURVEY PAGE 2. GOALS

FIGURE 5. METROQUEST GOALS PAGE



**Purpose.** Allows residents to prioritize the draft project goals. Respondents were able to click on each goal to see each goal statement and then rank their top five goals by dragging them above the dashed line. The goals were described as follows:

**Resiliency**

*Design transportation facilities and networks so they are secure and resilient to impacts from man-made or natural disasters.*

**Integration**

*Integrate transportation and land use decisions to create and preserve neighborhoods that promote vibrant community character and encourage active living.*

**Safety**

*Transportation facilities that provide safe travel options for all residents and visitors.*

**Efficiency**

*Optimize the use of existing infrastructure as well as strategic seeking of funding options to make effective investments in the transportation network.*

**Connectivity**

*Design transportation facilities and networks so they are secure and resilient to impacts from man-made or natural disasters.*

**Growth**

Promote growth in the economy, development, and tourism by providing a transportation system that accommodates current and future demand for the movement of residents, visitors, and goods.

**Choices**

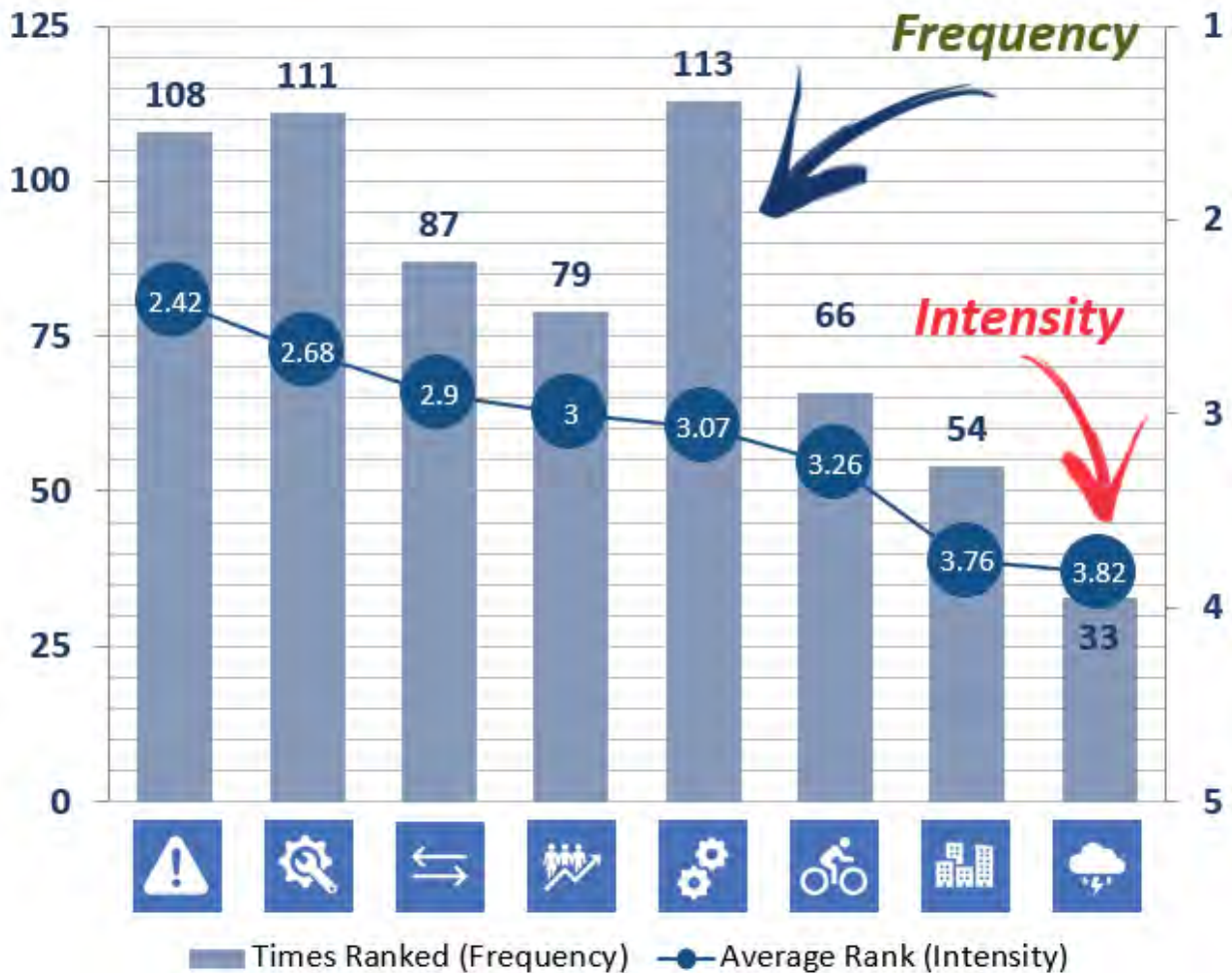
Provide travel choices that are accessible to all travelers, promote local mobility, and reduce the impacts of transportation on the environment and neighborhoods.

**Maintenance**

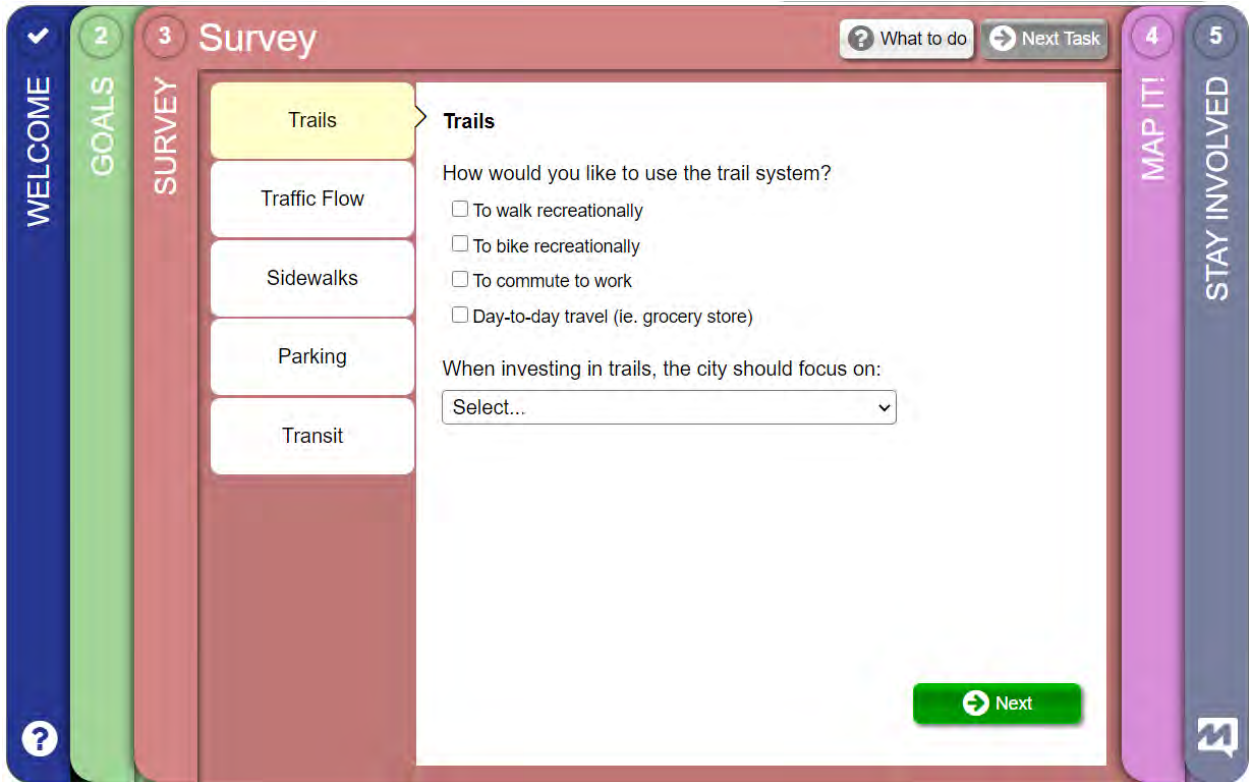
Extend the life of the transportation system and promote fiscal responsibility by emphasizing maintenance over system expansion.

**Results.** Safety received the highest average score and was among the highest in frequency; Maintenance was the second in both frequency and intensity of responses. Many respondents thought that Efficiency was important, but the gap between frequency and intensity shows that when it was ranked, it wasn't ranked particularly highly. There's a significant gap between frequency the top three ranked goals and the remainder of the goals. It is also clear that Integration and Resiliency are not major priorities in Elbert County.

FIGURE 6. METROQUEST GOALS RANKING RESULTS



SURVEY PAGE 3. SURVEY



The screenshot shows a survey interface with a red header bar. On the left, a vertical navigation bar contains five steps: 1. WELCOME (blue), 2. GOALS (green), 3. SURVEY (red, active), 4. MAP IT! (purple), and 5. STAY INVOLVED (dark blue). The main content area is titled 'Survey' and has a sub-header 'Trails' highlighted in yellow. Below this, a list of topics includes 'Trails', 'Traffic Flow', 'Sidewalks', 'Parking', and 'Transit'. The 'Trails' section contains the following questions and options:

**Trails**  
 How would you like to use the trail system?  
 To walk recreationally  
 To bike recreationally  
 To commute to work  
 Day-to-day travel (ie. grocery store)

When investing in trails, the city should focus on:  
 Select... (dropdown menu)

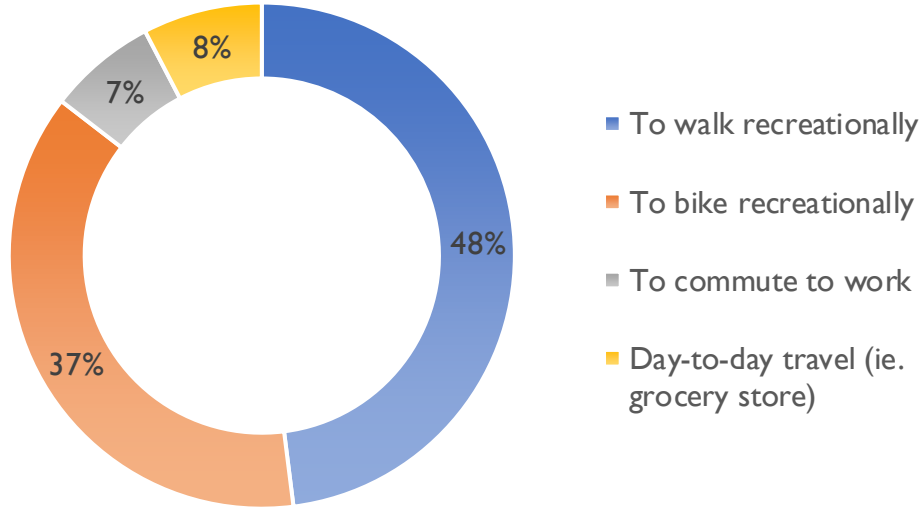
At the bottom right of the survey area is a green 'Next' button with a right-pointing arrow. In the top right corner of the survey area, there are two buttons: 'What to do' with a question mark icon and 'Next Task' with a right-pointing arrow icon.

**Purpose.** Allows respondents to respond to a variety of questions on five different topics. These questions help understand the participant’s viewpoint for the transportation system. The topics included trails, traffic flow, sidewalks, parking, and transit.

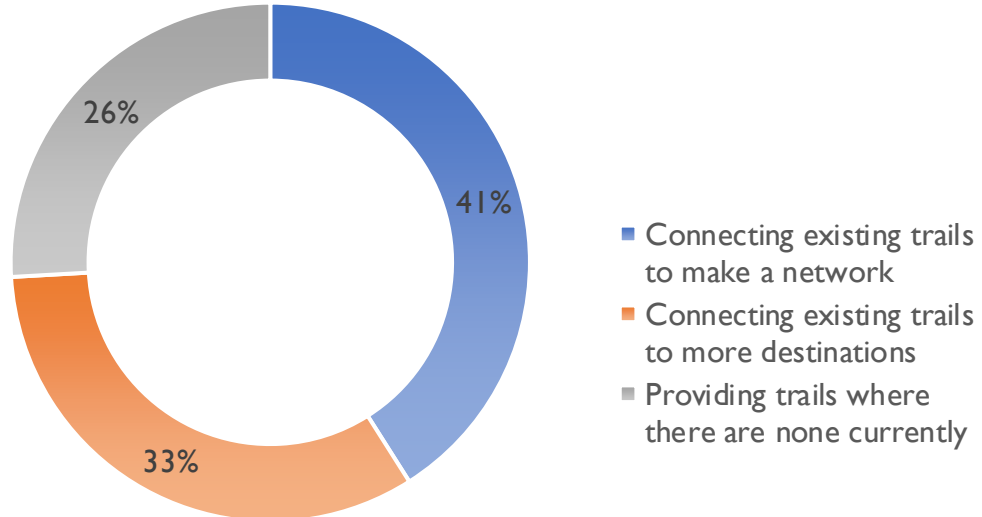
**Results.**

**Trails**

**How would you like to use the trail system?**

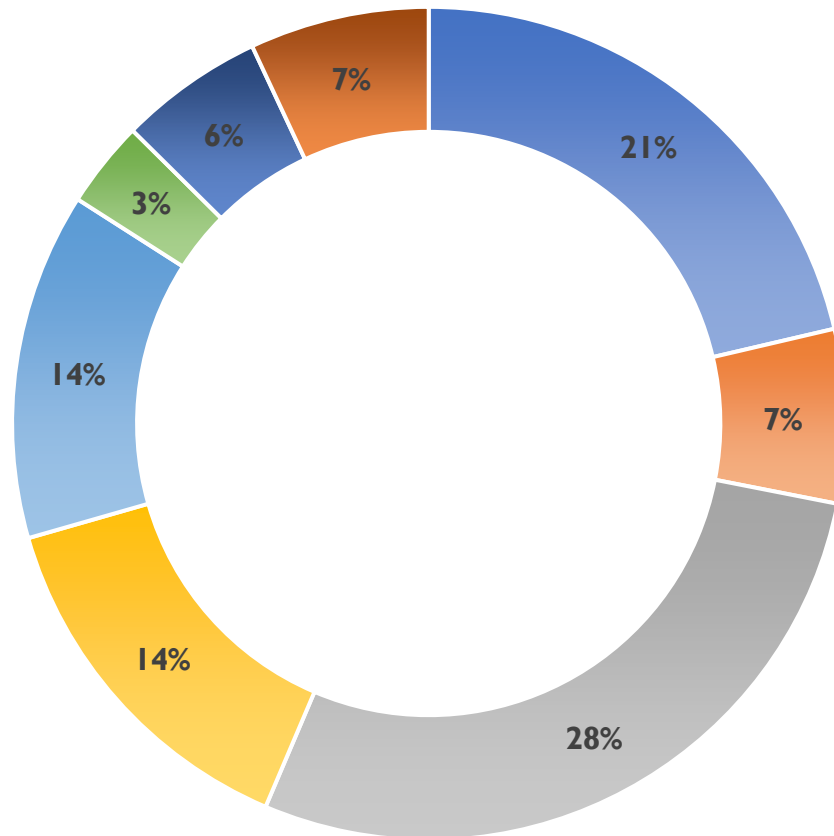


**When investing in trails, the city should focus on:**



**Traffic Flow**

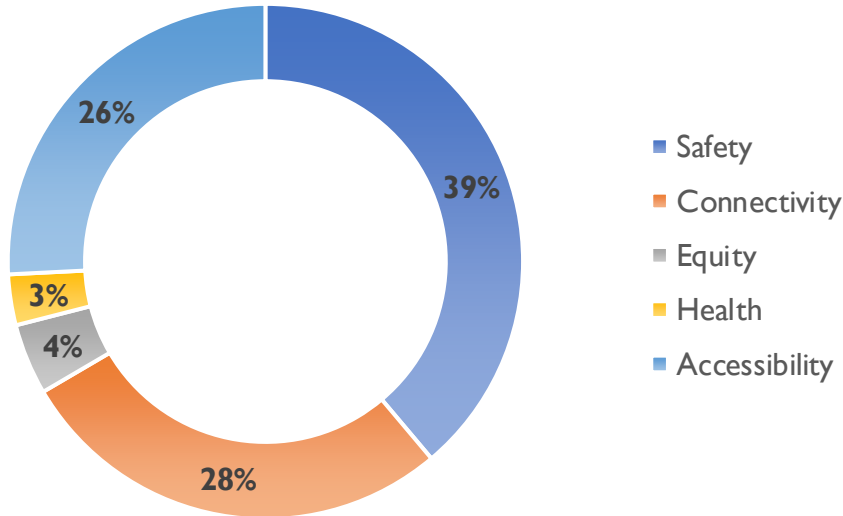
**What street improvements should the city focus on most? (Select 3)**



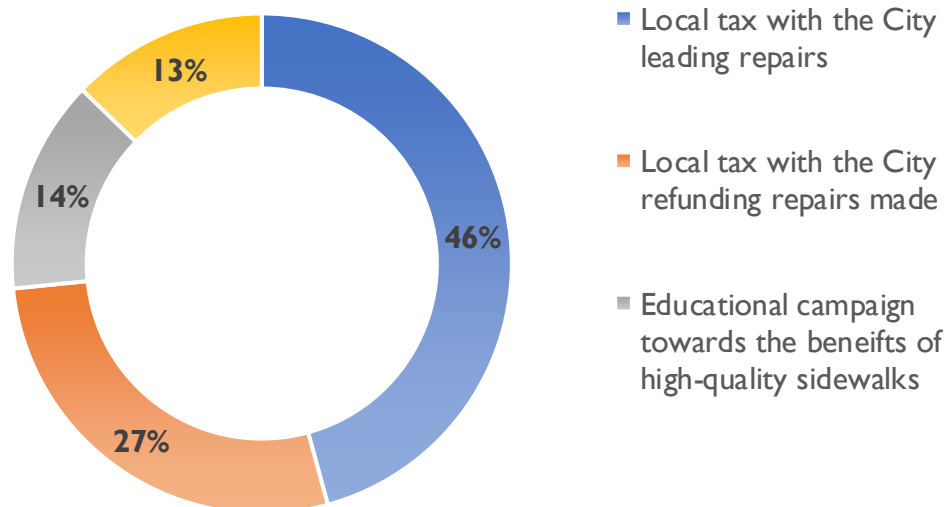
- Traffic Congestion
- Traffic Speed
- Street Maintenance
- Pedestrian & Bike Safety
- Street Network & Connectivity
- Way-finding and Signage Clarity
- Streetscape & Beautification
- One-Way to Two-Way Street Conversion

**Sidewalks**

**What should the City prioritize most in the sidewalk network? (Select 2)**

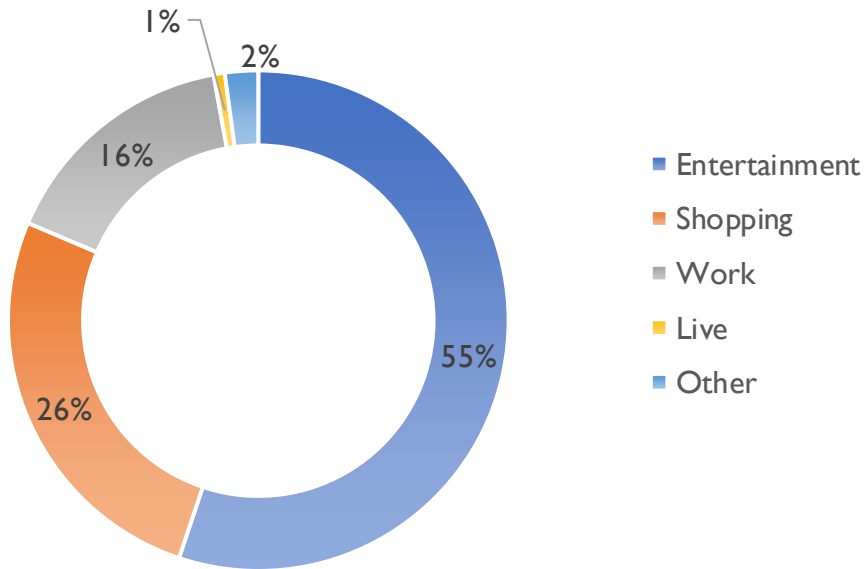


**What ways should the City explore to assist/encourage sidewalk repairs?**

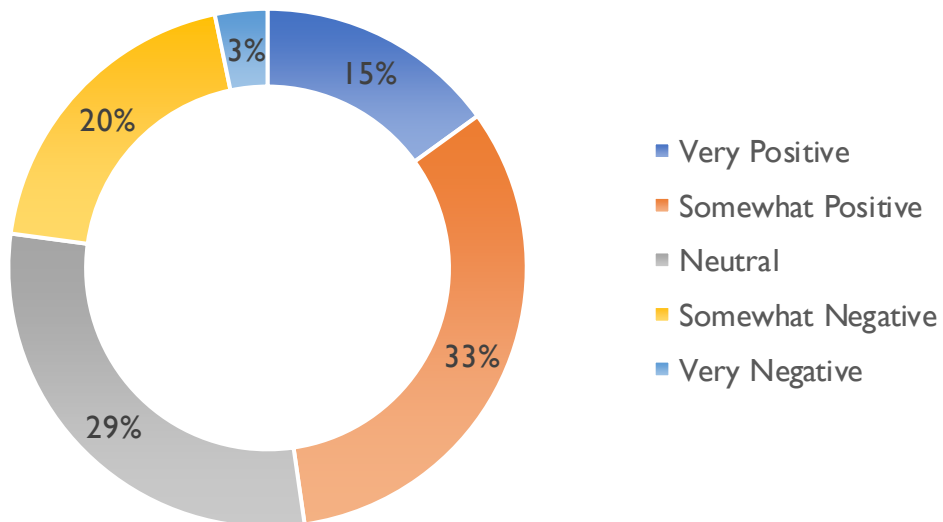


**Parking**

**Why do you visit downtown Hastings?  
 (select all that apply)**

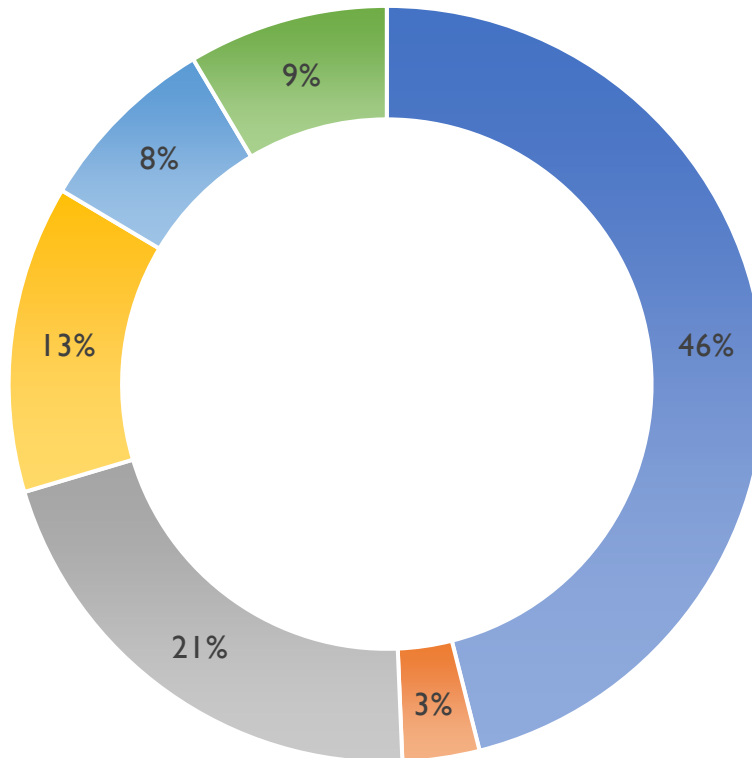


**How would you describe your experience  
 accessing downtown parking?**



**Transit**

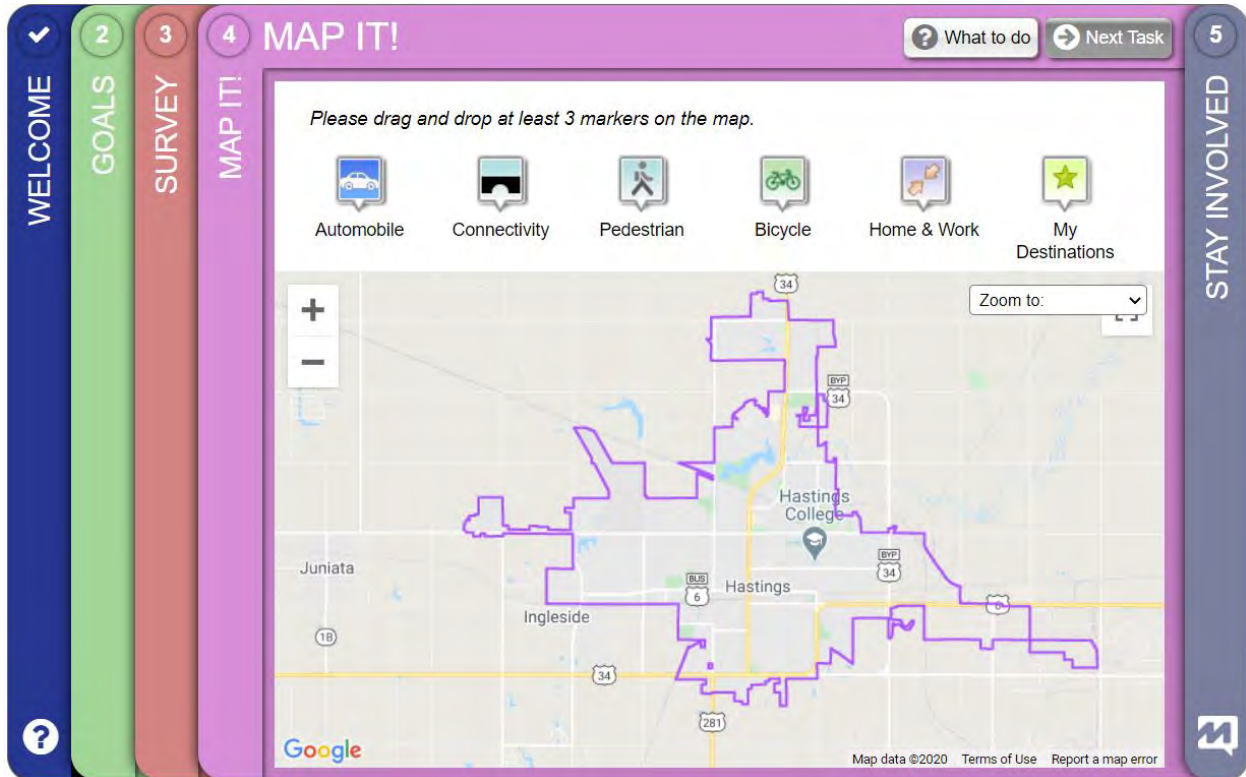
**Why are you most interested in public transit?**



- I am not interested in public transit
- I do not have access to a car -OR- I cannot drive
- To reduce greenhouse gasses
- To reduce the stress of driving
- To save money
- To supplement long walking or biking trips



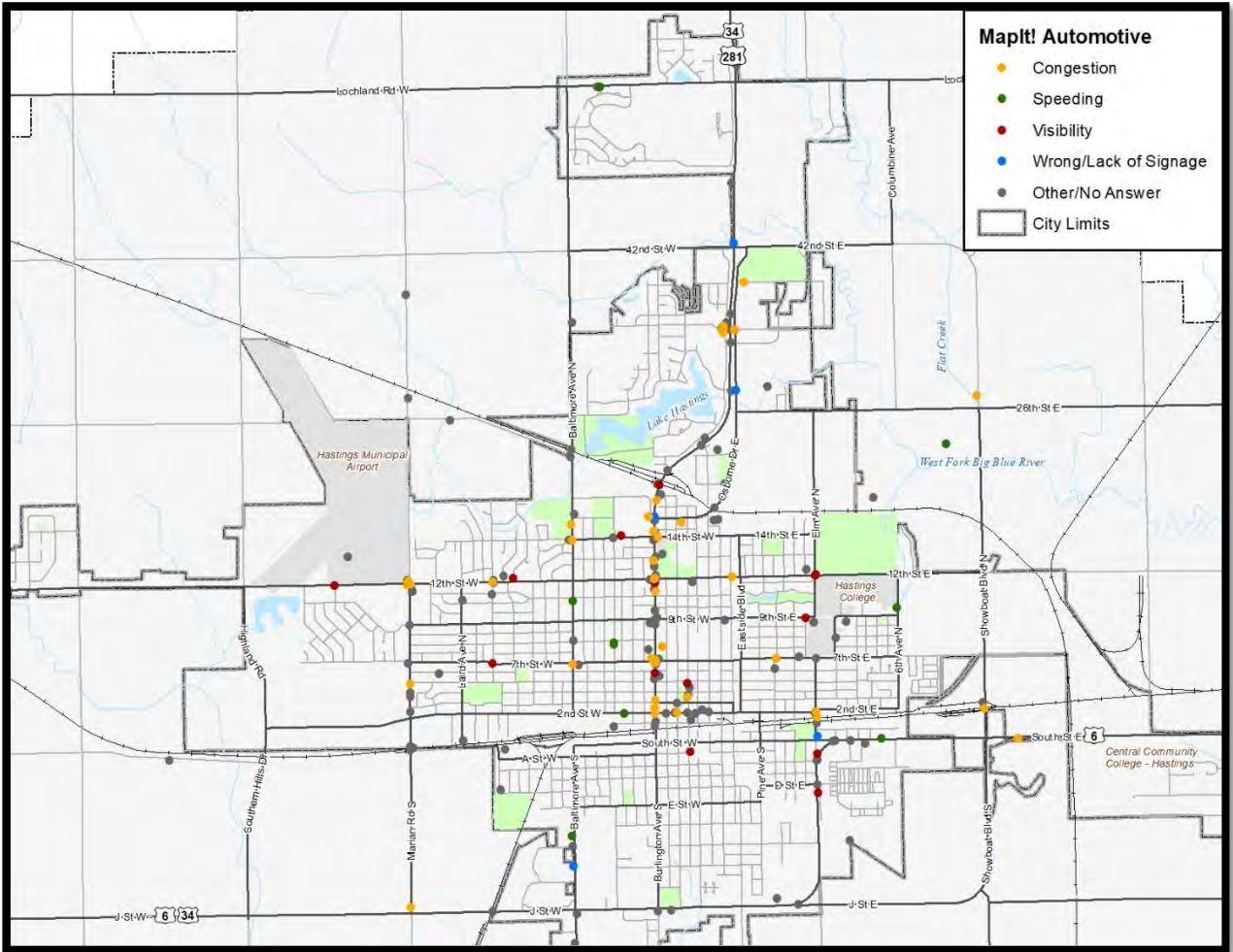
SURVEY PAGE 4. MAP IT!



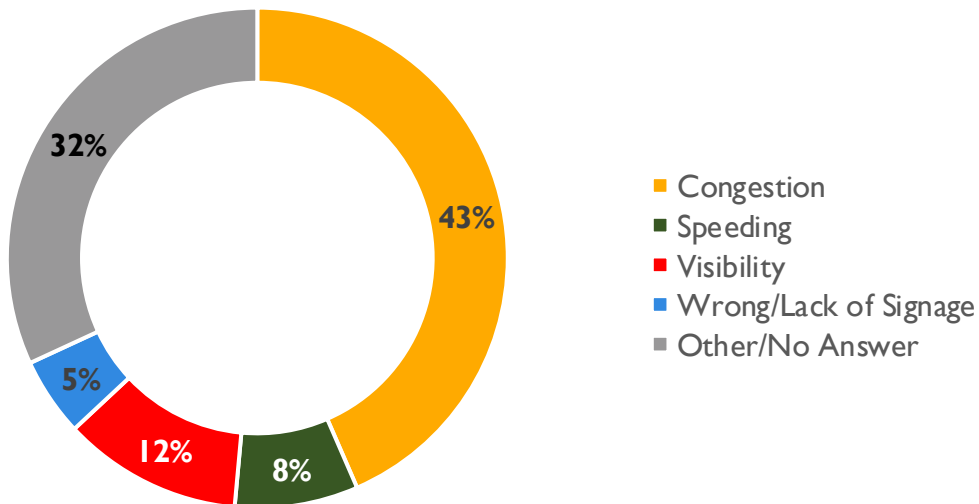
**Purpose.** Allows respondents to place markers on a map where they would like to show strengths, weaknesses, opportunity areas, along with the respondent’s home and work locations if they chose to provide that. The respondent was then able to type in a description of the issue they were indicating.

**Results.** A total of 514 markers were dropped in this page for all marker types, of which 402 were automobile, connectivity, pedestrian, or bicycle markers. This resulted in 1,797 different data points and over 400 written comments.

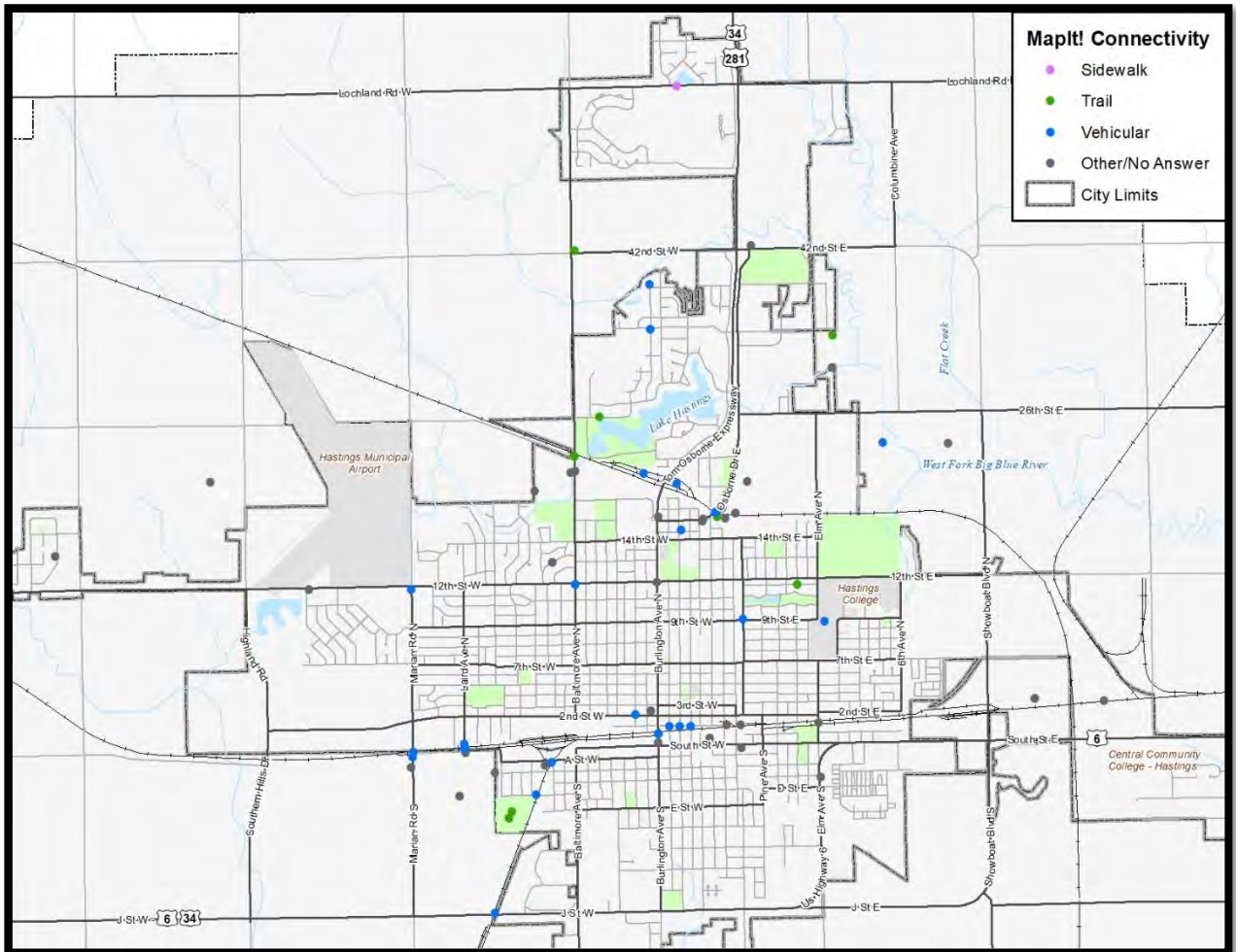
**Automobile**



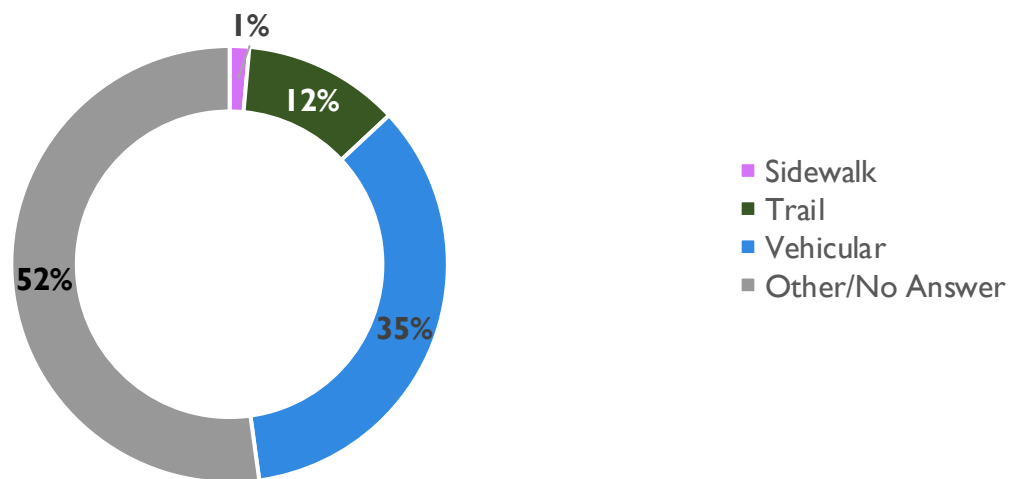
There were 236 automobile markers provided. Congestion was the largest contributor to the markers, with a clustering along Burlington Ave. from downtown to the overpass.



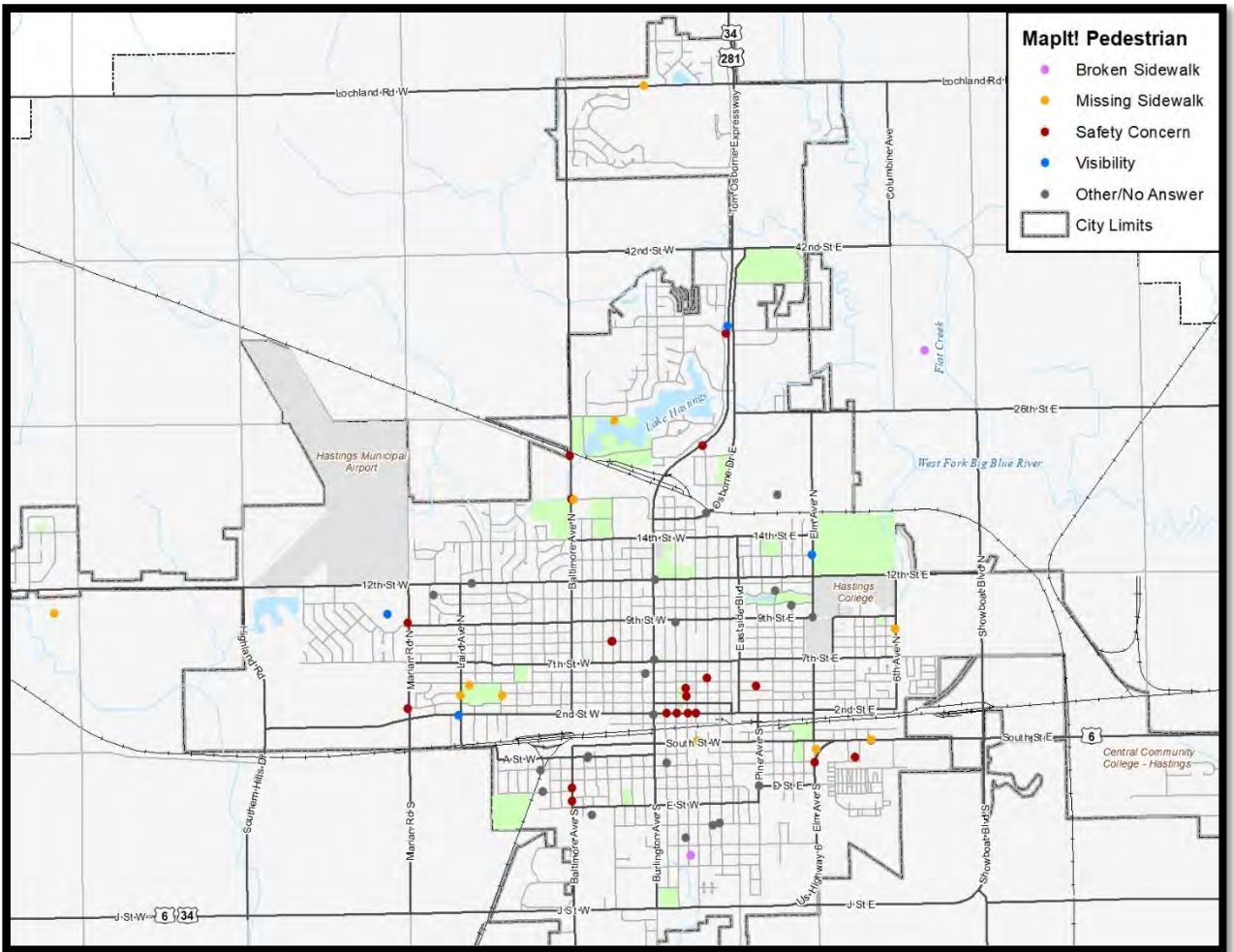
Connectivity



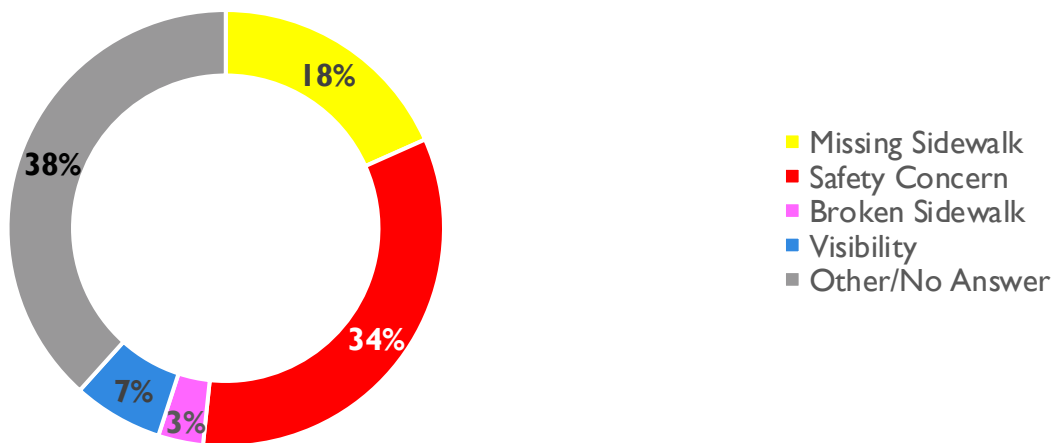
There were 69 connectivity markers. Many markers were accommodated by written comments with a clustering near downtown and the Osborne Dr. overpass.



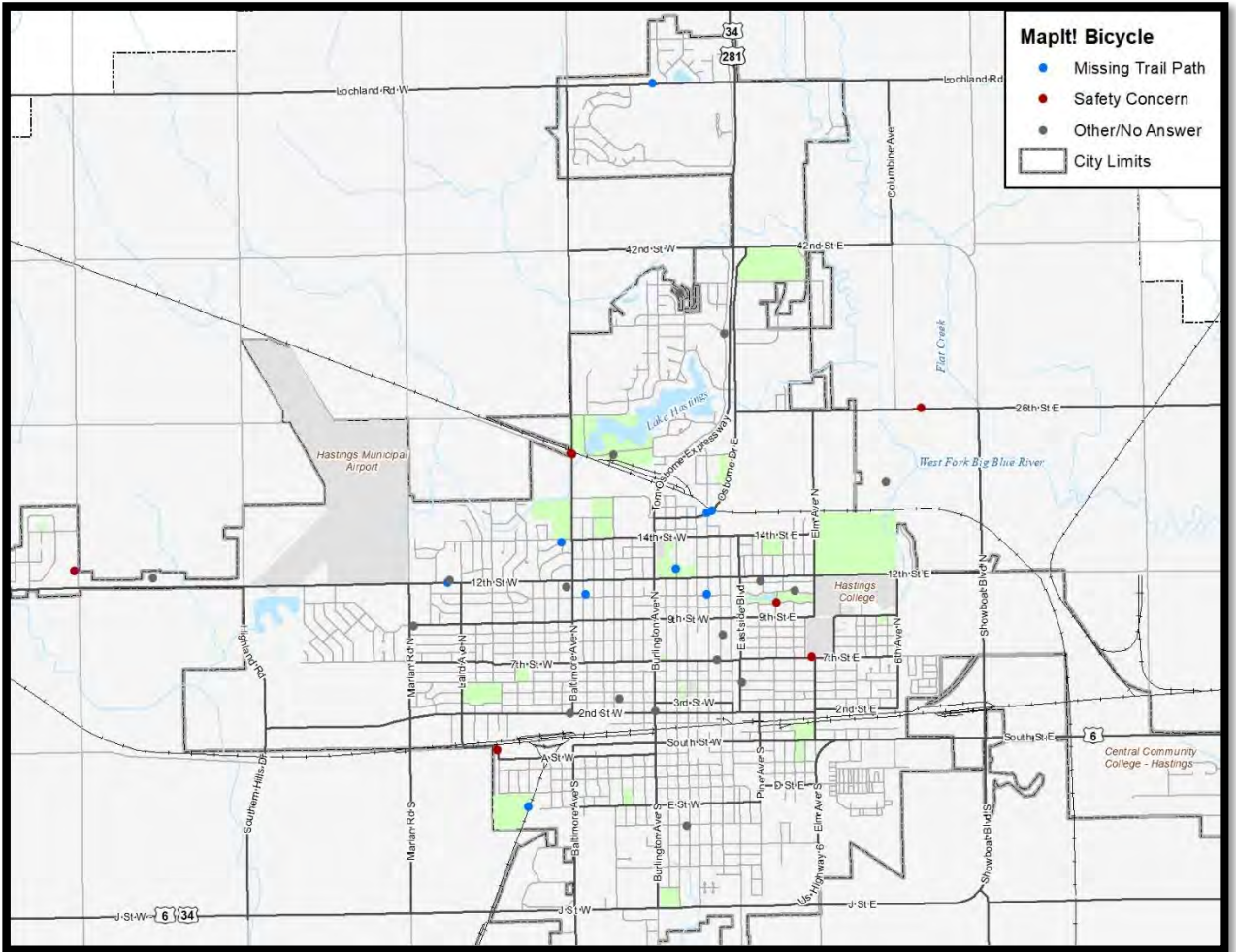
**Pedestrian**



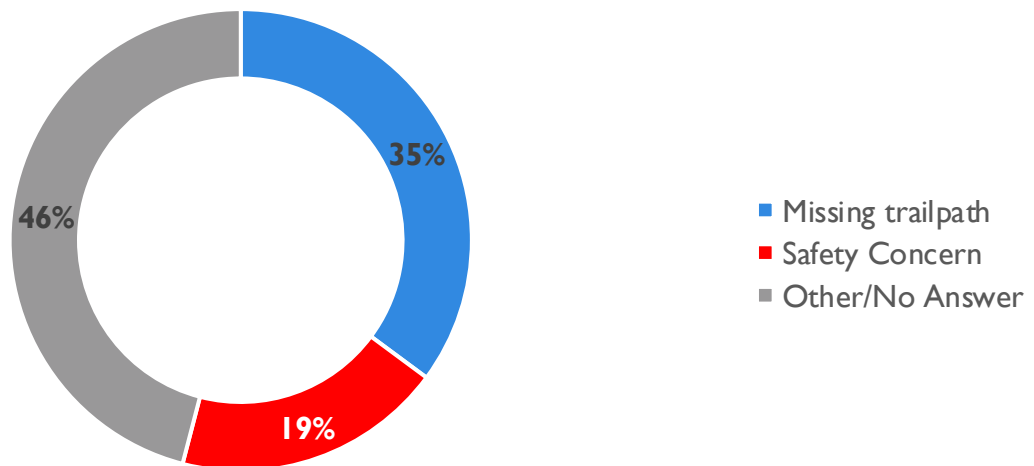
There were 60 pedestrian markers. Downtown received several safety concern comments and ward I, south of downtown, had several marker comments.



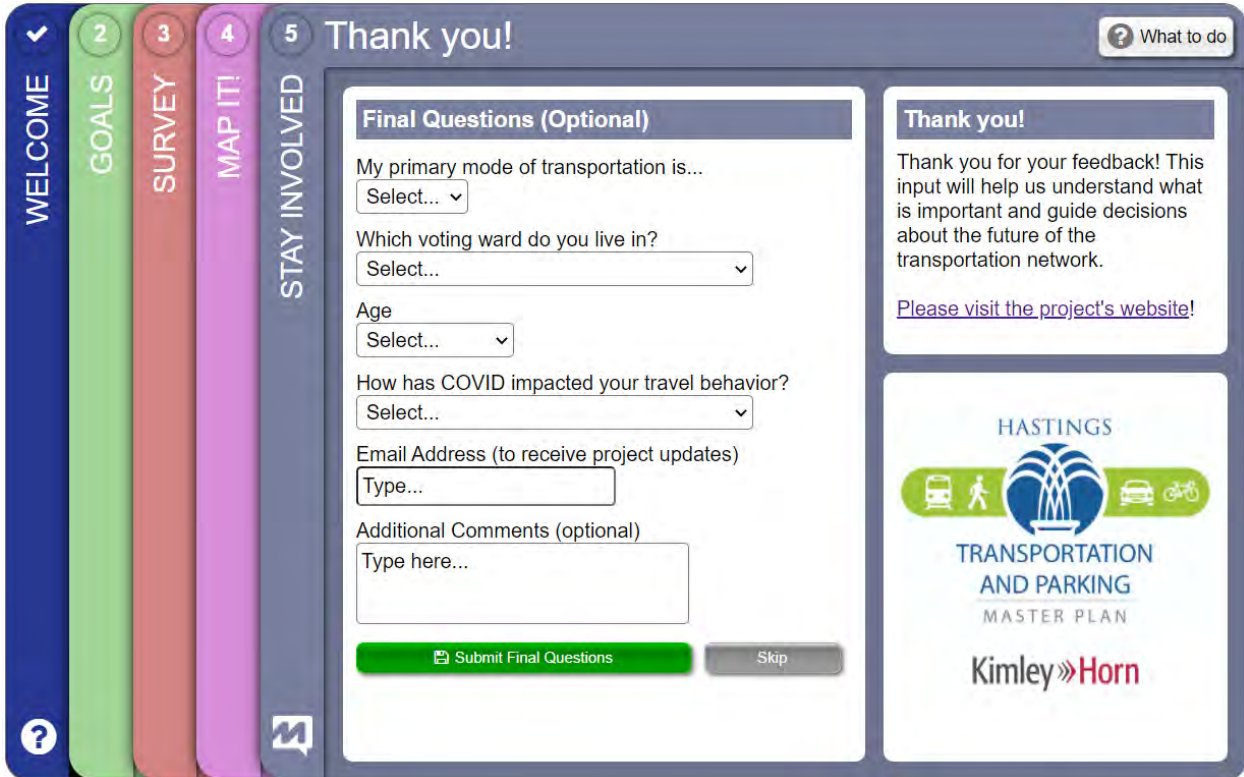
**Bicycle**



There were 37 bicycle markers with many highlighting missing trail paths or desired connections for trails.



SURVEY PAGE 5. STAY INVOLVED



**Purpose.** Asks respondents for additional demographic data, as well as a question specific to the impacts of COVID on their travel behavior. This page also allows respondents to sign up for project updates and add any additional comments they feel were not covered in the survey.

KEY TAKEAWAYS

- The Goals prioritization analysis indicates that roadway safety, maintenance, and connectivity are the highest priorities for residents, with efficiency being a factor for the highest number of people. The resiliency of the transportation system and transportation/land use integration are the lowest priorities of the eight goals.
- The survey page showed respondents would like to use the trail system recreationally and would like to expand and connect the current system.
- Over 70% of participants were in favor of the city exploring a taxing mechanism for repairing sidewalks.
- The mapping exercise showed a lot of interest and concern around Burlington Ave and Downtown.

## Opportunities and Constraints

Evaluating the existing conditions of the transportation network in Hastings is an important step in the planning process. Existing conditions can highlight areas where the transportation network is currently meeting the needs of the Hastings communities, areas where there are opportunities, and areas where the transportation network may experience constraints.

## HASTINGS TRANSPORTATION OPPORTUNITIES

Transportation opportunities are existing or anticipated strengths of the transportation system or county demographics which will contribute to the future development and maintenance of the county's multimodal network. Hastings transportation opportunities include:

- The city has undertaken several mobility and transportation related plans recently, which help to paint a more accurate picture of the city's transportation system.
- Survey participants priorities of maintenance and safety match well with the city's focus on roadway resurfacing and railroad quiet zones.
- There are several projects on the One- and Six-Year Plan that cover key issues brought up in the Map It! comments/markers.
- Crash frequency has been declining in Hastings over the past several years

## HASTINGS TRANSPORTATION CONSTRAINTS

Transportation constraints are existing or anticipated weaknesses or threats of the transportation system or county demographics which will make future investments in the transportation system more difficult. Hastings' transportation constraints include:

- The city's comprehensive plan, Imagine Hastings, is aging and its goals and direction must be internally vetted before being assumed to accurately reflect the community's desires and priorities.
- Imagine Hastings has numerous city goals, many which are difficult to monitor or keep track of progress.
- The railroads cutting through Hastings pose a significant obstacle to efficient connectivity across town.
- More recent development in the city has had less of a focus on connectivity than the historic parts of town.

HASTINGS



TRANSPORTATION  
AND PARKING  

---

MASTER PLAN

# Appendix C

## Downtown Parking Assessment and Recommendations



## MEMORANDUM

To: Lisa R. Parnell-Rowe, Director of Development Services

From: Jeremiah J. Simpson  
Kimley-Horn and Associates, Inc.

Date: June 23, 2021

Subject: TPMP Addendum - Downtown Parking Assessment and Recommendations

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### Purpose

The purpose of this memorandum is to assess the City of Hastings' ("City's") downtown public parking system and provide recommendations related to parking infrastructure, parking management, curb lane policies, and enforcement. This document has been prepared as an addendum to the *Hastings Transportation and Parking Master Plan* (TPMP). Our recommendations are informed by the following data collection efforts:

- RFI and meetings with City staff for the initial TPMP Mobility Audit (July 2020)
- Parking Management Charette with stakeholders (February 2021)
- Site visit and downtown parking system inventory/occupancy surveys (May 2021)

### Introduction

One of the foundational elements of an effective parking management plan is to quantify the parking supply that is available for public use and determine how these stalls are being utilized. Occupancy surveys are usually collected during typical busy conditions (e.g., weekday daytimes, evenings, and weekends). This baseline survey of parking supply and demand helps to answer the questions of whether there is enough public parking downtown, what management strategies are most appropriate, and how much future growth and development can be supported before additional supplies are needed.

Currently, the City operates eight (8) public surface lots within, and near to, the downtown area along with on-street parking. A ninth lot (Lot 3) is managed by the Downtown Development Authority ("DDA") and is also available for public parking. In addition, there are several dozen privately-owned off-street parking lots associated with businesses that are generally available for customers and visitors.

All parking in the downtown is free. Block-face restrictions are ad hoc and include unrestricted, no parking, 15-minute, 2 hour and 4 hour limited parking, and ADA stalls. There are a small number

additional restrictions, such as temporary COVID-19 testing, delivery driver only, and 1-hour time limited stalls (the latter located near the library and the Adams County building). Much of the downtown is configured for one-way traffic with angles parking on both sides of the street.

The downtown study area covers roughly 93 acres and consists of 27 blocks. It is generally bound by W. 4th St on the North, Eastside Blvd on the East, the railroad tracks on the South, and N. Bellevue Ave on the West.

## Data Collection Methodology (Drone-Based Surveys)

Due to the impact of COVID-19, the project steering committee approved a plan to delay parking system baseline data collection to Spring 2021 and to collect downtown parking inventory and occupancy counts using drone-based high-resolution aerial photography. This option provided several advantages, including:

- The survey methodology provides an accurate record of existing public parking inventory for the three days of Thursday May 20<sup>th</sup>, Friday May 21<sup>st</sup>, and Saturday May 22<sup>nd</sup>, 2021.
- For each of the days image capture was completed three times per day-at 9:00 AM, 12:00 PM, and 6:00 PM. These three times are representative of parking demand for typical morning, mid-day and evening on weekdays and weekends.
- Kimley-Horn's cloud-based data storage and analysis tools (accessed through SiteScan ArcGIS) can be used to verify parking and other surface transportation and infrastructure conditions at any time in the future.
- The drone option provides for a repeatable methodology that may be deployed at a future date, as appropriate, to update surveys of weekday, weekend, and special event conditions.

## Downtown Study Area Map and Aerial Images

The following pages provide a sample of the drone-based imagery that was collected for the baseline parking inventory / occupancy surveys. Figures showing the data collection and the methodology associated are listed below:

- Figure 1. Downtown Study Area
- Figure 2. Drone Flight Pattern
- Figure 3. Sample Aerial Images
- Figure 4. Downtown Public Parking Facilities Map
- Figure 5. Parking Restrictions Map

Figure 1. Downtown Study Area

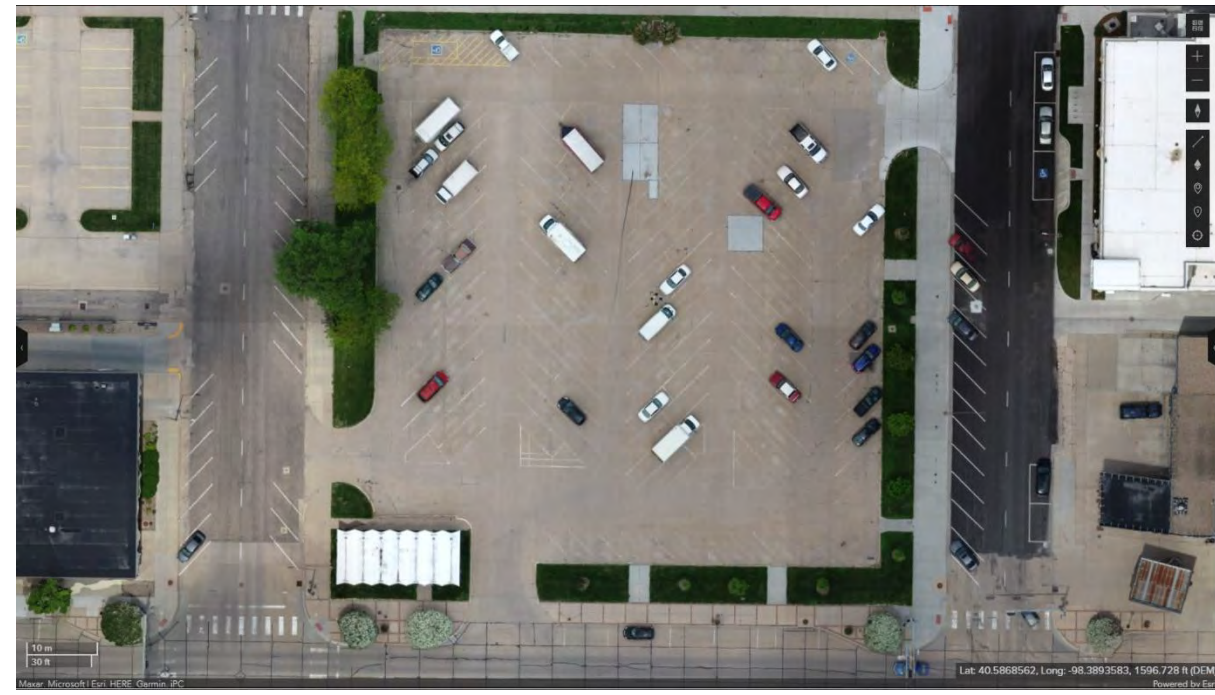
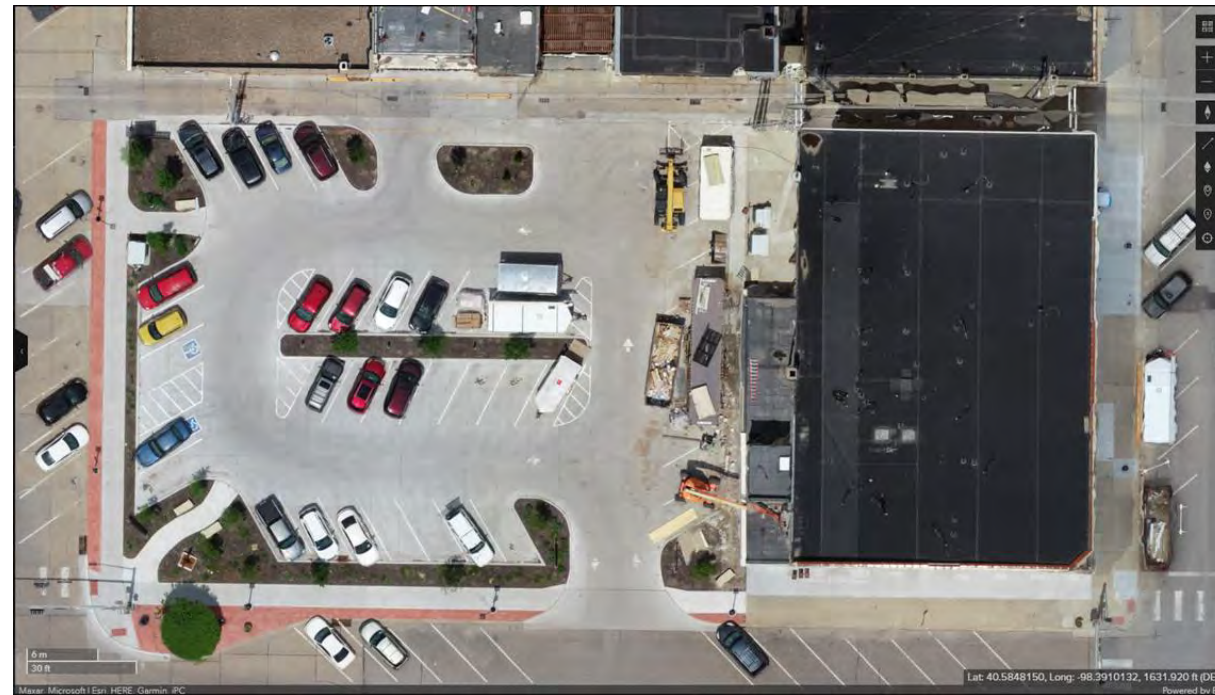


500 ft North ▲

Figure 2. Drone Flight Pattern



Figure 3. Sample Aerial Images (2D, Cloud Mapping, and Timeline)



\*Tools available for parking analysis using drone images and Kimley-Horn's hosting platform (SiteScan, ArcGIS)

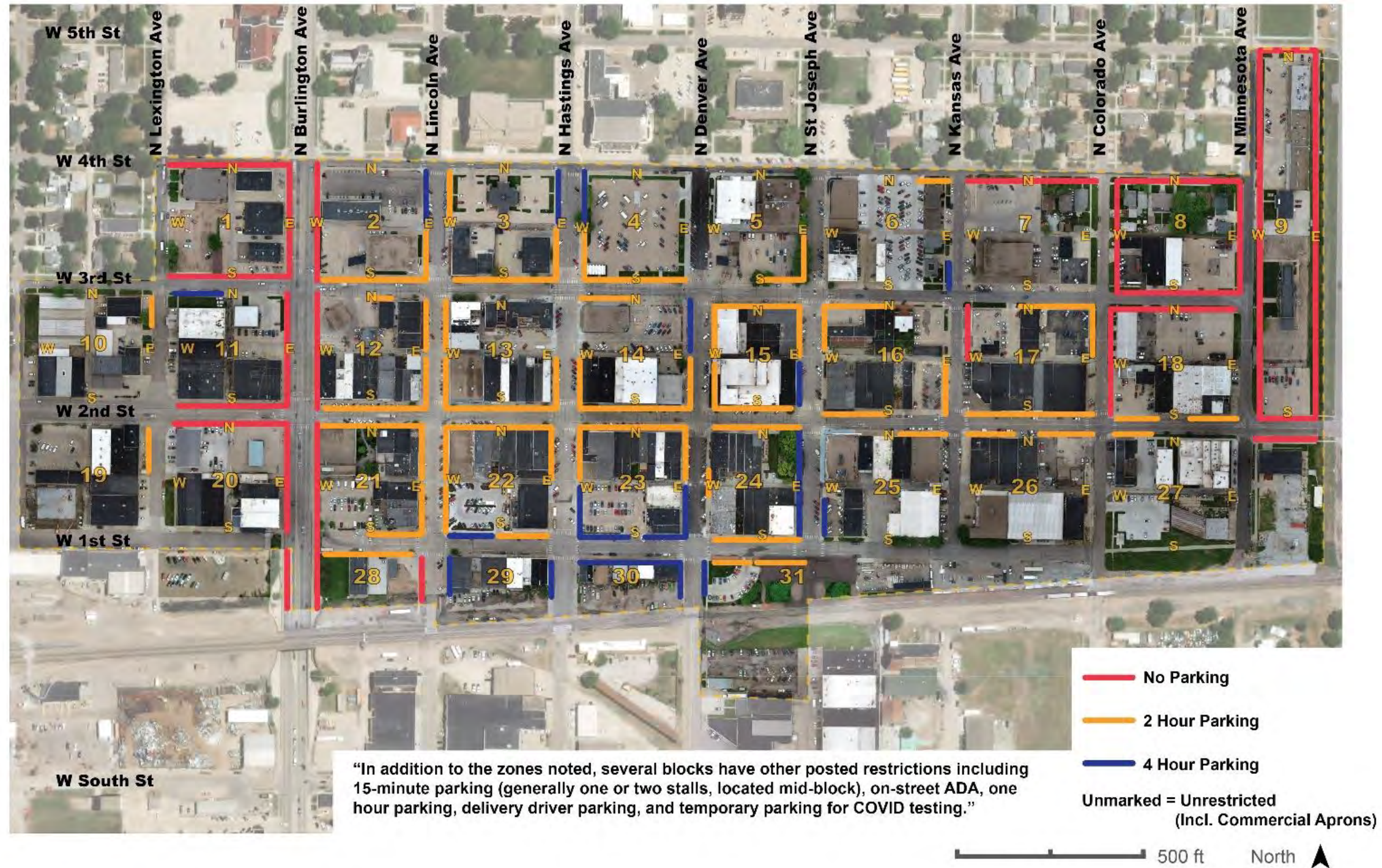
Figure 4. Downtown Public Parking Facilities Map

Hastings, NE - Parking Study

5/20/2021, 9:48 AM



Figure 5. Parking Restrictions Map



## Inventory Analysis

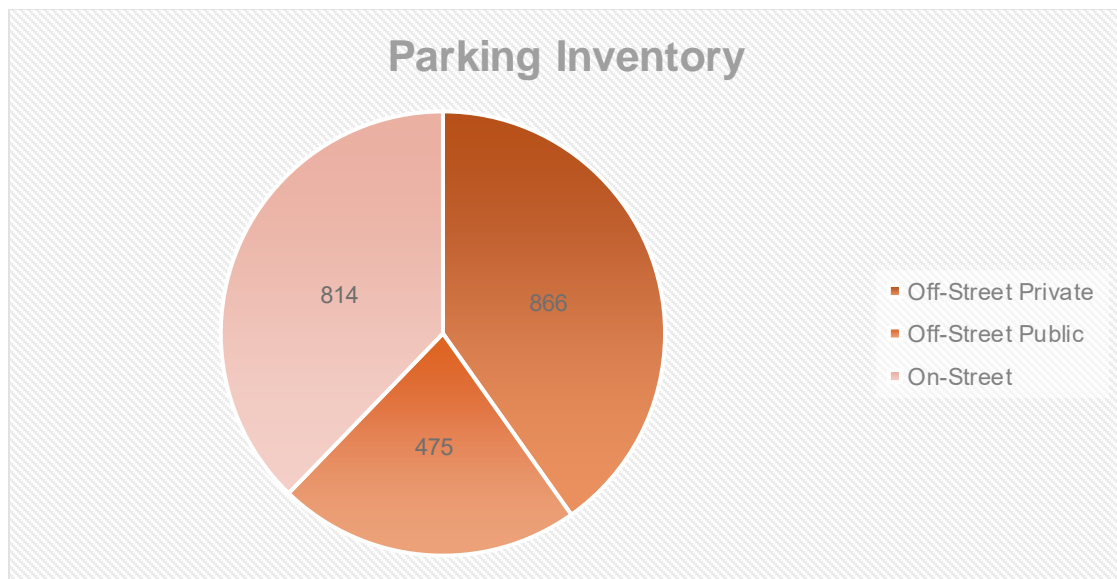
The study area’s inventory was broken down by Private Off-Street, Public Off-Street, and On-Street parking supply. For the purposes of this analysis, private parking includes all non- public lots, even if those lots are generally unrestricted and available for visitors and customers.

The study area has an approximate parking inventory of 2,155 spaces. Off-street private spaces account for 40% of total inventory whereas off-street public spaces make up approximately 22%. On-street parking provides 38% of the spaces in the study area. Off-street private parking includes several non-stripped dirt lots and/or lots with deteriorated surfaces that are used for parking.

Across all inventory categories the inventories should be considered “approximate.” Unstriped block faces, unimproved lots, and lots with deteriorated striping are all included based on their inventory estimates. We assume roughly 350 SF per stall for dirt lots or 22 linear feet of curb for unmarked block faces, though actual usage may vary.

Downtown parking systems are also relatively dynamic and subject to frequent changes. It is typical for surface lots to be reconfigured and restriped on occasion. Also, redevelopment, addition of ADA stalls, and other changes are often made to add and remove parking supplies.

**Figure 6. Approximate Parking Inventory**



There are nine total off-street public parking lots within the study area including Lot 3 which is managed by the DDA. The facility inventories are shown in Table 1.



**Table 1. Downtown Public Off-Street Inventory**

Public Off Street Parking Facility	Inventory
Parking Plaza	143
City Hall	35
Clock Tower	37
Lot 2	38
Lot 3	30
Lot 4	55
Amtrak Depot	25
W. of Underpass	59
Bruckman Rubber	53 (approx.)

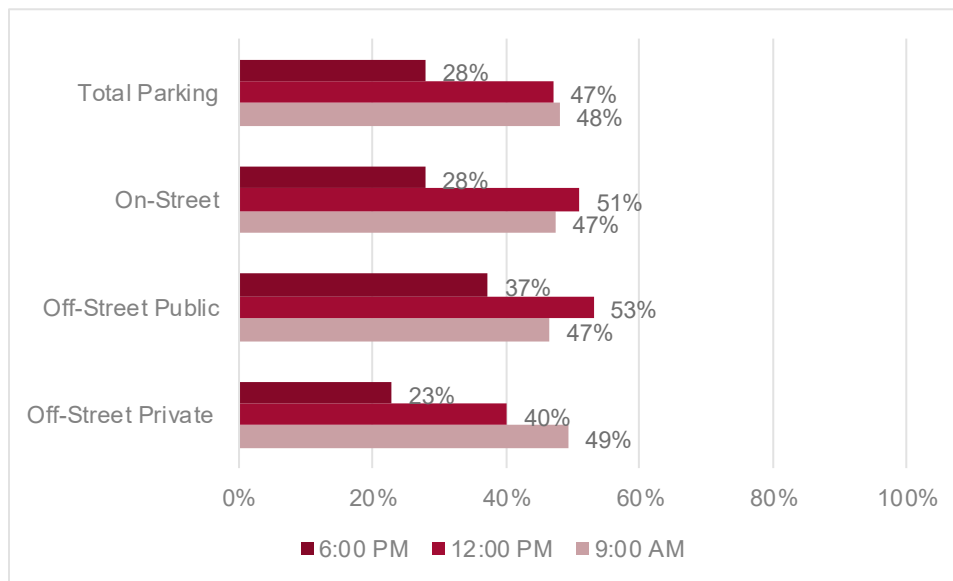
## Parking Occupancy Analysis

Parking occupancies for the study area are analyzed in this section. Results from the nine survey samples have been compiled in the summary on the next few pages. The study dates, Thursday (5/20/21), Friday (5/21/21), and Saturday (5/22/21) were analyzed for typical occupancy.

### Parking Occupancy by Day and Type

Utilization of private off-street, public off-street, and on-street inventory for the collected times are shown in Table 2, Table 3, and Table 4. The data collected on Thursday, May 20<sup>th</sup>, showed a peak utilization at 9:00 AM, where off-street public facilities was the most utilized at 53% occupancy.

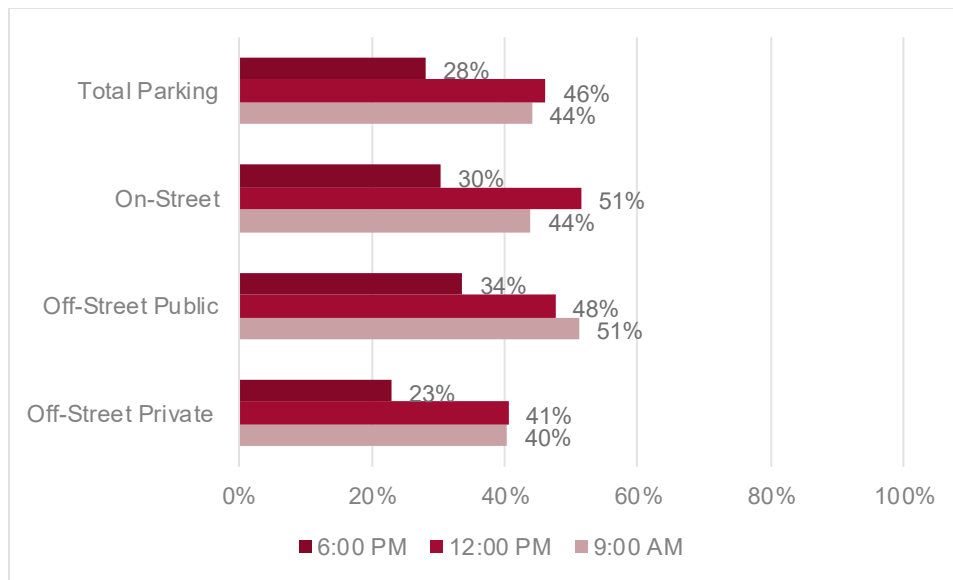
**Table 2. Thursday Occupancy by Parking Type**



On Thursday, 5/20/21, the off-street public parking facilities accounted for the highest occupancy of the parking types, with a peak occupancy of 53% at 12:00 PM. Off-street private facilities reach a 40% utilization at 9:00 AM and on-street parking a peak of approximately 51% at 12:00 PM. The occupancy collections on Thursday showed peak utilization at 9:00 AM and 12:00 PM collections, at approximately 48% utilized, while 6:00 PM was 20% less utilized.

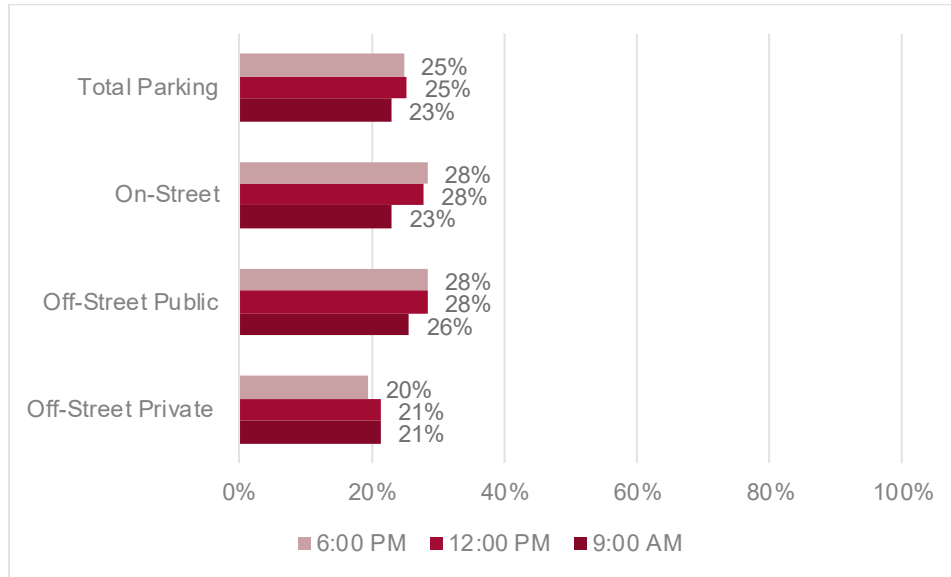
The occupancy data collection Friday, May 21, 2021, showed the total parking system peak to occur at 12:00 PM. The on-street parking reached peak occupancy at 12:00, at 51%. Off-street public facilities reached peak occupancy at 9:00 AM while private off-street lots had similar occupancies at 9:00 AM and 12:00 PM, reaching approximately 40% occupancy.

**Table 3. Friday Parking Occupancy by Parking Type**



Occupancy collected on Saturday, May 22, 2021, had a peak occupancy of approximately 25%, significantly less than observed for weekday peak hour occupancy. Occupancy for the study area is similar between the collection times, with 12:00 PM being only approximately 1% more utilized than the 9:00 AM occupancy. On-street parking had similar occupancies at 12:00 PM and 6:00 PM, utilized at approximately 28%. Off-Street Public lots also had split peak occupancy between noon and 6:00 PM, at 28%. Off-Street private facilities are more utilized in the morning and 12:00 PM collections, utilized at 21%.

**Table 4. Saturday Parking Occupancy by Parking Type**



Overall, for all collection times, parking facility type occupancy did not exceed 53%. Parking is better utilized in the day for both weekday and weekend occupancies, where private off-street occupancy often decreases in the evening due to many businesses being closed.

During the weekday collections, peak parking occupancies for all parking types occurred at 9:00 AM and 12:00 PM whereas the weekend collection has peak occupancy occurring at noon or 6:00 PM. Public off-street parking has the highest occupancy overall, with a peak occupancy of 53%.

Based on the occupancies of the study area, the parking system is underutilized, and can accommodate more users, with at least 1,000 spaces available during data collection.

**Public Off-Street Facility Occupancy**

Occupancy for the public off-street parking lots were analyzed for the collection days below. Thursday had the highest public off-street occupancy, at approximately 53%. The public off-street parking occupancy collected on Thursday, May 20<sup>th</sup>, 2021, is shown in Table 5 below.

**Table 5. Thursday Public Off-Street Occupancy**

Parking Facility	INV	Thursday Occupancy (5/20/21)					
		9:00 AM Count	9:00 AM OCC	12:00 PM Count	12:00 PM OCC	6:00 PM Count	6:00 PM OCC
Parking Plaza	143	46	32%	51	36%	16	11%
City Hall	35	28	80%	27	77%	7	20%
Clock Tower	37	8	22%	6	16%	5	14%

Lot 2	38	22	58%	21	55%	24	63%
Lot 3	30	22	73%	22	73%	23	77%
Lot 4	55	42	76%	43	78%	37	67%
Amtrak Depot	25	21	84%	23	92%	19	76%
W. of Underpass	59	32	54%	32	54%	32	54%
Bruckman Rubber	53	27	51%	27	51%	14	26%
	<b>475</b>	<b>248</b>	<b>52%</b>	<b>252</b>	<b>53%</b>	<b>177</b>	<b>37%</b>

Public off-street parking occupancy had a peak of 53% at 12:00 PM. The parking occupancies for all public parking lots are higher during the day and drop at 6:00 PM. Amtrak Depot Lot has occupancies at 12:00 PM and 9:00 AM over effective capacity. The Bruckman Rubber lot is in close proximity to the Amtrak Depot Lot and has significantly lower occupancies. City Hall Lot, Lot 3, and Lot 4 also experience high occupancy throughout the day.

The public off-street parking occupancy for Friday, May 21<sup>st</sup>, 2021, is shown in Table 6 below.

**Table 6. Friday Public Off-Street Occupancy**

Parking Type	INV	Friday Occupancy (5/21/21)					
		9:00 AM Count	9:00 AM OCC	12:00 PM Count	12:00 PM OCC	6:00 PM Count	6:00 PM OCC
Parking Plaza	143	48	34%	37	26%	15	10%
City Hall	35	27	77%	22	63%	4	11%
Clock Tower	37	16	43%	11	30%	3	8%
Lot 2	38	19	50%	23	61%	34	89%
Lot 3	30	22	73%	23	77%	13	43%
Lot 4	55	39	71%	33	60%	30	55%
Amtrak Depot	25	20	80%	23	92%	18	72%
W. of Underpass	59	32	54%	32	54%	32	54%
Bruckman Rubber	53	20	38%	22	42%	11	21%
	<b>475</b>	<b>243</b>	<b>51%</b>	<b>226</b>	<b>48%</b>	<b>160</b>	<b>34%</b>

The peak occupancy occurs at 9:00 AM, with a peak of 52.84%. Occupancy reduces as the day goes on. Like Thursday, Amtrak Depot Lot has occupancy that exceeds effective capacity at 9:00 AM and 12:00 PM. The Bruckman Rubber lot is in close proximity to the Amtrak Depot Lot and has

significantly lower occupancies, with peak occupancy reaching 48% at 12:00 PM. City Hall, Lot 3, and Lot 4 all experience high occupancies during the day that drop off in the evening.

Occupancy collections done on Saturday, May 22<sup>nd</sup>, 2021, are shown in Table 7 below.

**Table 7. Saturday Public Off-Street Occupancy**

Parking Facility	INV	Saturday Occupancy (5/22/21)					
		9:00 AM Count	9:00 AM OCC	12:00 PM Count	12:00 PM OCC	6:00 PM Count	6:00 PM OCC
Parking Plaza	143	24	17%	27	19%	15	10%
City Hall	35	5	14%	6	17%	5	14%
Clock Tower	37	6	16%	5	14%	4	11%
Lot 2	38	6	16%	12	32%	26	68%
Lot 3	30	10	33%	18	60%	17	57%
Lot 4	55	21	38%	15	27%	15	27%
Amtrak Depot	25	11	44%	13	52%	14	56%
W. of Underpass	59	29	49%	29	49%	29	49%
Bruckman Rubber	53	10	19%	10	19%	10	19%
	<b>475</b>	<b>122</b>	<b>26%</b>	<b>135</b>	<b>28%</b>	<b>135</b>	<b>28%</b>

Peak occupancy occurred at both noon and 6:00 PM, at 28%. Amtrak Depot and W of Underpass experience higher occupancies throughout the day, ranging from 44% to 56%. The Bruckman Rubber lot is in close proximity to the Amtrak Depot Lot and has significantly lower occupancies, only reaching a peak occupancy of 19% through the collection day. Lots 2 and 3 reach higher occupancies during the afternoon and evening. All lots were at least 15% effective capacity.

Overall, the public off-street facilities show high occupancies in the day on weekdays and higher occupancies in the afternoon and evening on the weekend. City Hall, Lots 3, and Lot 4 are likely utilized for employee parking throughout the week and have notable occupancies during working hours. Amtrak Depot is heavily occupied during the week. Bruckman Rubber Lot has significantly low occupancies and is in close proximity to the Amtrak Depot Lot.

**KEY PARKING OCCUPANCY TAKEWAYS**

The parking system within the study area is generally underutilized and can accommodate a significant number of additional vehicle users. Parking occupancies are higher during the week than the weekend, especially during the workday. Public off-street parking has the highest occupancy by parking type, with City Hall, Amtrak, Lot 3, and Lot 4 the most heavily during certain counts. Note that roughly 90% is considered the effective capacity for a given facility of block.

Due to the availability of on-street parking and other alternatives, we conclude the downtown visitor parking is likely sufficient. For Amtrak parking and for some downtown employees, the City might want to continue to promote the Bruckman Rubber Lot as a long-term and employee parking alternative. Other options to address employee parking needs are discussed under the Parking System Recommendations.

## Parking System Recommendations

The following recommendations are based on feedback received from the project Steering Committee, City staff, downtown stakeholder group, and Kimley-Horn’s site visit and observations. These recommendations are roughly prioritized based on the estimated timetable to complete, the need for capital funding, and our opinion of the immediate versus long-term benefits.

### 1. Approve budgets for parking system repairs, maintenance, and improvements

The condition of public parking assets is important to address as part of the City’s regular maintenance cycle. The condition of parking assets sets the standard for the first and last customer experience in the downtown. More importantly, delayed infrastructure maintenance can lead to issues with snow removal, more costly repairs down the road, and eventual unsafe conditions for pedestrians and motorists, which may be a liability issue in extreme cases.

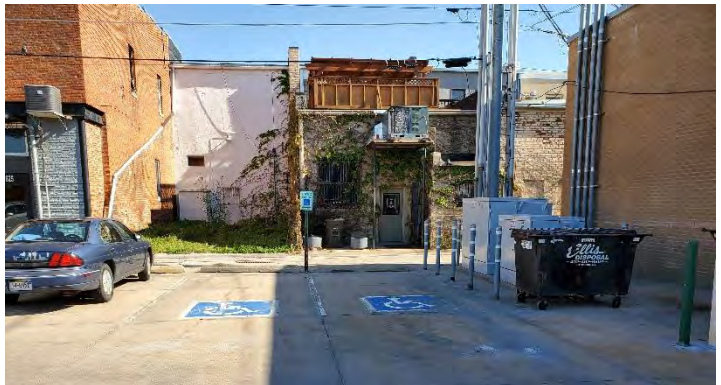
As a general industry guideline (see National Parking Association publications) it is recommended that parking system owners typically set aside around 2% of the base construction cost each year to address major maintenance needs. For a typical surface parking lot, this would be approximately \$120 - \$170 per space per year in budgeted reserves. Major maintenance projects, including resurfacing, restriping, and concrete repair, are needed at periodic intervals (every 5 to 8 years) as the asset ages.

Several major projects were identified during our site visit. Priorities may include:

- Parking Plaza:** The Parking Plaza is a concrete slab lot that is showing considerable cracking to the point where the entire lot may need replacement. This cracking is likely caused by differential vertical displacement, meaning that the sub-grade material has low structural integrity and will need to be addressed to fully repair the lot. Unless it is slated for near-term development, we recommend replacing the Parking Plaza lot.



- **Bruckman Rubber Lot:** As a public parking asset, the City might be at risk for pedestrian safety issues, accidents, etc. with the uneven and aging surface. This lot should be re-surfaced and the pedestrian connection to the downtown should be evaluated for improvements.
- **ADA compliance:** Several public surface lots and streets have designated ADA stalls that do not meet the minimum criteria established by the Department of Justice (DOJ) as part of the 2010 Americans with Disabilities Act Accessibility Guidelines (AAG). These should be evaluated and corrected. (see: <https://www.access-board.gov/ada/guides/chapter-5-parking/>)
- **Public parking lot signage:** The DDA has already established a brand and nomenclature and upgraded signage for Lots 2, 3, and 4. The City may want to partner with the DDA and expand this signage to other public parking assets. Additionally, City ordinances related to the parking, such as the 72-hour maximum stay, should be clearly posted within all City lots.

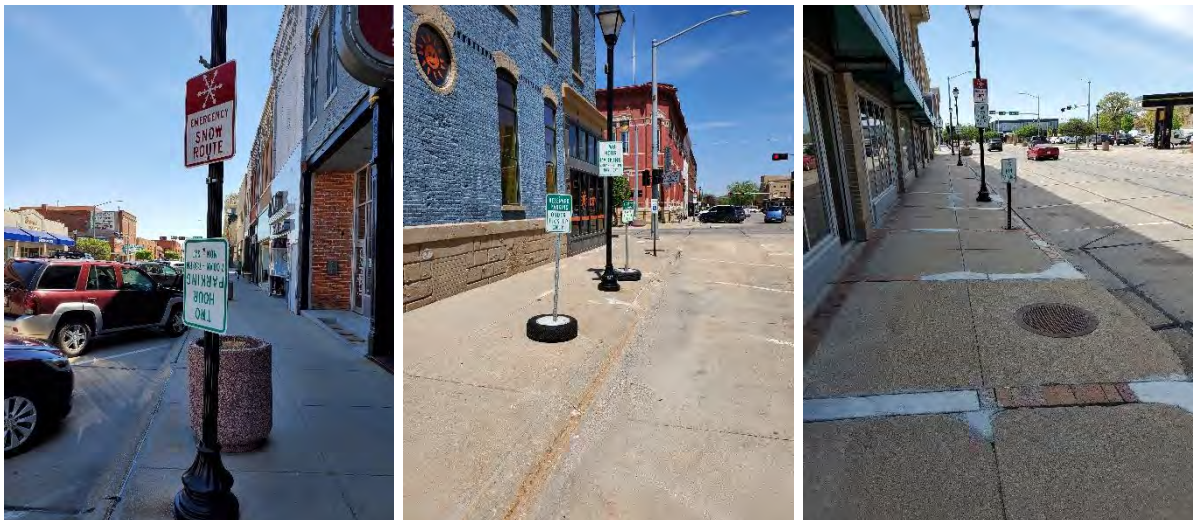


**2. Implement a more consistent approach to downtown on-street parking restrictions**

The current pattern of on-street parking restrictions can be seen on Figure 5 (see page 7) and could be described as ad hoc. This is evident on some block faces that have a mix of unrestricted, 2-hour, and 4-hour posted restrictions, with additional 15-minute restrictions located mid-block on some block faces.

One of the major issues with ad hoc restrictions is that it becomes difficult for visitors to predict where and how long they should park. The system is also difficult for parking enforcement officers to consistently monitor and enforce times limits.

Based on the low utilization of 15-minute parking stalls, and the challenge with managing this supply (especially in the case where business uses may change over time), we recommend sticking with a consistent restriction, either two-hour or three-hour, for the majority of the downtown. Current curb-management best practices recommend that the same restriction be applied to at least 10 contiguous block faces within an area leaving no gaps for enforcement. If on-street ADA and loading spaces are required, we recommend moving to a more uniform approach where these stalls are in a predictable pattern on each block face.



For this recommendation, we recommend the following as possible implementation priorities:

- Establish a downtown parking management district
- Establish uniform 2-hour or 3-hour parking throughout the core of the downtown
- Eliminate 15-minute parking
- Implement a zone-based on-street parking permit program
- Work with the DDA to re-introduce a consistent parking enforcement methodology based on the parking ambassador model
- Evaluate sign placement and messaging consistent with updated MUTCD standards



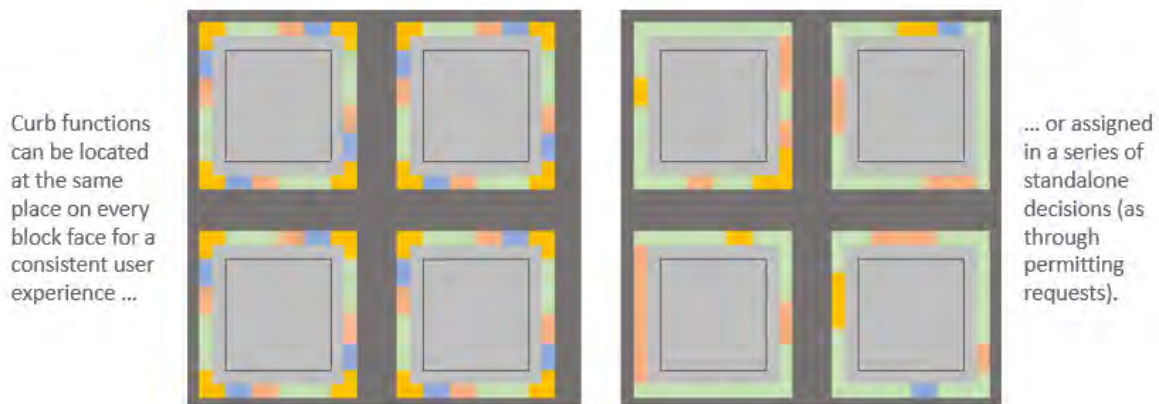
### 3. Clarify city government oversight and parking ordinances

As discussed in the TPMP Mobility Audit, the following issues were identified by City staff and stakeholders:

- There is currently no formalized process within the municipal code for overnight or residential permit parking within City-owned facilities
- Likewise, requests for curb-management zones, valet parking requests, parking for oversized vehicles or food trucks, and other needs are generally not addressed in the code. (These are typically handled as either temporary permit requests or longer-term curb management and signage applications).
- Parking lot snow removal, repaving and some maintenance items are handled through Public/Works Streets though other management responsibilities including signage, permit management, and administration generally fall to Development Services but are not clearly defined by the City ordinances.

To address these issues, we recommend establishing a formal parking management department and job descriptions. For the time being, these roles might be handled as part-time FTE positions under Development Services. City ordinances should be updated to address the administrative process for applying for parking permits of all types for use of City-owned assets for private, commercial, and overnight parking.

We recommend charging a nominal fee for any temporary permit requests for administrative costs. We do not recommend addressing curb management requests on a one-off basis but recommend establishing a consistent block face template for application of valet and pick-up drop off zones, where these are appropriate.



For longer-term solutions (such as providing residential parking in a City asset), the City might consider imposing a cost more in line with the full replacement value of that parking stall, less the discounted rate the City is interested in providing as the public participation component of the project.

Based on national averages, the full replacement value of parking can be significant. The following should be considered as a point of reference\*:

- Surface lot replacement cost (per month) = median \$160
- Above-grade parking garage replacement cost (per month) = median \$240

*\*These values consider hard construction costs only (based on national averages published by RS Means) along with typical operation and maintenance costs. Land costs and design and soft costs for new public parking assets are excluded from the valuation.*

**4. Expand opportunities for employee parking resources and greater pedestrian connectivity**

The final two recommendations are longer-term suggestions aimed at providing new downtown employee opportunities and expanding access to existing public parking resources on the west side of the downtown.

- Evaluate opportunities for improved public (or shared use) parking north of railroad tracks; this opportunity would include making public parking improvements to the existing parking located behind 1<sup>st</sup> Street businesses between Denver Ave. and Burlington Ave.



- Consider improving pedestrian connections across Burlington Ave. A pedestrian bridge has been discussed by the City which might tie in top other improvements such as the parking lot options mentioned in the prior bullet point.



## Closing

Parking system recommendations discussed in this analysis should be discussed with downtown stakeholders including the DDA and adjusted based on funding priorities and feasibility.

Additional information on existing parking system usage is provided in the following Appendices.

## Appendices

Table 1. Thursday (5/20/21) Occupancy

Parking Type	Inventory	Thursday Occupancy (5/20/21)					
		9:00 AM Count	9:00 AM Occupancy	12:00 PM Count	12:00 PM Occupancy	6:00 PM Count	6:00 PM Occupancy
Off-Street Private	866	395	45.61%	348	40.18%	198	22.86%
Off-Street Public	422	221	52.37%	225	53.32%	163	38.63%
On-Street	814	386	47.42%	415	50.98%	227	27.89%
	<b>2102</b>	<b>1002</b>	<b>47.67%</b>	<b>988</b>	<b>47.00%</b>	<b>588</b>	<b>27.97%</b>

Table 2. Friday (5/21/21) Occupancy

Parking Type	Inventory	Friday Occupancy (5/21/21)					
		9:00 AM Count	9:00 AM Occupancy	12:00 PM Count	12:00 PM Occupancy	6:00 PM Count	6:00 PM Occupancy
Off-Street Private	866	350	40.42%	351	40.53%	199	22.98%
Off-Street Public	422	223	52.84%	204	48.34%	149	35.31%
On-Street	814	358	43.98%	419	51.47%	247	30.34%
	<b>2102</b>	<b>931</b>	<b>44.29%</b>	<b>974</b>	<b>46.34%</b>	<b>595</b>	<b>28.31%</b>

Table 3. Saturday (5/22/21) Occupancy

Parking Type	Inventory	Saturday Occupancy (5/22/21)					
		9:00 AM Count	9:00 AM Occupancy	12:00 PM Count	12:00 PM Occupancy	6:00 PM Count	6:00 PM Occupancy
Off-Street Private	866	185	21.36%	185	21.36%	169	19.52%
Off-Street Public	422	112	26.54%	125	29.62%	125	29.62%
On-Street	814	188	23.10%	227	27.89%	231	28.38%
	<b>2102</b>	<b>485</b>	<b>23.07%</b>	<b>537</b>	<b>25.55%</b>	<b>525</b>	<b>24.98%</b>

Table 4. Occupancy by Block Face

Block Number	Block Face ID	Estimated Inventory	20-May				21-May				22-May				Percent Avg Total	Percent Avg Weekday	Percent Avg Weekend						
			9:00:00 AM Count	9:00:00 AM Occ	12:00:00 PM Count	12:00:00 PM Occ	6:00:00 PM Count	6:00:00 PM Occ	9:00:00 AM Count	9:00:00 AM Occ	12:00:00 PM Count	12:00:00 PM Occ	6:00:00 PM Count	6:00:00 PM Occ				9:00:00 AM Count	9:00:00 AM Occ	12:00:00 PM Count	12:00:00 PM Occ	6:00:00 PM Count	6:00:00 PM Occ
BLOCK 1	W	9	3	33%	1	11%	5	56%	3	33%	4	44%	2	22%	2	22%	1	11%	3	33%	30%	33%	22%
	N	np	0	N/A	0	N/A	0	N/A	0	N/A	2	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A
	E	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A
	S	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A
	Private Off-Street Dirt Lot	32	15	47%	5	16%	3	9%	16	50%	10	31%	4	13%	7	22%	6	19%	2	6%	24%	28%	16%
BLOCK 2	W	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A
	N	7	0	0%	1	14%	0	0%	1	14%	1	14%	0	0%	0	0%	0	0%	0	0%	5%	7%	0%
	E	12	7	58%	3	25%	0	0%	6	50%	7	58%	1	8%	0	0%	1	8%	0	0%	23%	33%	3%
	S	4	1	25%	0	0%	0	0%	0	0%	1	25%	0	0%	0	0%	0	0%	0	0%	6%	8%	0%
	Private Off-Street	75	21	28%	17	23%	13	17%	14	19%	15	20%	12	16%	10	13%	9	12%	12	16%	18%	20%	14%
BLOCK 3	W	14	7	50%	5	36%	0	0%	2	14%	2	14%	0	0%	0	0%	0	0%	0	0%	13%	19%	0%
	N	2	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	50%	0	0%	0	0%	6%	0%	17%
	E	10	2	20%	3	30%	2	20%	5	50%	2	20%	2	20%	3	30%	1	10%	1	10%	23%	27%	17%
	S	5	5	100%	4	80%	0	0%	2	40%	2	40%	1	20%	0	0%	0	0%	0	0%	31%	47%	0%
	Private Off-Street	48	8	17%	11	23%	0	0%	9	19%	10	21%	0	0%	0	0%	0	0%	0	0%	9%	13%	0%
BLOCK 4	W	12	4	33%	6	50%	0	0%	7	58%	5	42%	0	0%	0	0%	0	0%	0	0%	20%	31%	0%
	N	11	3	27%	2	18%	0	0%	0	0%	1	9%	0	0%	0	0%	0	0%	0	0%	6%	9%	0%
	E	13	5	38%	7	54%	3	23%	5	38%	4	31%	0	0%	2	15%	4	31%	0	0%	26%	31%	15%
	S	5	1	20%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	1	20%	0	0%	4%	3%	7%
	Parking Plaza	143	46	32%	51	36%	16	11%	48	34%	37	26%	15	10%	24	17%	27	19%	15	10%	22%	25%	15%
BLOCK 5	W	4	1	25%	3	75%	1	25%	1	25%	1	25%	0	0%	0	0%	3	75%	1	25%	31%	29%	33%
	N	7	3	43%	2	29%	0	0%	3	43%	3	43%	0	0%	0	0%	1	14%	0	0%	19%	26%	5%
	E	4	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0%	0%	0%
	S	3	1	33%	2	67%	0	0%	1	33%	0	0%	1	33%	0	0%	1	33%	0	0%	22%	28%	11%
	Private Off-Street	50	20	40%	17	34%	4	8%	14	28%	14	28%	5	10%	6	12%	6	12%	5	10%	20%	25%	11%
BLOCK 6	W	14	8	57%	3	21%	0	0%	1	7%	2	14%	0	0%	0	0%	0	0%	0	0%	11%	17%	0%
	N	3	0	0%	1	33%	0	0%	0	0%	1	33%	0	0%	0	0%	1	33%	0	0%	11%	11%	11%
	E	7	6	86%	3	43%	2	29%	6	86%	5	71%	2	29%	3	43%	3	43%	2	29%	51%	57%	38%
	S	np	0	N/A	0	N/A	0	N/A	1	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A
	Private Off-Street	129	81	63%	57	44%	14	11%	73	57%	61	47%	14	11%	15	12%	15	12%	13	10%	30%	39%	11%
BLOCK 7	W	10	2	20%	3	30%	0	0%	0	0%	1	10%	0	0%	1	10%	0	0%	0	0%	8%	10%	3%
	N	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A
	E	9	2	22%	2	22%	1	11%	2	22%	2	22%	1	11%	1	11%	1	11%	3	33%	19%	19%	19%
	S	21	6	29%	3	14%	0	0%	2	10%	4	19%	0	0%	4	19%	1	5%	0	0%	11%	12%	8%
	Private Off-Street	37	16	43%	22	59%	4	11%	22	59%	22	59%	17	46%	19	51%	18	49%	16	43%	47%	46%	48%
BLOCK 8	W	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A
	N	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A
	E	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A
	S	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A
	Private Off-Street	64	10	16%	6	9%	5	8%	11	17%	9	14%	4	6%	4	6%	4	6%	3	5%	10%	12%	6%

BLOCK 9	W	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A	
	N	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A	
	E	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A	
	S	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A	
	Private Off-Street		45	27	60%	26	58%	15	33%	32	71%	36	80%	15	33%	16	36%	20	44%	12	27%	49%	56%	36%
BLOCK 10	W	np	0	N/A	6	N/A	3	N/A	6	N/A	5	N/A	3	N/A	3	N/A	3	N/A	3	N/A	N/A	N/A	N/A	
	N		3	1	33%	0	0%	0	0%	2	67%	1	33%	1	33%	1	33%	1	33%	1	33%	30%	28%	33%
	E		8	4	50%	3	38%	0	0%	7	88%	7	88%	0	0%	1	13%	1	13%	1	13%	33%	44%	13%
	S		5	1	20%	0	0%	0	0%	1	20%	0	0%	0	0%	0	0%	0	0%	0	0%	4%	7%	0%
	Private Off-Street		17	15	88%	9	53%	5	29%	7	41%	10	59%	0	0%	3	18%	2	12%	2	12%	35%	45%	14%
BLOCK 11	W		11	8	73%	9	82%	4	36%	11	100%	9	82%	5	45%	4	36%	2	18%	2	18%	55%	70%	24%
	N		12	4	33%	2	17%	0	0%	4	33%	1	8%	0	0%	2	17%	0	0%	0	0%	12%	15%	6%
	E	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	2	N/A	0	N/A	0	N/A	2	N/A	N/A	N/A
	S	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A
	Private Off-Street		38	22	58%	8	21%	1	3%	14	37%	8	21%	2	5%	3	8%	3	8%	1	3%	18%	24%	6%
BLOCK 12	W	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A
	N		4	1	25%	0	0%	0	0%	1	25%	0	0%	0	0%	0	0%	0	0%	0	0%	6%	8%	0%
	E		15	11	73%	13	87%	9	60%	11	73%	12	80%	7	47%	5	33%	9	60%	9	60%	64%	70%	51%
	S		11	10	91%	12	109%	2	18%	7	64%	9	82%	1	9%	5	45%	1	9%	0	0%	47%	62%	18%
	Private Off-Street		19	10	53%	10	53%	9	47%	12	63%	11	58%	4	21%	6	32%	3	16%	2	11%	39%	49%	19%
BLOCK 13	W		16	13	81%	15	94%	4	25%	8	50%	12	75%	3	19%	6	38%	6	38%	3	19%	49%	57%	31%
	N		4	0	0%	2	50%	3	75%	0	0%	2	50%	3	75%	0	0%	1	25%	2	50%	36%	42%	25%
	E		9	8	89%	6	67%	3	33%	8	89%	9	100%	1	11%	3	33%	4	44%	5	56%	58%	65%	44%
	S		10	5	50%	4	40%	4	40%	9	90%	10	100%	2	20%	4	40%	5	50%	1	10%	49%	57%	33%
	Private Off-Street		13	5	38%	11	85%	7	54%	6	46%	6	46%	7	54%	6	46%	5	38%	4	31%	49%	54%	38%
BLOCK 14	W		10	6	60%	6	60%	1	10%	8	80%	5	50%	2	20%	4	40%	4	40%	1	10%	41%	47%	30%
	N		4	0	0%	2	50%	0	0%	0	0%	1	25%	0	0%	0	0%	0	0%	0	0%	8%	13%	0%
	E		15	11	73%	9	60%	2	13%	8	53%	9	60%	4	27%	10	67%	9	60%	6	40%	50%	48%	56%
	S		11	9	82%	5	45%	1	9%	5	45%	7	64%	3	27%	9	82%	11	100%	0	0%	51%	45%	61%
	City Hall		35	28	80%	27	77%	7	20%	27	77%	22	63%	4	11%	5	14%	6	17%	5	14%	42%	55%	15%
	Private Off-Street		5	1	20%	3	60%	1	20%	1	20%	2	40%	0	0%	1	20%	1	20%	1	20%	24%	27%	20%
BLOCK 15	W		13	7	54%	9	69%	2	15%	4	31%	7	54%	4	31%	4	31%	5	38%	5	38%	40%	42%	36%
	N		6	1	17%	1	17%	0	0%	1	17%	3	50%	1	17%	0	0%	0	0%	3	50%	19%	19%	17%
	E		16	6	38%	10	63%	3	19%	7	44%	10	63%	10	63%	3	19%	6	38%	7	44%	43%	48%	33%
	S		7	5	71%	7	100%	8	114%	6	86%	7	100%	7	100%	2	29%	5	71%	7	100%	86%	95%	67%
BLOCK 16	W		13	6	46%	13	100%	5	38%	6	46%	12	92%	8	62%	0	0%	10	77%	9	69%	59%	64%	49%
	N		10	1	10%	4	40%	2	20%	1	10%	3	30%	3	30%	0	0%	4	40%	2	20%	22%	23%	20%
	E		8	3	38%	3	38%	2	25%	5	63%	7	88%	2	25%	0	0%	0	0%	0	0%	31%	46%	0%
	S		8	6	75%	6	75%	5	63%	4	50%	4	50%	6	75%	4	50%	1	13%	3	38%	54%	65%	33%
	Private Off-Street		45	21	47%	31	69%	22	49%	18	40%	25	56%	30	67%	12	27%	15	33%	20	44%	48%	54%	35%
BLOCK 17	W		9	9	100%	9	100%	1	11%	8	89%	7	78%	1	11%	0	0%	0	0%	0	0%	43%	65%	0%
	N		5	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0%	0%	0%
	E		9	3	33%	3	33%	1	11%	4	44%	3	33%	0	0%	0	0%	0	0%	0	0%	17%	26%	0%
	S		7	4	57%	3	43%	1	14%	4	57%	3	43%	1	14%	3	43%	0	0%	0	0%	30%	38%	14%
	Private Off-Street		35	24	69%	28	80%	25	71%	28	80%	28	80%	27	77%	28	80%	28	80%	23	66%	76%	76%	75%

Unstriped commercial apron used for car storage (roughly 9

Table 4. Continued

BLOCK 18	W	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A	N/A		
	N	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A	N/A		
	E	4	4	100%	4	100%	3	75%	4	100%	3	75%	3	75%	3	75%	3	75%	3	75%	83%	88%	75%	
	S	11	2	18%	6	55%	3	27%	7	64%	3	27%	1	9%	3	27%	2	18%	5	45%	32%	33%	30%	
	Private Off-Street	28	22	79%	25	89%	24	86%	22	79%	21	75%	23	82%	21	75%	23	82%	19	68%	79%	82%	75%	
BLOCK 19	W	1	1	100%	0	0%	0	0%	0	0%	1	100%	0	0%	1	100%	0	0%	0	0%	33%	33%	33%	
	N	6	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0%	0%	0%	
	E	14	11	79%	13	93%	3	21%	11	79%	10	71%	6	43%	3	21%	2	14%	16	114%	60%	64%	50%	
	S	8	1	13%	1	13%	0	0%	0	0%	1	13%	0	0%	0	0%	1	13%	0	0%	6%	6%	4%	
	Clock Tower	37	8	22%	6	16%	5	14%	16	43%	11	30%	3	8%	6	16%	5	14%	4	11%	19%	22%	14%	
BLOCK 20	W	10	2	20%	5	50%	8	80%	7	70%	10	100%	7	70%	8	80%	7	70%	4	40%	64%	65%	63%	
	N	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A	
	E	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A	
	S	9	1	11%	1	11%	0	0%	3	33%	2	22%	2	22%	2	22%	0	0%	4	44%	19%	17%	22%	
	Private Off-Street	24	17	71%	15	63%	6	25%	11	46%	12	50%	8	33%	6	25%	5	21%	6	25%	40%	48%	24%	
BLOCK 21	W	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A	
	N	10	6	60%	10	100%	1	10%	5	50%	7	70%	0	0%	2	20%	2	20%	5	50%	42%	48%	30%	
	E	14	4	29%	12	86%	10	71%	3	21%	10	71%	11	79%	4	29%	5	36%	11	79%	56%	60%	48%	
	S	10	1	10%	6	60%	6	60%	1	10%	7	70%	8	80%	2	20%	5	50%	5	50%	46%	48%	40%	
	Lot 2	38	22	58%	21	55%	24	63%	19	50%	23	61%	34	89%	6	16%	12	32%	26	68%	55%	63%	39%	
	Private Off-Street	N/A	N/A	N/A	NA	N/A	NA	N/A	1	N/A	NA	N/A	NA	N/A	NA	N/A	NA	N/A	NA	N/A	N/A	N/A	N/A	
BLOCK 22	W	16	12	75%	12	75%	10	63%	4	25%	16	100%	12	75%	3	19%	7	44%	7	44%	58%	69%	35%	
	N	11	5	45%	4	36%	3	27%	2	18%	11	100%	3	27%	1	9%	7	64%	1	9%	37%	42%	27%	
	E	14	7	50%	7	50%	0	0%	9	64%	5	36%	3	21%	3	21%	3	21%	3	21%	32%	37%	21%	
	S	10	7	70%	6	60%	8	80%	5	50%	8	80%	10	100%	4	40%	3	30%	7	70%	64%	73%	47%	
		Lot 3	30	22	73%	22	73%	23	77%	22	73%	23	77%	13	43%	10	33%	18	60%	17	57%	63%	69%	50%
		Private Off-Street	N/A	N/A	N/A	NA	N/A	NA	N/A	NA	N/A	NA	N/A	NA	N/A	NA	N/A	NA	N/A	NA	N/A	N/A	N/A	N/A
BLOCK 23	W	10	6	60%	8	80%	1	10%	10	100%	4	40%	2	20%	3	30%	6	60%	2	20%	47%	52%	37%	
	N	10	10	100%	9	90%	3	30%	10	100%	9	90%	6	60%	11	110%	10	100%	4	40%	80%	78%	83%	
	E	15	8	53%	10	67%	12	80%	9	60%	14	93%	10	67%	9	60%	8	53%	4	27%	62%	70%	47%	
	S	12	3	25%	6	50%	8	67%	1	8%	3	25%	6	50%	5	42%	3	25%	8	67%	40%	38%	44%	
		Lot 4	55	42	76%	43	78%	37	67%	39	71%	33	60%	30	55%	21	38%	15	27%	15	27%	56%	68%	31%
		Private Off-Street	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
BLOCK 24	W	11	6	55%	5	45%	8	73%	4	36%	7	64%	9	82%	2	18%	7	64%	7	64%	56%	59%	48%	
	N	7	4	57%	5	71%	5	71%	2	29%	5	71%	6	86%	3	43%	6	86%	5	71%	65%	64%	67%	
	E	8	8	100%	5	63%	6	75%	6	75%	4	50%	6	75%	1	13%	7	88%	7	88%	69%	73%	63%	
	S	6	4	67%	3	50%	5	83%	1	17%	1	17%	4	67%	2	33%	1	17%	5	83%	48%	50%	44%	
		Private Off-Street	6	3	50%	2	33%	2	33%	4	67%	4	67%	2	33%	3	50%	3	50%	2	33%	46%	47%	44%
BLOCK 25	W	12	7	58%	4	33%	11	92%	5	42%	8	67%	11	92%	0	0%	4	33%	9	75%	55%	64%	36%	
	N	10	4	40%	6	60%	8	80%	7	70%	7	70%	7	70%	1	10%	2	20%	3	30%	50%	65%	20%	
		E	17	15	88%	14	82%	0	0%	14	82%	15	88%	0	0%	0	0%	0	0%	0	0%	38%	57%	0%
		S	6	3	50%	3	50%	0	0%	2	33%	3	50%	0	0%	0	0%	0	0%	0	0%	20%	31%	0%
	Private Off-Street	14	11	79%	9	64%	2	14%	13	93%	11	79%	5	36%	0	0%	0	0%	3	21%	43%	61%	7%	

Unstriped commercial apron used for car storage (roughly 9

Unstriped commercial apron used for car storage (roughly 10

Table 4. Continued

BLOCK 26	W	4	2	50%	2	50%	1	25%	9	225%	8	200%	0	0%	1	25%	0	0%	0	0%	64%	92%	8%
	N	13	8	62%	11	85%	2	15%	11	85%	2	15%	2	15%	6	46%	1	8%	2	15%	38%	46%	23%
	E	5	0	0%	0	0%	0	0%	1	20%	1	20%	1	20%	2	40%	1	20%	1	20%	16%	10%	27%
	S	6	2	33%	1	17%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	6%	8%	0%
	Private Off-Street	12	8	67%	12	100%	5	42%	8	67%	11	92%	5	42%	9	75%	6	50%	6	50%	65%	68%	58%
BLOCK 27	W	5	4	80%	4	80%	3	60%	5	100%	4	80%	2	40%	2	40%	2	40%	2	40%	62%	73%	40%
	N	7	2	29%	4	57%	2	29%	2	29%	2	29%	1	14%	2	29%	1	14%	2	29%	29%	31%	24%
	E	4	4	100%	4	100%	0	0%	3	75%	3	75%	3	75%	5	125%	5	125%	3	75%	83%	71%	108%
	S	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A
	Private Off-Street	47	15	32%	11	23%	16	34%	9	19%	17	36%	13	28%	12	26%	14	30%	16	34%	29%	29%	30%
BLOCK 28	W	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A
	N	6	2	33%	1	17%	3	50%	1	17%	3	50%	4	67%	1	17%	4	67%	4	67%	43%	39%	50%
	E	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A
		Dirt Lot	np	0	N/A	2	N/A	0	N/A	0	N/A	1	N/A	2	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A
BLOCK 29	W	6	3	50%	1	17%	3	50%	2	33%	5	83%	2	33%	0	0%	3	50%	5	83%	44%	44%	44%
	N	8	1	13%	2	25%	5	63%	3	38%	4	50%	5	63%	2	25%	0	0%	2	25%	33%	42%	17%
	E	3	0	0%	1	33%	0	0%	0	0%	1	33%	0	0%	0	0%	0	0%	1	33%	11%	11%	11%
		Private Off-Street	12	12	100%	8	67%	5	42%	8	67%	8	67%	8	67%	7	58%	7	58%	7	58%	65%	68%
BLOCK 30	W	6	0	0%	1	17%	2	33%	0	0%	4	67%	2	33%	0	0%	1	17%	1	17%	20%	25%	11%
	N	10	4	40%	5	50%	4	40%	0	0%	0	0%	4	40%	3	30%	3	30%	4	40%	30%	28%	33%
	E	3	0	0%	0	0%	0	0%	1	33%	0	0%	0	0%	0	0%	0	0%	0	0%	4%	6%	0%
		Dirt Lot	50	12	24%	10	20%	13	26%	13	26%	14	28%	13	26%	15	30%	10	20%	17	34%	26%	25%
BLOCK 31	W	4	1	25%	1	25%	1	25%	0	0%	0	0%	0	0%	1	25%	1	25%	1	25%	17%	13%	25%
	N	7	1	14%	2	29%	2	29%	1	14%	0	0%	3	43%	0	0%	0	0%	1	14%	16%	21%	5%
	E	np	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	0	N/A	N/A	N/A	N/A
		Amtrak Depot	25	21	84.00%	23	92%	19	76%	20	80%	23	92%	18	72%	11	44%	13	52%	14	56%	72%	83%
	Bruckman Rubber	53	27	51%	27	51%	14	26%	20	38%	22	42%	11	21%	10	19%	10	19%	10	19%	32%	38%	19%
	W. of Underpass	59	32	54%	32	54%	32	54%	32	54%	32	54%	32	54%	29	49%	29	49%	29	49%	53%	54%	49%

Note: W. of Underpass was not on flight path. Weekday data from 1<sup>st</sup> hand count. Weekend data from Google Earth taken 8/27/17



Table 5. Occupancy Summary

Parking Type	Estimated Inventory	20-May						21-May						22-May					
		5/20		5/20		5/20		5/21		5/21		5/21		5/22		5/22		5/22	
		9:00 AM Count	9:00 AM Occ	12:00 PM Count	12:00 PM Occ	6:00 PM Count	6:00 PM Occ	9:00 AM Count	9:00 AM Occ	12:00 PM Count	12:00 PM Occ	6:00 PM Count	6:00 PM Occ	9:00 AM Count	9:00 AM Occ	12:00 PM Count	12:00 PM Occ	6:00 PM Count	6:00 PM Occ
Public Street Parking	814	386	47%	415	51%	227	28%	358	44%	419	51%	247	30%	188	23%	227	28%	231	28%
Public Off Street Parking	422	221	52%	225	53%	163	39%	223	53%	204	48%	149	35%	112	27%	125	30%	125	30%
Private Off Street Parking (Includes Dirt Lots)	866	395	46%	348	40%	198	23%	350	40%	351	41%	199	23%	185	21%	185	21%	169	20%
Public Total	1236	386	31%	415	34%	227	18%	358	29%	419	34%	247	20%	188	15%	227	18%	231	19%
Total	2102	1002	48%	988	47%	588	28%	931	44%	974	46%	595	28%	485	23%	537	26%	525	25%

