

CITY OF HUTCHINSON

MCLEOD COUNTY, MINNESOTA







2012 TRANSPORTATION PLAN

Table of Contents

	I	age
1.0	Introduction	1
	1.1 Purpose and Content of the Transportation Plan	1
	1.2 Transportation Vision	2
	1.3 Guiding Transportation Principles	2
2.0	Existing Transportation System	3
	2.1 Roadway Jurisdictional Classification System	3
	2.1.1 Jurisdictional Classification Guidelines	3
	2.2 Roadway Functional Classification System	8
	2.2.1 Principal Arterial	9
	2.2.2 Minor Arterial	. 10
	2.2.3 Collectors	. 13
	2.2.4 Local Roadways	. 14
	2.3 Existing Transportation Needs and Issues	.14
	2.3.1 Existing System Capacity Analysis	. 14
	2.3.2 Existing System Safety and Crash Analysis	. 15
	2.4 Public and Transportation Stakeholder Involvement	. 21
	2.4.1 Local Traffic Flow & Safety Questionnaire	. 21
	2.4.2 Transportation Focus Group	. 22
	2.4.3 Public Open House Meetings "Listening Sessions"	
	2.4.4 Coordination with Other Jurisdictions	. 25
3.0	Transportation Plan Goals, Objectives, And Policies	. 27
	3.1 Goal 1: Preserve and Enhance the Transportation System	. 27
	3.2 Goal 2: Improve the Functionality & Safety of the Transportation System	28
	3.3 Goal 3: Balance Transportation Needs with Land Use Principles	. 29
	3.4 Goal 4: Improve Connectivity Throughout the Community	. 29
	3.5 Goal 5: Enhance Transit Opportunities and Usage	. 30
	3.6 Implement the Transportation Vision Through Strategic Funding, Objective &	
	Definitive Decision Making with the Collaboration of Jurisdictions	
4.0	Special Area Studies	
	4.1 2 nd Avenue SE Bridge Assessment	. 33
	4.1.1 Existing Bridge Information	. 33
	4.1.2 Existing Land Use Information	. 33
	4.1.3 Other Surrounding River Crossings	
	4.1.4 Previously Reviewed Alternatives	
	4.1.5 Long Term Use Options for 2 nd Avenue Bridge	
	4.1.6 2 nd Avenue Bridge Special Study Recommendations	. 37

	4.2 Existing Traffic Signal Assessment	38
	4.2.1 Traffic Signal Coordination/Interconnectivity	38
	4.2.2 Flashing Yellow Left Turn Arrow Control	43
	4.3 Complete Streets Assessment	44
	4.3.1 What is a Complete Street?	46
	4.3.2 Complete Street Benefits	46
	4.3.3 Complete Street Policy	47
	4.3.4 Application/Implementation	47
	4.4 Northeast Ring Road Assessment	48
	4.4.1 McLeod County Project Development Process	48
	4.4.2 Potential Traffic Affects	49
	4.4.3 Findings and Conclusions	52
	4.5 Highway 15 - South Frontage/Backage Road Assessment	
	4.5.1 Existing Frontage/Backage Roads	53
	4.5.2 Additional Frontage/Backage Road Opportunities	53
	4.6 Downtown Highway 15 Reconstruction Concepts	54
	4.6.1 Existing Downtown Conditions	54
	4.6.2 TH 15 Conceptual Design Process	56
	4.6.3 Streetscape Enhancements	58
5.0	Analysis of Future Needs and Characteristics	61
	5.1 20-Year Traffic Volume Projections	
	5.2 Capacity Assessment	61
	5.3 Safety Assessment	65
	5.4 Future Functional Classification System	65
	5.5 Future Jurisdictional Classification System	66
	5.5.1 Jurisdictional Transfer Guidelines	
	5.5.2 Candidates for Potential Jurisdictional Transfer	67
	5.6 Right-of-Way Preservation	68
	5.7 Access Management	
	5.8 Alternative Modes of Transportation	75
6.0	Pedestrian and Bicycle System Plan	
	6.1 System Overview - Existing Conditions	
	6.1.1 Existing Multi-use Trails	77
	6.1.2 On-street Facilities/Bike Friendly Routes	81
	6.1.3 Accessibility to Community Resources	
	6.2 Future Pedestrian Bicycle Plan	
	6.2.1 Proposed Multi-use Trails	
	6.2.2 Proposed On-street Facilities/Bike friendly Routes	
	6.3 Americans with Disabilities Act (ADA) Transition Plan	
7.0	Implementation Plan	87

Table of Contents (Continued)

7.1	Roadway/Intersection Policies and Improvements	87
7.2	Pedestrian, Bicycle, and Transit Policies and Improvements	88
	List of Tables	
Table	e 1 – Average Daily Traffic (ADT) Planning Level Capacities	14
	2 – Northeast Ring Road Alignment Comparison and Screening	
	e 3 – Recommend Future Functional Classification Changes	
Table	e 4 – Hutchinson Urban Public Street Spacing Guidelines	71
Table	e 5 – Urban Private Driveway Spacing Guidelines	72
	List of Figures	
Figur	e 1 – Hutchinson Area Jurisdictional Roadway Classification Map	5
Figur	e 2 - Relationship between Land Access and Mobility	9
Figur	e 3 – Basic Functional Classification System Framework	9
Figur	e 4 – Hutchinson Area Existing Functional Classification System and Existin Daily Traffic Volumes	
Figur	e 5 – Crash Frequency (2007 – 2011)	17
	e 6 - Figure 6 - Crash Severity (2007 - 2011)	
Figur	e 7 – Transportation Study Issues Map	23
Figur	e 8 – 2nd Avenue Bridge Study Area	34
Figur	e 9 – Existing Traffic Signals	41
Figur	e 10 – Top Tier Complete Street Candidates	48
Figur	e 11 – Brownton Shuttle Facility Market Draw Area	50
Figur	e 12 – Brownton Facility: Corn Market Area and Directional Flows	50
Figur	e 13 – Brownton Facility: Soybean Market Area and Directional Flows	50
Figur	e 14 – Highway 15 South – Frontage/Backage Road System	55
Figur	e 15 – Existing Highway 15 Typical Section – Downtown Hutchinson	56
Figur	e 16 - Proposed Highway 15 Typical Section - Downtown Hutchinson	57
Figur	e 17 – Highway 15 – Architectural Streetscape Rendering	58
Figur	e 18 – Downtown Highway 15 – Future Reconstruction Plan View	59
Figur	e 19 – Hutchinson Area Proposed Functional Classification System and Proj Year Traffic Projections	
Figur	e 20 – Roadway Functionality	69
Figur	e 21 - Relationship Between Access Points and Crash Rates	69
Figur	e 22 – Proper Driveway Location	70
Figur	e 23 – Minimize Direct Access to Higher Function Roadways	70
Figur	e 24 – Intersection With Full Access (No Restrictions)	74
Figur	e 25 – Intersection with Right-in/Right-Out Access Only	74
Figur	e 26 – Hutchinson Pedestrian and Bicycle Plan	79

List of Appendices

Appendix A	Hutchinson Traffic Flow & Safety Questionnaire (2012) and Responses
Appendix B	Transportation Focus Group Meeting Summaries
Appendix C	McLeod County Northeast Ring Road Concept Design Options
Appendix D	Transportation Plan Final Draft Overview and Proposed Work Plan

Hutchinson Area Transportation Plan

Prepared for the City of Hutchinson

1.0 Introduction

The Hutchinson Area Comprehensive Plan establishes a vision for how the City is anticipating social, economic, and environmental changes over the next 20 plus years. The Comprehensive Plan is intended to provide a framework to assist the City in ensuring that a planned vision is realized to the extent possible. As part of that vision, the City recognizes the travel needs of its residents, local businesses, commuters, visitors, and others traveling through the community. Furthermore, the City of Hutchinson recognizes its important role within the local and regional transportation system and that its policies and infrastructure improvement projects need to encourage and contribute to the orderly development within and surrounding the community.

Transportation facilities both link and, in some cases, separate land uses within communities and throughout a county or region. Therefore, the Transportation Plan is an integrated component of the Hutchinson Comprehensive Plan because it assesses all components of the transportation system. This plan encompasses the location, limits, function, and capacity of all transportation facilities in the City of Hutchinson.

1.1 Purpose and Content of the Transportation Plan

The purpose of the Hutchinson Area Transportation Plan is to provide the policy and program guidance needed to make appropriate transportation related decisions when land use changes occur, when elements of the transportation system need to be upgraded, or when transportation problems occur. This Transportation Plan defines how Hutchinson will provide for an integrated transportation system that will serve existing and future needs of residents, businesses, visitors, and how the City's system of roadways will complement the portion of the McLeod County roadway system and state highway system that lie within and immediately surrounding the Hutchinson's municipal limits. To provide for safe transportation facilities that offer adequate capacity (existing and future) with a high level of mobility, a transportation improvement plan that corresponds to Hutchinson's overall comprehensive plan must be adopted, implemented, routinely utilized, and regularly maintained.

1.2 Transportation Vision

The intent of this policy statement is to state a desired outcome in general terms. The transportation vision was developed by considering key findings related to the transportation system and integrating public input generated as part of the community outreach associated with the plan update.

"The transportation network in the City of Hutchinson will facilitate the efficient movement of citizens, visitors, and commerce within and through the city on a safe, well maintained, convenient, coordinated, and fiscally responsible network of routes using a balanced multi-modal transportation system".

1.3 Guiding Transportation Principles

The City's transportation guiding principles will serve as an overall framework for this Transportation Plan. These principles represent the basic goals of this plan and reflect the expressed needs and desires of the citizens and businesses of Hutchinson. The guiding principals will guide the direction of future transportation improvements throughout the community. These principles will also be used as a tool for guiding infrastructure improvements and furthering the transportation vision for Hutchinson. The following principles reflect the community's desire to provide a safe, convenient, multi-modal, and environmentally-responsible transportation infrastructure for Hutchinson and the surrounding area:

- To develop a system of streets that is consistent with the existing transportation patterns throughout the community, which provides safe and timely travel for residents, visitors,
 - commuters, and commercial users by creating a network of routes that separate traffic according to length of trip, speed, and land accessibility.
- Local street patterns should minimize circuitous travel because it increases trip length, time, fuel consumption and emissions. Local street design should permit flexibility in community design and allow streets that are compatible with all design objectives of a neighborhood.
- Opportunities will continue to be encouraged and facilitated to allow walking and biking throughout the community.
- Enhance public transit when the community grows to a scale that can support additional services and facilities.
- Opportunities to expand additional modes of transportation (i.e. air travel and railroad corridors) should be preserved and expanded in a safe and efficient manner.
- The City shall ensure local and regional transportation plans are regularly updated to effectively help guide planning and attract future development.

2.0 Existing Transportation System

2.1 Roadway Jurisdictional Classification System

Jurisdiction over the system of roadways in Hutchinson is shared among three levels of government (state, county, and city). Roadway jurisdiction is important because it affects a number of critical organizational functions and obligations including regulatory, maintenance, construction, and financial commitments. Figure 1 depicts the existing jurisdictional classification for all roadways within and immediately surround the City of Hutchinson. The system includes the trunk highway system, managed by the Minnesota Department of Transportation (MnDOT), the County State Aid Highway (CSAH) and County Road system, managed by McLeod County, and the City's Municipal State Aid System (MSAS) and local city streets, managed by Hutchinson. Furthermore, several roadways located in the future growth area for the city are currently under township jurisdiction.

In general, the following relationships regarding jurisdictional designations are observed:

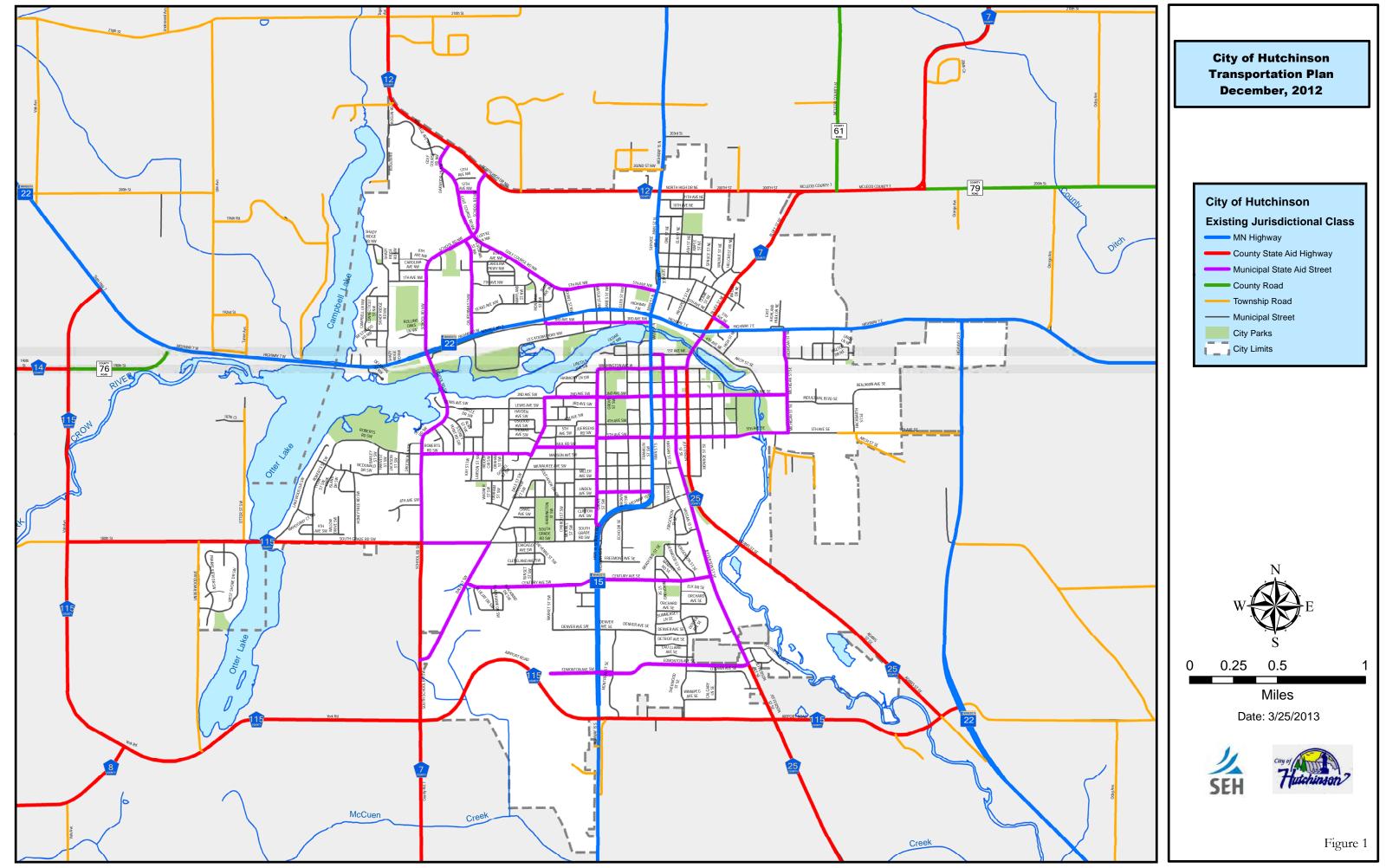
- Roadways that serve regional, inter-county or state-wide travel needs are typically owned and maintained by MnDOT.
- Roadways that serve sub-regional needs generally qualify as county state aid highways or county roads and are owned and maintained by McLeod County.
- Roadways that primarily serve local trips and property access are owned and maintained by Hutchinson or the surrounding townships.

2.1.1 Jurisdictional Classification Guidelines

Jurisdictional classification is based on a variety of issues and factors including functional classification, system continuity, access control, type of trips served (length of road/length of trip served), average daily traffic volumes, special facilities served, and funding/maintenance issues. Functional classification is means by which roadways are grouped into classes according to the character of service they are intended to provide. Functional classification is further discussed in Section 2.2.

State Highway System

Generally, state jurisdiction is focused on routes that can be characterized as serving longer trips at higher speeds with regional, inter-county, and/or state-wide travel needs. State highways commonly have the highest traffic volumes, accommodate more truck movements, and are typically spaced at intervals consistent with population density, such that developed areas of the state are within reasonable distance of a state highway. The functional classification system for roads under the state jurisdiction is normally Principal Arterial or Minor Arterial.



The state highway system provides vital links for Hutchinson to communities to the south (Glencoe, New Ulm, and Mankato) and to the north (Litchfield, Willmar, and St. Cloud), and to the east (Twin Cities western suburbs). MnDOT's existing annual average daily traffic (AADT) volumes indicate Highway 7 carries a range of traffic from 6,300 to 12,200 trips west of Highway 15 and 7,200 to 8,800 trips east of Highway 15. Traffic volumes along Highway 15 range from 4,450 trips south of County State Aid Highway (CSAH) 115/Airport Road to 13,000 trips through downtown Hutchinson. Immediately north of Highway 7 average daily traffic on Highway 15 is approximately 10,100 trips and declines to 5,200 trips north of CSAH 12/North High Road. Traffic volumes along Highway 22 range from 3,400 trips just south of Highway 7 to 4,550 trips south of CSAH 115/Airport Road. As is common in most areas, traffic volumes on the trunk highway system increase dramatically in more urbanized areas (downtown) and drop to lower levels in urban fringe and rural areas. Existing roads within Hutchison under MnDOT's jurisdiction include: Highway 7, Highway 15, and Highway 22. Other state highways in the area include Highway 12, located approximately 15 miles to the north and Highway 212, which is located approximately 12 miles to the south.

McLeod County Road System

The County's jurisdictional system is made up of both County State Aid Highways (CSAH) and County Roads (CR). These roads provide connections throughout McLeod County and convenient access to urban areas and state highways. The County system emphasizes higher mobility rather than land access and often includes some form of access management control that will assist in preserving mobility and safety. The functional classification system for roads under the County's jurisdiction is usually Minor Arterial, Major Collector, or Minor Collector. A county roadway system is often spaced at intervals consistent with population density so as to provide reasonable access to arterial or collector roads. Traffic volumes on county roadways tend to be at moderate levels and most often within the capacity range of a two-lane roadway.

Existing roadways within the City under McLeod County's jurisdiction include: CSAH 7/Bluff St., CSAH 115/Airport Rd., CSAH 12/North High Dr., CSAH 25/Adams St., CSAH 115/So. Grade Rd., CR 61/Lake Hook Rd., CR 76/190th St., and CR 79/200th St (see Figure 1).

City Streets

The City of Hutchinson has a comprehensive network of local streets (see Figure 1). City streets are typically closely spaced shorter routes that primarily focus on providing land access and connections between neighborhoods and commercial nodes rather than continuity to outlying areas. The functional classification of most city streets is collector roadways, but in some cases can be designated as arterial routes if they serve highly developed areas and/or provide important connections between major traffic generators such as industrial parks, shopping centers, and education complexes.

Township Roads

The City is surrounded by four townships (Acoma, Hutchinson, Lynn, and Hassan Valley), which all have an extensive network of regularly spaced local roadways that primarily focus on providing land access to adjacent properties. Township roads also provide connections to state highways, the McLeod County roadway system and in some cases to city streets. Township roads commonly carry low levels of traffic and have minimal design features including gravel surfaces.

2.2 Roadway Functional Classification System

Functional classification is a system by which roadways are grouped according to the function they are intended to serve. Basic to this process is the recognition that individual roadways do not function independently, but rather most travel involves movement along a network of different functional types of roads. In simplistic terms, "functional classification" involves determining what role (level of mobility versus property access) each roadway should perform prior to determining its design features, such as street widths, design speed, and intersection control. Furthermore, functional classification is an important consideration in the development of local land use regulations. The mobility of higher classified roadways should be protected by careful management of site development and access spacing standards. Transportation problems commonly occur when a roadway's design and the management of access to the roadway are inconsistent with the functional and operating demands imposed by the surrounding land uses.

The Federal-Aid Highway Act of 1973 first established the functional classification concepts, procedures, and criteria that a still being utilized today. Four basic functional classification categories are typically used for transportation planning. The functional classification categories include:

- Principal Arterials;
- Minor Arterials;
- Collectors (Major/Minor); and
- Local Streets.

The Federal Highway Administration has established guideline ranges for travel volume (vehicle miles traveled) and mileage percentage recommendations for each of the four functional classification categories. MnDOT, McLeod County, and Hutchinson have designated their roadways in a fashion that complies with the intent of the federal standards.

As previously mentioned, a functional classification system also provides a means for identifying roadways which are oriented toward providing mobility for through-trips (Principal and Minor Arterials) versus those that are oriented more toward providing accessibility or land access (Collectors and local streets). Figure 2 depicts the relationship between land access and mobility and how the different classifications of roads provide varying degrees of mobility versus land access. Figure 3 shows the basic framework and layout of the functional classification system of roads.

Mobility

Arterial Roadway

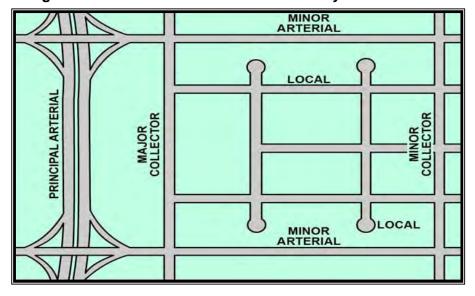
Collector Roadway

Land Access

Local Roadway

Figure 2 - Relationship between Land Access and Mobility

Figure 3 – Basic Functional Classification System Framework



2.2.1 Principal Arterials

Principal arterials typically have the highest volume capacity and provide the highest level of service at higher speeds for the longest uninterrupted distance. This type of roadway is intended to connect larger cities with one another and connect major business centers. The functional emphasis is on mobility rather than land access. The nature of land uses adjacent to principal arterials is typically of a higher intensity. Trunk Highways 7, 15, and 22 are classified as principal arterial roadways (see Figure 4).

Principal Arterial Roadway Characteristics

- Emphasis on mobility rather than providing land access.
- High speed design with travel speeds of 55 mph or greater in rural areas.
- Serve longer (regional, inter-county, state-wide) trips.
- Commonly spaced at least 6 to 12 miles apart.

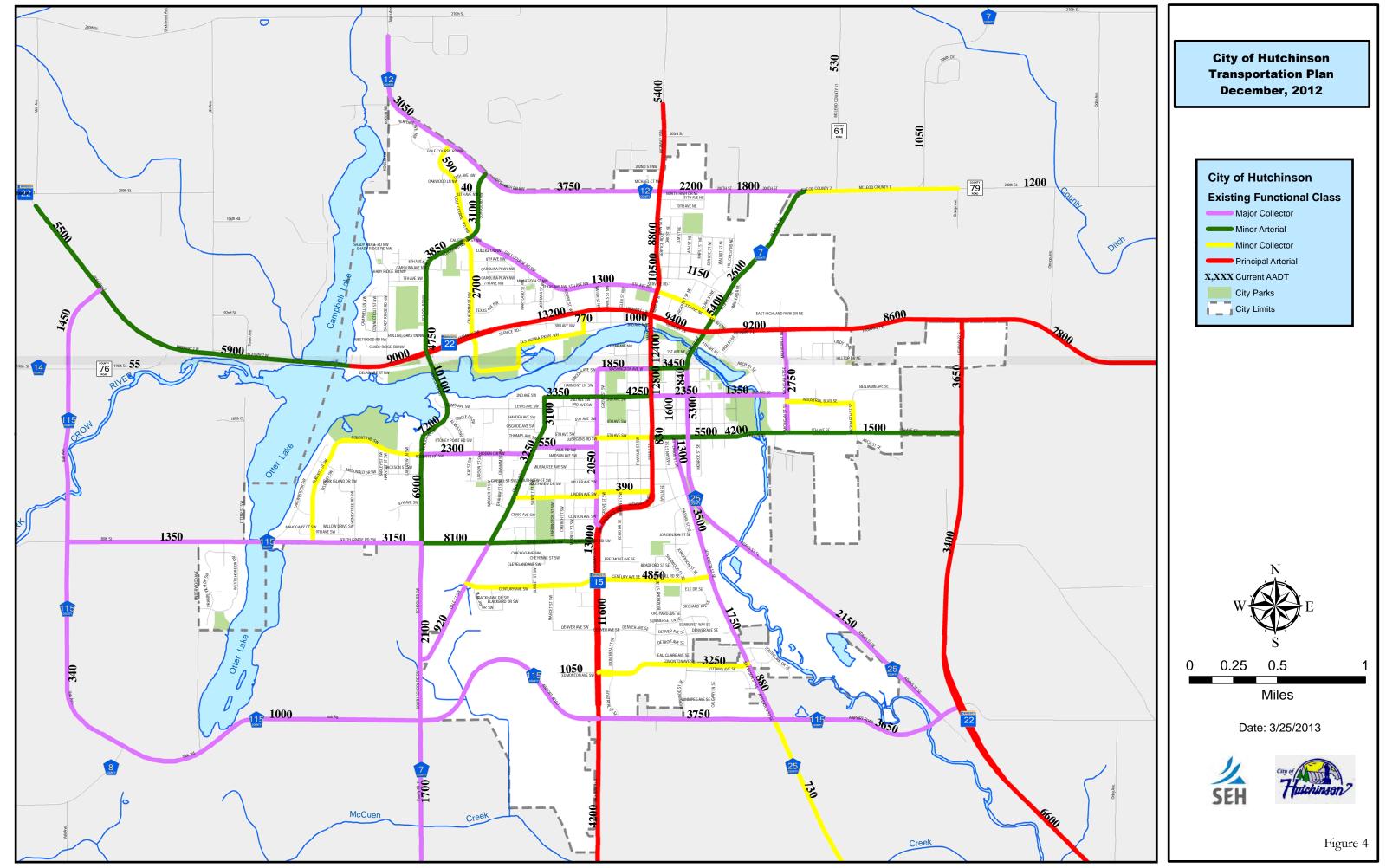
2.2.2 Minor Arterials

Minor arterials are intended to connect important locations both inside and outside of Hutchinson. The function of this type of roadway is intended to provide service for trips of moderate length at a somewhat lower level of mobility than principal arterials. However, minor arterials should continue to have a greater focus on mobility rather than providing land access. Minor Arterials generally connect to principal arterials, other minor arterials, or major collectors. They are commonly of regional importance because they relieve traffic on, or substitute for principal arterials when necessary. In the city, the following roadways are classified as minor arterials (see Figure 4):

- Trunk Highway 7/22 (west of Campbell Lake);
- School Road (North High Dr. to South Grade Road);
- South Grade Road (School Rd. to Highway 15);
- Dale Street (So. Grade Rd. to 2nd Ave.);
- 2nd Avenue (Dale St. to Highway 15);
- Bluff Street/CSAH 7 (North High Dr. to Washington Ave. SE);
- 5th Avenue SE (Highway 15 to Highway 22); and
- Washington Avenue (Highway 15 to Adams St./CSAH 25)

Minor arterial Roadway Characteristics:

- Emphasis more on mobility rather than providing land access.
- Higher speed design (greater than 40 mph).
- Serve longer (regional, inter-county, inter-city) trips, typically greater than 5 miles.



2.2.3 Collectors

Within a functional classification system there are commonly two types of collector roadways (Major and Minor), which provide a balance between land access and mobility. Major collector roadways are designed to serve shorter trips that occur primarily within the City, and to collect and distribute traffic from one part of the community to another and from employment centers to the arterial system. These roadways can be part of the county highway system as well as the local municipal street system. The major collector system in the Hutchinson Area includes the following roadways (see Figure 4):

- North High Drive/CSAH 12 (Highway 15 to beyond west City limits.);
- Golf Course Road/5th Avenue NW (School Rd. to Highway 15);
- Juul Road (Dale St. to Lynn Rd.)
- Roberts Street (School Rd. to Dale St.);
- Airport Road/CSAH 115 (Highway 7 to Highway 22);
- South Grade Road/CSAH 115 (CSAH 115 to School Rd.);
- School Road (south of South Grade Road);
- Dale Street (School Rd. to So. Grade Rd.);
- Lynn Road (So. Grade Rd. to Washington Ave. NW);
- Jefferson Street (5th Ave. SE to Airport Rd./CSAH 115);
- Adams Street/CSAH 25 (Washington Ave SE to Airport Rd./CSAH 115);
- 2nd Avenue SE (Highway 15 to Michigan St.)
- Michigan Street (Highway 7 to 5th Ave. SE); and
- North High Drive/CSAH 12 (Highway 15 to Bluff St.)

Minor collector roadways collect and distribute traffic to the major collector and arterial networks. These roads are generally shorter and less continuous than major collectors, but serve to supplement those roadways. Minor collectors are also typically part of the municipal street system and county road system. The minor collector system in the Hutchinson Area includes the following roadways (Figure 4):

- California Street;
- Golf Course Road (North High Dr./CSAH 12 to School Rd.);
- 5th Avenue SW (Lynn Rd. to Highway 15);
- Linden Avenue (Dale St. to Highway 15);
- Roberts Street (South Grade Rd. to School Rd.);
- Century Avenue (Dale St. to Jefferson St.);
- Edmonton Avenue (Highway 15 to Jefferson St.);
- Jefferson Street (south of Airport Rd./CSAH 115);
- 5th Avenue NE (Highway 15 to Bluff Street);
- Les Kouba Parkway;
- Industrial Boulevard SE;
- Hackbarth Street SE; and
- North High Drive/CSAH 7 (east of Bluff St.)

Major and Minor Collector Roadway Characteristics:

- Emphasis equally balanced between mobility and providing land access for major collectors and more focused on land access for minor collectors.
- Serving shorter length trips within and through the community.
- Commonly spaced at ½ mile apart in urban areas.
- Travel speeds typically range from 30-40 mph in urban areas.

2.2.4 Local Roadways

All other public roadways within the Hutchinson Area (city streets and township roads) are classified as local roadways.

Local Roadway Characteristics:

- Local roads provide the highest level of direct property access and typically carry lower traffic volumes at slower speeds (30 mph or less).
- Typically serve trips that range from one city block in urban areas to less than 2 miles in rural areas.
- Local roadways are spaced as needed.

2.3 Existing Transportation Needs and Issues

It is important that an analysis of the transportation system needs and issues is based on both an evaluation of the existing transportation system and an understanding of how the traffic will likely grow in the future. This section focuses on existing transportation system issues and needs.

2.3.1 Existing System Capacity Analysis

A review of potential capacity constraints on the existing local and regional roadway system was completed using the most recent traffic volume counts (as previously shown on Figure 4).

Traffic operations data indicates that a roadway begins to experience noticeable operational problems once traffic approaches approximately 85% of a roadways design capacity. For a two-lane road that means operational problems begin to occur when traffic volumes exceed approximately 10,500 trips per day (see Table 1).

Table 1 – Average Daily Traffic (ADT) Planning Level Capacities

Deadanas Torre	Level of Service Based on ADT					
Roadway Type	A	В	C	D *	E	F
Two-lane	<8,000	8,000–9,500	9,250–10,750	10,500-12,000	11,750–13,250	>13,250
Three-lane (center left turn lane)	<9,000	9,000-12,000	11,500–14,500	14,000–17,000	16,500–19-500	>19,500
Four-lane undivided	<12,000	12,000–15,000	14,500–17,500	17,000–20,000	19,500–22,500	>22,500
Four-lane divided (center median)	<19,000	19,000-22,000	21,500–24,500	24-500-27,000	26,500–29,500	>29,500

^{*} ADT associated with LOS D represent traffic volumes approaching 85-percent of a roadways design capacity.

Roadway level of service (LOS) is commonly used to assign a value to the level of congestion and efficiency of the roadway. LOS is a measure of delay and operating conditions defined by the Highway Capacity Manual using a grading scale from A to F.

Level of Service	Volume/Capacity (V/C) Ratio	Traffic Flow	Description
Α	0.00 to 0.39	Free Flow	FREE FLOW Low volumes and no delays.
В	0.40 to 0.59	Stable Flow	STABLE FLOW Low volumes and speeds dictated by travel conditions.
С	0.60 to 0.79	Stable Flow	STABLE FLOW Speeds and maneuverabilify closely controlled due to higher volumes.
D	0.80 to 0.99	Restricted Flow	RESTRICTED FLOW Higher density traffic restricts maneuverability and volumes approaching capacity.
E	1.00 to 1.19	Unstable Flow	UNSTABLE FLOW Low speeds, considerable delays, and volumes at or slightly over capacity.
F	1.20 and above	Forced Flow	FORCED FLOW Very low speeds, volumes exceed capacity, and long delays with stop-and-go traffic.

LOS A and B indicate conditions when traffic demand is well below the roadway capacity and travel is rather unimpeded. At LOS C, the average speed decreases and slower traffic and turning traffic quickly cause delays/congestion. Through LOS D, traffic volumes approach a roadway's functional capacity, stoppage and delays begin to occur, the

average speed is substantially lower, and passing is unlikely to occur. At LOS E, traffic demand exceeds capacity, drivers are choosing other routes and times to travel, and any disturbance to the traffic flow, such as turning traffic, promptly drops this condition to a LOS F. A LOS F means traffic demand far exceeds capacity, heavy congestion is prevalent, log periods of stop and go conditions occur, and travel time is severely degraded.

The capacity thresholds listed in Table 1 were considered for the various roadways throughout the City of Hutchinson. In addition to assessing the operations of the existing system, the capacity table provides a means to determine what typical roadway sections would be generally acceptable at various levels of traffic. The information contained in the table was also utilized in an assessment of future capacity constraints (see Section 5.2).

Capacity deficiencies result in increased congestion, reduced travel speeds, and increase travel times. Furthermore, roadway congestion causes drivers to seek out alternative routes, which can place additional traffic on county and city streets that may not be designed to handle such a function. Residential property owners along these routes recognize the increase in traffic when congestion on the regional system occurs and this increase in traffic can create conflicts with residential land uses. Capacity improvements typically begin to be planned for when a roadway is operating at LOS D. This provides adequate opportunity to plan corrective improvements before operational problems reach LOS E or F.

According to existing traffic volumes, Highway 15 from CSAH 115/Airport Road through downtown Hutchinson and north of Highway 7 to 5th Avenue has daily traffic volumes that appear to exceed the capacity of the highway. The addition of intersection improvements (turn lanes) have extended the capacity and improved operations, especially in the southern portion of the City. No other roadway segments are experiencing capacity constraints.

2.3.2 Existing System Safety and Crash Analysis

Roadway safety can be a major concern and should be a priority for all jurisdictional levels (state, county, local). Safety and operational problems often result from when a roadway or system of roads inhibits the efficient movement of travel.

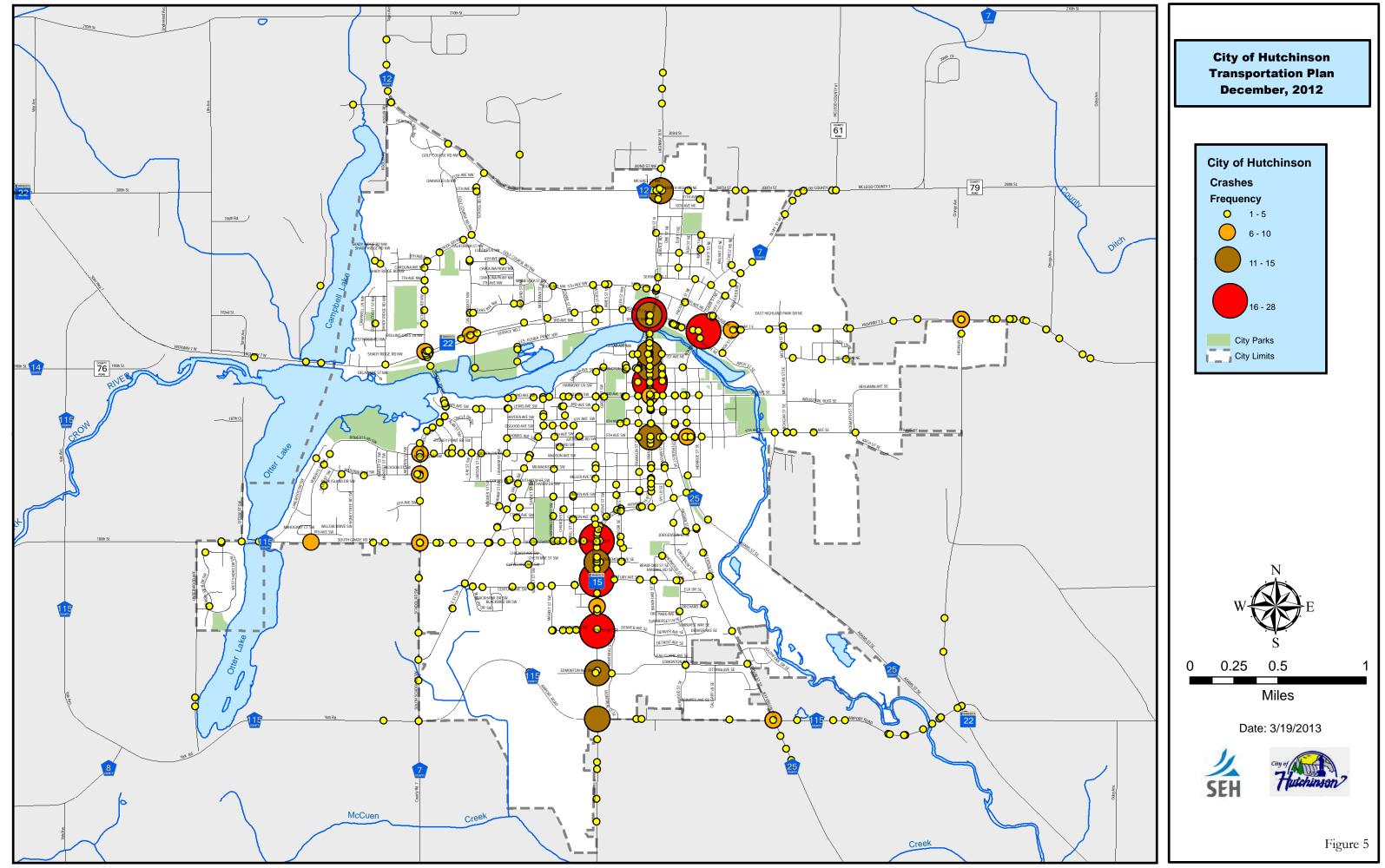
Other safety concerns can arise due to traffic volumes on a particular roadway or intersection approaching or exceeding the design capacity of the transportation infrastructure. An effort must be made to correct design problems which contribute to unsafe or inefficient conditions.

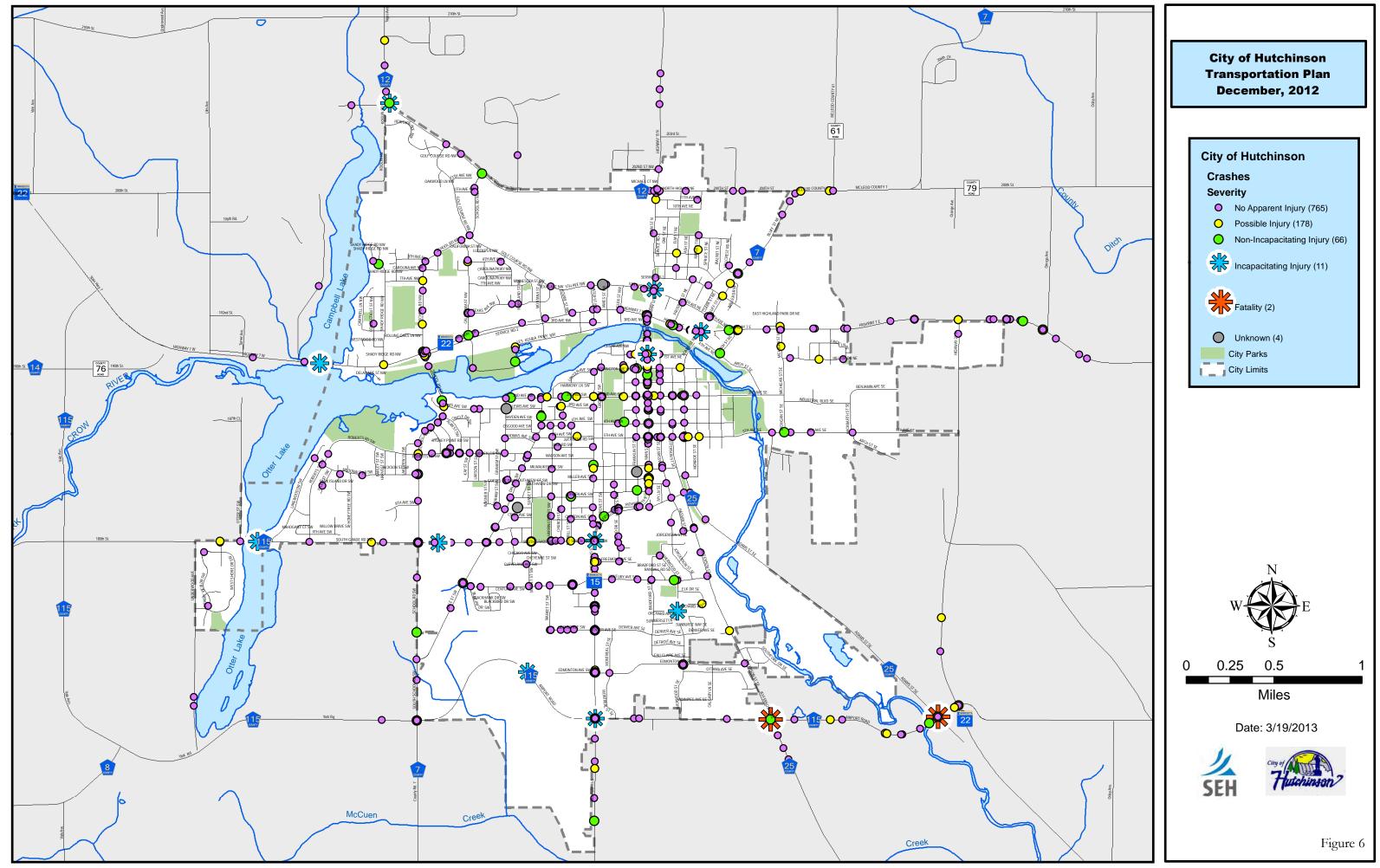
The Minnesota Department of Transportation's Crash Mapping Software (MnCMAT) was used to identify crash locations and frequencies for the City of Hutchinson. A five-year reporting period beginning 2007 and ending in 2011 was utilized in this assessment of existing safety conditions. Figures 5 and 6 illustrate the 5-year crash history for roadways within the Hutchinson Area. According to the MnDOT database, a total of 1,026 crashes were reported during the five year analysis period. As part of that total, there were 20 bicycle crashes and 12 pedestrian related crashes reported. It should be noted that this number of crashes only reflects "reported" crashes and instances were no law enforcement officer responded to a crash site and/or a crash report was not completed were not included.

As depicted on Figure 5, the highest concentrations of crashes occur at intersections and along corridors with higher traffic volumes. Figure 5 is intended to provide a graphical depiction of high frequency crash areas and is not intended to provide a total number of reported crashes. Figure 6 illustrates crash severity in the Hutchinson Area. Crashes of greatest concern are those that resulted in fatalities and/or incapacitating injuries. These crashes should receive a disproportional level of attention since they involve loss of life and injuries resulting in permanent disabilities. There were a total of 2 fatal crashes 11 incapacitating, and 66 non-incapacitating injury crashes in the analysis period. The vast majority of these higher severity injury crashes occurred at roadway intersections. Two of the fatal crashes occurred along CSAH 8/Airport Road. According to the reports, none of the pedestrian/bicycle crashes involved fatalities or incapacitating injuries.

The Highway 15/Century Avenue intersection has been identified as one of the highest crash rate intersections in all of MnDOT District 8. Concept intersection improvements have been considered, but due to high costs any improvements have been delayed at this time. It has been determined that intersection improvements will be pursued in a larger cooperative safety project with MnDOT. Other intersections "hot spots" with higher frequencies of crashes in and around the community include:

- Highway 15/Airport Road/CSAH 115 (roundabout planned)
- Highway 15/Edmonton Avenue
- Highway 15/Denver Avenue SE/SW
- Highway 15/South Grade Road SW
- Highway 15/Freemont Avenue
- Highway 15/5th Ave SE/SW
- Highway 15/1st Ave SE/SW
- Highway 15/Washington Avenue E/W
- Highway 15/1st Avenue NE/NW
- Highway 15/Highway 7/22
- Highway 15/North High Street/CSAH 12 (roundabout recently reconstructed)
- Highway 7/Bluff Street/CSAH





Potential cause and analysis of frequent crashes at a particular intersection was not conducted for this analysis. A Roadway Safety Audit – Intersection Analysis is a tool to better understand the traffic operations and provide the detailed crash history for each site. This can then outline specific improvements that may be consider in improving safety at a location. In addition, a more rigorous investigation of possible geometric design changes or an intersection control evaluation (ICE) is recommended prior to determining the appropriate corrective measures at any particular intersection.

2.4 Public and Transportation Stakeholder Involvement

The planning process was designed to achieve broadly based, informed, and thoughtful consideration of the crucial issues confronting the City of Hutchinson. The process for identifying transportation issues and needs was built upon past transportation planning efforts, provided new technical information, and created multiple opportunities for public input.

An open and comprehensive public and transportation stakeholder involvement process was identified as a key component to the successful development of the Hutchinson Transportation Plan. Public and transportation stakeholder involvement efforts provided the public, businesses, and local/regional/state transportation agencies with continuing opportunities to be involved in the identification of issues and potential improvements of the existing and future transportation system in the City of Hutchinson. Input from affected agencies and the public was important in lending credibility to key decisions made during the transportation planning process. Making timely, accurate, and useful information available to both key decision-makers and the general public assisted in gaining trust and support that will be necessary to ultimately implement the policies and recommendations contained in this plan. Key elements of the public involvement and transportation stakeholder process included:

2.4.1 Local Traffic Flow & Safety Questionnaire

A questionnaire was distributed through the public utility billing system in February of 2012. The objective of the community-wide survey was to gather input and feedback regarding the current status of traffic flow and safety within and around the City of Hutchinson. The City received excellent participation, with over 700 questionnaires being returned with responses from citizens, other agencies, local organizations, and businesses. The survey results indicate that the status of traffic flow and safety in the Hutchinson area is generally considered positive and in fact more favorable when compared to a similar survey conducted in 2007. One question requested specific areas where traffic flow and safety could be improved. The following list is includes the top five areas and the number of survey responses for each:



- 1. Main Street/TH 15 and 3rd Avenue S intersection (130 responses)
- 2. Main Street/TH 15 traffic flow (congestion) and safety (102)

- 3. Main Street/TH 15 and 5th Avenue S intersection (68)
- 4. Main Street/TH 15 downtown area (62)
- 5. TH 15 and McLeod CSAH 115/Airport Road intersection (30)

The survey also requested responders to provide suggestions to help improve traffic flow and safety within the City of Hutchinson. The following list includes the top five transportation improvements/actions and the number of survey responses provided in the survey results:

- 1. Traffic signal timing and synchronization (45 responses)
- 2. Main Street/TH 15 bypass (25)
- 3. Enforcement of stop signs/traffic signals (25)
- 4. Enforcement of speed limits (25)
- 5. Main St./TH 15 and 5th Avenue S four-way stop or traffic signal (15)

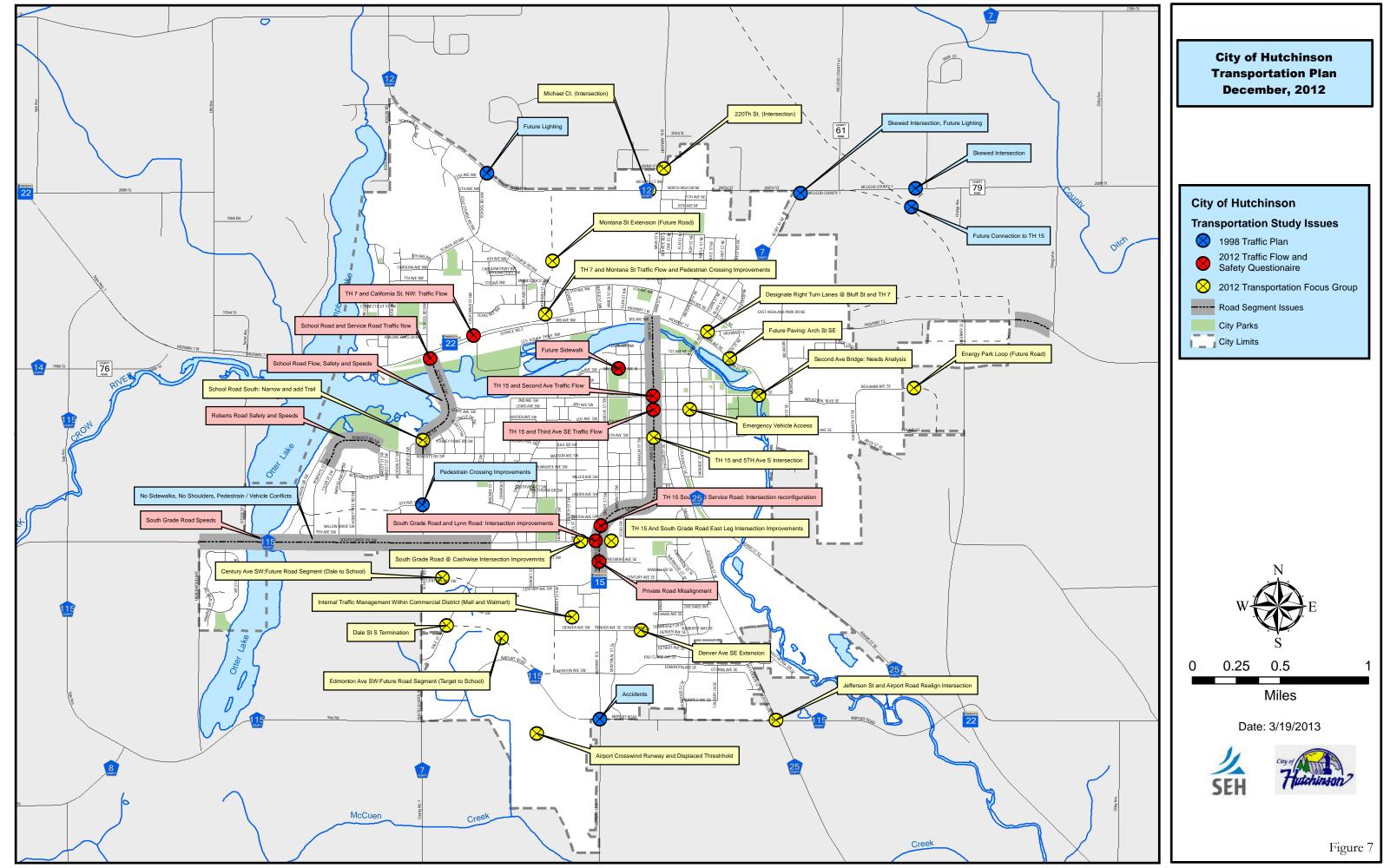
All of the questionnaire information received was used in identifying and prioritizing traffic flow and safety issues that impact the traveling public. In general, the issues primarily pertained to specific streets, intersections, trails, sidewalks, bike lanes, crosswalks and other locations/items. A copy of the 2012 Local Traffic Flow & Safety Questionnaire with a summary of the responses is included in Appendix A.

2.4.2 Transportation Focus Group

A Transportation Focus Group was formed to guide decision making during the preparation of the Transportation Plan Update. The Group included transportation stakeholders from various agencies including the City of Hutchinson, Mid-Minnesota Regional Development Commission, McLeod County, Hutchinson Public Schools, and MnDOT. The group met six times between November 2011 and December 2012. A summary of each of the Transportation Focus Group meetings is included in Appendix B.

The purpose of these meetings was to discuss existing and future transportation needs and issues affecting the City of Hutchinson and the surrounding area. Two important outcomes of the Transportation Focus Group meetings was the completion of an updated list and figure of key issues throughout the community (see Figure 7) and an updated Pedestrian and Bicycle Plan map (formerly referred to as the Light Traffic Plan map). The Pedestrian and Bicycle Map is contained in Section 6.0 of this Plan.

The issues identified by the Focus Group included traffic flow concerns, safety concerns, proposed future roadway extensions, and pedestrian/bicycle improvements. Section 7.0 – Implementation, identifies several recommendations for new policies and/or City actions that are aimed at addressing these transportation issues and others. The Focus Group also assisted in defining the "special area studies" that were completed as part of the Comprehensive Plan Update. These studies are discussed in detail in Section 4.0.



2.4.3 Public Open House Meetings "Listening Sessions"

The City conducted two open house meetings throughout the development of the Transportation Plan Update. The purpose of the meetings was to provide information, listen to and receive public comments, and to answer questions. Participants included residents, property owners, and business owners from the area. These meetings provide an excellent opportunity for the City to listen to public concerns and ideas related to transportation infrastructure in the community. The information gathered at these meetings was then used in the development of the Plan.

2.4.4 Coordination with Other Jurisdictions

Hutchinson shall continue to coordinate with other jurisdictions (i.e., MnDOT, McLeod County, and surrounding townships) when planning future transportation infrastructure improvements. Coordination among jurisdictions provides opportunities for collaboration that can benefit all agencies and the public, which in turn can result in financial and time savings through economies of scale and potentially reduced construction impacts to residents and businesses through the coordination of projects.

3.0 Transportation Plan Goals, Objectives, And Policies

Transportation goals, objectives, and policies should reflect a vision of what Hutchinson's transportation system should provide. They will also help guide priorities for future investment, either as a publicly-maintained local system or in partnership with regional or state transportation agencies. These transportation goals, objectives, and policies provide the City with a means to measure the performance of the transportation system over time, and as necessary, an opportunity to reassess, revise and/or supplement the desires of the community.

The "goals" indicate a specific policy direction and assist in organizing individual objectives and more defined policies. The "objectives" provide more detailed action plans that are necessary to prioritize and initiate a goal. Objectives and policies may include the start up or continuation of a program or implementation of a specific project. The following goals, objectives, and policies are not ranked or presented in order of importance or need:

3.1 Goal 1: Preserve and Enhance the Transportation System Objectives:

- A. Monitor and maintain the existing transportation system by making adequate improvements to accommodate anticipated growth or to replace worn or obsolete components of the system
- B. Seek opportunities to improve existing roadways through land use changes or redevelopment opportunities and by coordinating improvements with roadway partners (e.g. McLeod County and MnDOT) and their funding programs.
- C. Make sure that local needs are considered as part of regional transportation plans.

Policies:

- 1. As one of its greatest investment priorities, the City shall preserve its existing transportation system in the highest order of operating condition.
- 2. The City will continue to maintain pavement and permanent right-of-way fixtures associated with the roadway system (including bridges) using routine inspections and maintenance and improvement programs (street rehabilitation program) coordinated by the Hutchinson Public Works Department.
- 3. The City will coordinate roadway preservation improvements with other transportation system partners including McLeod County, MnDOT, and existing/future transit providers in the area.
- 4. The City will continue to develop a transportation system that is cost-effective, where each expenditure satisfies a public transportation objective.
- 5. The City will review all plans for development/redevelopment to determine their impact on the transportation system.
- 6. The City will actively participate with other jurisdictions in regional planning efforts.

3.2 Goal 2: Improve the Functionality & Safety of the Transportation System Objectives:

- A. Continually monitor and analyze the transportation system and assess its performance level.
- B. Identify system deficiencies by examining trend data, including safety (crashes), forecast traffic volumes (capacity), and accessibility (mobility).
- C. Establish a complete roadway network based on balancing the principals of sustainable infrastructure and roadway functional classification.

Policies:

- 1. The City will encourage and in some cases conduct studies of reasonable traffic management techniques where documented safety issues exist.
- 2. The City will monitor crash statistics for trends and tailor crash reduction improvements for targeted areas.



- 4. The City will continue to work with public roadway partners and private property owners on access management strategies along primary roadway corridors.
- 5. The City's sign maintenance practices shall meet all requirements, including federal sign retro-reflectivity standards, and ensure appropriate signing for the traveling public.
- 6. Where applicable, the City will integrate safety features into pedestrian/bicycle improvements.
- 7. The City's land use development standards will promote safe and efficient access to the transportation system.
- 8. Require new development to provide an adequate system of local streets while limiting direct access to major thoroughfares (e.g. Highway 7, Highway 15, Highway 22) in order to maintain safe and efficient roadway operations.
- 9. Require the dedication or preservation of right-of-way consistent with adopted right-of-way standards when property is platted or subdivided, and work with landowners/developers during the site planning and platting process to implement safe and efficient roadway designs that look first to provide access via a local roadway rather than a regional roadway.
- 10. The City will continue the implementation of access management guidelines to assist in preserving future roadway capacity and improving safety along all roadways.
- 11. The City will periodically survey the residents of Hutchinson on their perception of the local transportation system including its strengths, areas of concerns and opportunities for improvement.

3.3 Goal 3: Balance Transportation Needs with Principles Objectives:

- A. Maintain and enhance the "small-town" character of Hutchinson by providing multimodal transportation choices and context-sensitive design elements for new and/or reconstructed intersections and corridors.
- B. The City shall strive to provide convenient access to natural features and opportunities to support active living and healthy lifestyle activities.

Policies:

- 1. Where possible the City will utilize a Complete Streets methodology in the design of streets (adjacent land uses, travel speed, width and number of lanes, on-street parking,
 - vertical / horizontal alignment, pedestrian and bicycle features, intersection curb radii and crossing facilities, landscaping, lighting, etc.).
- 2. To the greatest extent practical, the City shall balance the transportation system needs with the potential impacts and affects upon natural features of the community.
- The City will minimize the number of private access points to minor arterial and major collector roadways as part of the development review process.



4. The City will require multimodal traffic impact studies for larger scale developments.

3.4 Goal 4: Improve Connectivity Throughout the Community Objectives:

- A. Assess the current transportation system for efficiency and connectivity between commercial nodes, neighborhoods, and civic amenities and develop possible solutions.
- B. Encourage interconnected development patterns to create more convenient multi-modal travel options that will also foster a sense of neighborhoods, while maintaining acceptable traffic volume levels and safety.
- C. Consider solutions for all modes of travel demonstrating connectivity concerns. Maintain an interconnected pedestrian and bicycle system that links residential, institutional/educational, commercial/retail, employment and recreational destinations.

Policies:

- 1. The City will work with McLeod County, MnDOT, residents, and businesses to provide linkages for logical connections that currently represent transportation system gaps, especially to help reduce crashes and maintain the local transportation system.
- 2. The City will evaluate current intersection control (stop signs) along primary travel corridors that have frequent intersections from the criss-crossing of local roadways. Removal of excessive intersection control shall only be considered after a determination is made that travel safety will not be compromised and the modification(s) will enhance travel efficiency/mobility.

- 3. When new/re-development proposals are received, the City shall require connectivity of collector and local streets (including their pedestrian facilities) and trails between residential developments and other land uses.
- 4. The City will continue to support trail connectivity among local, regional and state trail systems.

3.5 Goal 5: Enhance Transit Opportunities and Usage Objectives:

- A. The City will support local and regional transit providers and programs that benefit residents and visitors to the area.
- B. The City will assess the changing transit needs of residents through continued coordination with the outreach efforts of local and regional providers.
- C. The City will encourage transit use through improvements to accessibility, service, and choice.
- D. The City will ensure planned development/redevelopment consider future accommodations for transit facilities or services.



Policies:

- 1. The City will coordinate with transit providers to determine future transit services consistent with the City's transit market and its associated service standards and strategies.
- 2. Evaluate the need for transit facilities and accommodations in the redesign and reconstruction of roadways whether or not they are currently used by transit providers.
- 3. Reduce transportation demand by encouraging programs that provide alternatives to single occupant vehicles.
- 4. Encourage collaboration with surrounding communities on the need for and location of improved transit services.

3.6 Goal 6: Implement the Transportation Vision Through Strategic Funding, and Objective and Definitive Decision Making, with the Collaboration of Jurisdictions (MnDOT, McLeod County, and surrounding townships). Objectives:

- A. Plan for and preserve future opportunities for necessary transportation system improvements, including right-of-way and multi-modal routes and facilities.
- B. Realize necessary transportation system improvements in a cost-effective and timely fashion.
- C. Empower City staff to pursue state and federal transportation funding and evaluate non-traditional transportation funding mechanisms.

Policies:

1. Utilize available funding programs such as the Municipal State Aid Street (MSAS) and other revenue sources to maximize and leverage funds to transportation improvements.

- 2. Require adequate right-of-way dedication for new and/or expanded roadways based on the planned function under future conditions.
- 3. Encourage business owners, residents and community groups to be active participants in seeking funding by contacting local, state and federal decision makers in support of transportation funding.

This Page Left Blank Intentionally

4.0 Special Area Studies

Several special transportation studies were conducted to provide a more detailed assessment. The studies were not intended to identify specific recommendations, but rather findings that could be used in the development of improvements or policies.

4.1 2nd Avenue SE Bridge Assessment

This special study focused on the potential short-term and long-range options for the 2nd Avenue Bridge (part of Municipal State Aid Route 109) that crosses over the South Fork of

the Crow River and the anticipated effects on the surrounding transportation system if changes/restrictions/removal is made to bridge.

4.1.1 Existing Bridge Information

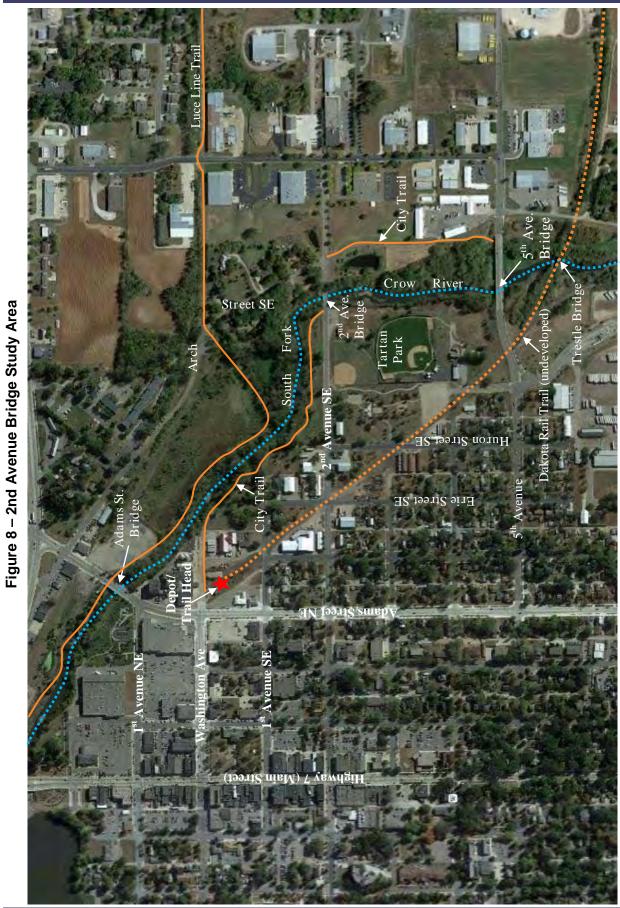
The 2nd Avenue Bridge over the South Fork of the Crow River was constructed in 1967. The structure type is a precast channel span bridge that measures 131.3-feet in length and has a deck width of 34.5-feet. The bridge accommodates two-way traffic with one lane in each direction. The bridge was last inspected on November 16, 2011. According to the MnDOT Structure Inventory Report



the 2008 average daily traffic (ADT) along this segment of 2nd Avenue was 1,444 trips. The bridge was given a Sufficiency Rating of 40.5 and was classified as being "Structurally Deficient" by MnDOT. A Load Rating Analysis was also recently completed by the City and as a result load limit restrictions have been placed on the bridge.

4.1.2 Existing Land Use Information

A mix of land uses surrounds the 2nd Avenue SE Bridge. The area southwest of the bridge is developed as a city park (Tartan Park) that includes a small parking area, trail, and two baseball fields (see Figure 8). The area northwest of the bridge is part of the City's informal Crow River Recreation Area, which includes tracks of open space and gravel trails that go directly from the bridge to the proposed trail head at the Depot site. Further west between Huron Street and Erie Street the area has been developed with several commercial and light industrial businesses. Arch Street SE and Michigan Street SE intersect with 2nd Avenue SE on the east side of the bridge at approximately 200 feet and 850 feet to the east, respectively. Arch Street SE traverses northwest and parallels the north side of the river and intersects with Adams Street NE.



Special Area Studies Page 34

There are a small number of single family residential developments located on the southern end of Arch Street SE that likely use 2nd Avenue SE as their primary route when travelling to/from the downtown area. The proposed "Depot" Trailhead site is located south of the river at the intersection of 1st Avenue NE and Adams Street NE. The Dakota Rail corridor crosses the South Fork of the Crow River via the old trestle bridge, which is in poor structural condition.



Arch Street looking south towards 2nd *Avenue*

Additional industrial development and the east campus of Ridgewater College are located adjacent to Michigan Street SE. Again, trips associated with these developments that are destined to areas west of the river likely use the 2nd Avenue SE corridor and the bridge. Currently, 2nd Avenue SE provides connections between Michigan Street on the east and Adams Street/County Road 25, Highway 15/Main Street, etc., to the west

4.1.3 Other Surrounding River Crossings

There are two additional river crossings within the study area including the Adams Street NE Bridge located approximately 0.4 miles to the northwest and the 5th Avenue SE Bridge located approximately 0.2 miles to the south. The Highway 22 Bypass and 5th Avenue Bridge currently provide access to the community from the east. Existing traffic volumes and roadway capacity along both bridges provide acceptable traffic operations along these roadways. The 5th Avenue corridor provides a more comprehensive access to the community than the 2nd Avenue S corridor, and could easily handle any increase of traffic due to the removal or reuse of the 2nd Avenue SE Bridge.

4.1.4 Previously Reviewed Alternatives

When 2nd Avenue SE was rebuilt east of the bridge in 2001 the roadway was narrowed to match the width of the existing bridge, leaving room to the south of the roadway for a potential future trail connection to Michigan Street. An option discussed at that time was to construct a separate pedestrian/bike bridge crossing located immediately south of the current bridge to provide trail connectivity. 2nd Avenue SE from the bridge to the west was then proposed to also be narrowed to match the width of the bridge, with the option for a trail extension on the south side of the roadway going west as far as Adams Street.

4.1.5 Long Term Use Options for the 2nd Avenue Bridge

Five primary options for the 2nd Avenue Bridge were considered in the special study. These options included the following:

• Option 1: Maintain Existing Bridge and Functions – This option would leave the existing bridge in place and maintain the current transportation function. The width of the existing bridge is insufficient for simultaneously accommodating both vehicular traffic and pedestrian/bicycle movements. This option would require ongoing maintenance and likely significant rehabilitation of the bridge over time. The existing bridge deck is in poor condition and in need of replacement. The detailed costs associated with the long-term maintenance and/or rehabilitation of the bridge is dependent upon many factors that were beyond the scope of this special assessment. However, it is not uncommon for a new/replacement structure crossing a watercourse to be at a cost high enough that would

- require the City to secure non-traditional funding to assist in the bridge replacement cost. Assuming the bridge continues to serve traffic as is, there would be no affects on current traffic patterns. This long term use option would not address pedestrian or bicycle safety and access/connectivity concerns.
- Option 2: Construct Separate Pedestrian/Bike Bridge This option would maintain the existing 2nd Avenue Bridge as described in Option 1 above, but would also include the construction of an independent pedestrian/bicycle bridge located immediately south of the existing bridge. This long term option would provide a safe and convenient connection to existing trails on both the east and west sides of the South Fork of the Crow River. The cost of a separate bridge would be dependent upon several factors (length, width, structure type, materials, underlying soils, etc.) For the purposes of this assessment a generalized cost estimate value (\$150 sq./ft.) was used along with an assumed 150-foot length and 12-foot width to determine a new pedestrian/bicycle bridge would cost approximately \$270,000. Additional trail improvements (and costs) would be needed to connect the new pedestrian/bicycle bridge to the existing trail system.
- Option 3: Limited Use This long term use option for the 2nd Avenue Bridge would involve limiting the use of the structure to non-motorized modes of transportation (walking, biking, in-line skating, etc.). This option would extend the life of the bridge since the structural requirements for such uses are substantially less than that for motor vehicle use. Modifications to the approach roadways and bridge itself would likely need to occur in order to prohibit vehicle access to the bridge. This could be accomplished using a number of techniques including the reconstruction of the approach roads to create cul-de-sacs, parking areas, or erecting lower cost barricades/gates. A number of transportation related affects would likely result if the City pursued the limiting of vehicle use on the 2nd Avenue SE Bridge. While none of these factors appear to be significant, they should be further evaluated and discussed with input from other city departments, area residents, and businesses. These factors include, but are not limited to, the following:
 - Limiting use to only non-motorized transportation uses would provide a safe and efficient connection across the river for pedestrians/bicyclists.
 - Limiting the use of the bridge to only pedestrians/bicyclists would create a direct connection to the Depot Trailhead site and would not require the construction of a new pedestrian/bike bridge or replacement of the trestle bridge.
 - Prohibiting motor vehicle use of the bridge would require the redistribution of vehicles onto alternative routes. The most likely alternative routes include 5th Avenue SE and the bridge over the river and Adams Street and Highway 7 via Michigan Street SE that also crosses the river.
 - Arch Street accessibility and design would need to be reviewed to insure adequate access between 2nd Avenue SE and Adams Street, especially for emergency equipment. This is currently a low speed, rural section roadway east of High Street. From High Street to the Luce Line Trail it is a gravel road, and a paved rural section roadway with minimal shoulders from the Luce Line Trail to 2nd Avenue SE. It is recommended that the City review access and connectivity needs for this route if 2nd Avenue SE terminates at Arch Street, which may include neighborhood discussions on potential traffic changes in the area. Previous discussions have focused on narrowing or removing a portion of the gravel road, and developing an option that would allow for emergency access when needed, but pedestrian/bicycle access at other times.

- 2nd Avenue SE is currently a Municipal State Aid (MSA) route, and this option would create a situation in which this route was no longer eligible to be on the MSAS system. The City would need to review options for designating a new, continuous route that met MSA standards. Another possibility would be to designate the mileage elsewhere and remove this section from the MSAS system. 2nd Avenue SE east of the bridge up to Michigan Street utilized MSA funds for construction in 2002, and some payback of these MSA funds may be required.
- There may be minor changes to emergency service response routes and times. With the police and fire stations being located near downtown the loss of a river crossing may alter response routes and slightly increase response times.
- In some cases there would be a slight increase in travel time and distance for trips
 destine to/from areas adjacent to the 2nd Avenue SE Bridge. Again, alternative routes
 including Michigan Street SE to 5th Avenue SE and Highway 7/22 are reasonable
 alternatives.
- Option 4: Future Bridge Removal As previously stated, the most recent MnDOT Bridge Inspection Report classified the bridge as "structurally deficient", which indicates that significant rehabilitation or replacement of the bridge will be needed in the near future. If the City determines the costs of repairing or replacing the bridge are too great and that vehicular and pedestrian/bicycle movements in the area can be served by alternative facilities, than the City should consider the discontinuation and removal of the bridge. The resulting traffic related affects of this option are similar to those highlighted under Option 3. The removal of the deteriorating bridge would relieve the city of long term maintenance and replacements costs. One additional effect would be an aesthetic benefit for river users since the bridge structure would no longer obstruct views from the river channel.
- Option 5: Full Replacement This option would require the demolition of the existing structure and construction of a new 2nd Avenue Bridge. The new bridge structure would be designed and constructed to meet all current geometric design standards, including lane and shoulder widths, and provide ample space for a multi-use trail/pathway on the bridge. The detailed costs associated with the full reconstruction option are dependent upon many detailed design elements that were beyond the scope of this special assessment. However, for the purposes of this assessment a generalized cost estimate value (\$150 sq./ft.) was used to generate a high-level cost estimate. Assuming the dimensions of a new bridge would be approximately 150-foot long and 42-foot wide the cost of a new bridge structure alone is approximately \$750,000. Additional improvements such as roadway tie-ins, slope/grading work, water quality improvements, and other erosion control measures could add several hundred thousand in additional costs for a total replacement cost of approximately \$1.0 million.

4.1.6 2nd Avenue Bridge Special Study Recommendations

Since there are multiple options for the bridge, each with their own pros and cons, it is recommended that the City engage the public, business owners and emergency service providers/staff before making any decisions on the appropriate option for the 2nd Avenue Bridge.

4.2 Existing Traffic Signals Assessment

This special study included an assessment of the existing traffic signal systems located in the City of Hutchinson. The primary component of the assessment was to conduct field observations of the existing signal operations, signal hardware, and electrical equipment

found at each system. Collectively, the information gathered from the field review was used to determine if signal coordination/interconnectivity is feasible and should be recommended for three signalized intersections located along Highway 15 through downtown, for three signalized intersections located along Highway 7, and for four signalized intersections located along Highway 15 in the southern



portion of the community. Furthermore, this special study reviewed each signal system to determine the need and compatibility for whether signal changes should be pursued to accommodate flashing yellow left turn arrow control.

4.2.1 Traffic Signal Coordination/Interconnectivity

In conducting the field review of the ten existing traffic signal systems in Hutchinson, the following observations and recommendations are presented for the City to consider.

All signal controller cabinets were inspected except the Highway 15/South Grade Road. At that particular intersection, the controller cabinet lock was unable to be opened, due to corrosion in the locking mechanism. However, this signal system had been previously reviewed as part of a separate intersection design project. The intersection has a higher than average crash rate and overall intersection improvements, including changes to the signal system, should be pursued in an attempt to improve safety and reduce crashes. Improvements to the intersection have not been made to date due to costs, but could be included in a larger cooperative safety project with MnDOT.

All cabinets at the intersections contain Traconex TMP-390 traffic signal controllers. These controllers are actuated controllers which, although using relatively old technology, are capable of up to 8-phase operation and are capable of signal coordination, either through connection to a master controller or by time-base. It is unknown whether these older controller systems have been successfully used in conjunction with the implementation of the flashing yellow arrow operation.

In addition to the intersection traffic controllers, Traconex TMM-500 master controllers were found at two intersections: Highway 15/Main Street and Washington Avenue, and Highway 15/Main Street and Highway 7/4th Avenue. A master controller can be interconnected to a group of several intersections, allowing

for coordinated control of the group from the master controller.

The ten intersections can be divided into three distinct groups for potential future coordination (see Figure 9). In general, distances between adjacent intersections of up to ½ mile are considered suitable for potential coordination.

- 1. The first group consists of the four intersections on Highway 15 south of the downtown area (Edmonton Avenue, Denver Avenue, Century Avenue, and South Grade Road). Each of these intersections is approximately ¼ mile from the preceding intersection. Currently these four intersections are operating independently in free mode, and at observed traffic levels it is recommended that these continue to operate independently. It is believed that the reduced delays to Main Street (Highway 15) traffic introduced by coordinating the intersections would not offset the increased delays to side street traffic.
- 2. The second group of signals consists of the three downtown intersections on Highway 15/Main Street (2nd Avenue SE/SW, Washington Avenue, and 1st Avenue NE/NW). These three intersections are spaced closely together, covering approximately ½ mile total. The close spacing of these three intersections makes them very good

candidates for coordination. The master controller located at the Washington Avenue intersection is interconnected with intersection traffic controllers both at that intersection and at the 2nd Avenue intersection. It also appears that interconnect cable has been installed between Washington Avenue and 1st Avenue, but the intersection controller at 1st Avenue has not been connected to the master. It is not known if that lack of

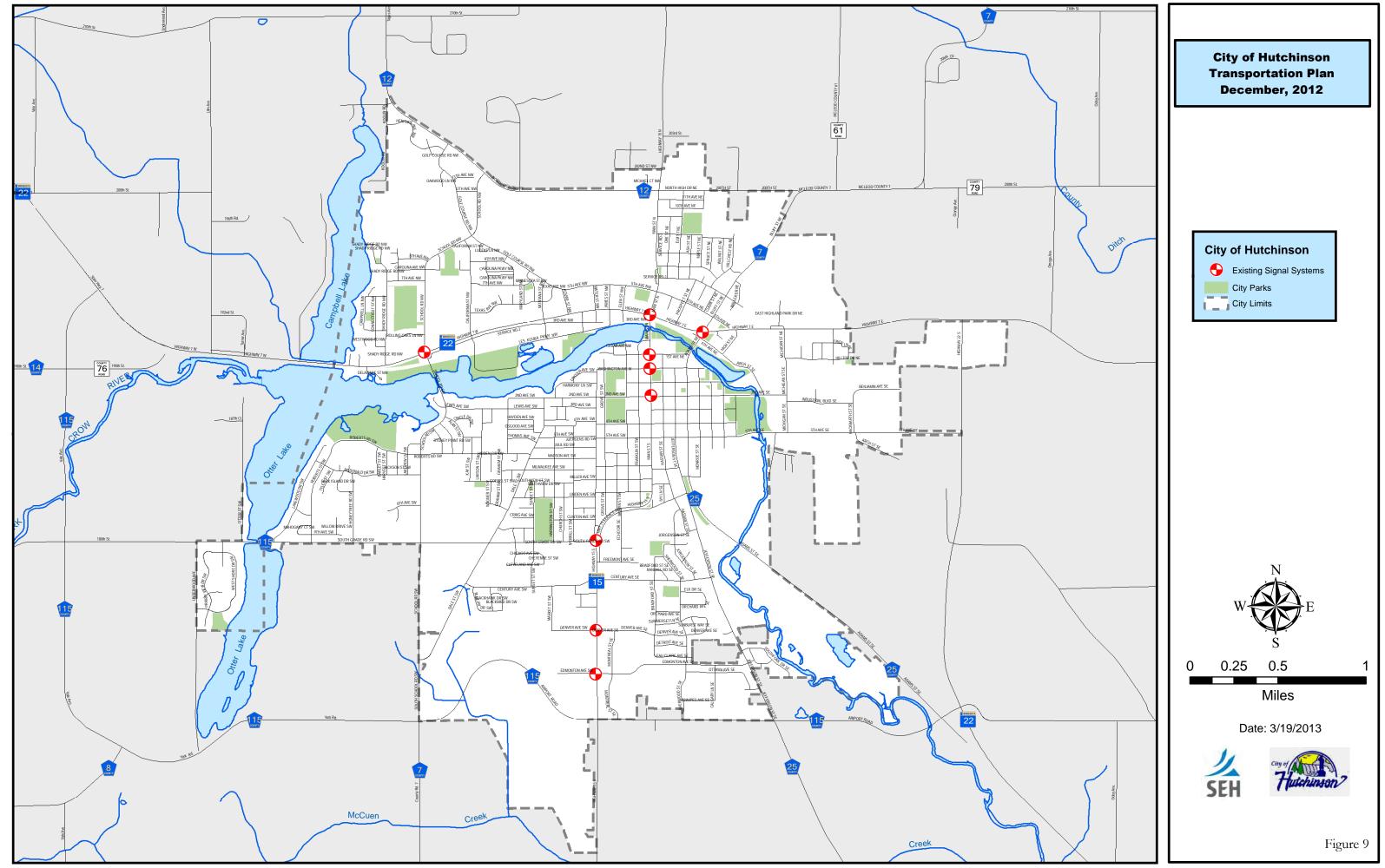


connection is intentional, is the result of a faulty cable, or the plan to interconnect this intersection was simply not completed. MnDOT will be consulted to determine the capability and compatibility of an interconnected system of signals. The potential cost of completing the interconnection appears to be relatively inexpensive since the required hardware and interconnect cables currently exists. However, if the connection cable between the Washington Avenue and 1st Avenue intersections is faulty and in need of replacement there would be additional costs to replace/update this missing connection. Therefore, it is recommended that further coordination with MnDOT occur in order to pursue the interconnection of these three Highway 15 signalized intersections in the near-term.

The current operations at the three Highway 15 signalized intersections are as follows:

- Main Street/2nd Avenue: connected to the master controller, which is selecting a coordinated plan (dial 3, split 1, offset 1). At this intersection, dial 3 corresponds to a 90-second cycle.
- Main Street/Washington Avenue: connected to the master controller, which is selecting a coordinated plan (dial 3, split 1, offset 1). At this intersection, dial 3 corresponds to an 80-second cycle. Therefore, although both the 2nd Avenue intersection and the Washington Avenue intersection are operating on fixed cycle lengths, because their cycle lengths do not match, they are not coordinated with each other.

This Page Left Blank Intentionally



This Page Left Blank Intentionally

- Main Street/1st Avenue: as indicated above, interconnect cable appears to have been installed, but this intersection has not been connected to the master controller. It is operating in free mode, which means that it is not operating on a fixed cycle length. In addition, the database for the controller does not currently contain any plans utilizing a fixed cycle length.
- 3. The third group consists of the three intersections along Highway 7 (School Road, Highway 15/Main St, and Bluff Street). Because the School Road intersection is more than a mile west of Highway 15, only the latter two intersections, located 1,700 feet apart, should be considered for coordination. As mentioned earlier, the presence of a master controller in the cabinet at Highway 15/Highway 7 and the apparent presence of an interconnect cable between this intersection and the Bluff Street intersection, MnDOT feels that these may be candidates for coordination at some point in the future. At this time, though, based on the observed traffic patterns and levels specifically the relatively light traffic levels on Bluff Street it is believed that overall delays would increase if coordination was implemented. Therefore, it is recommended that these intersections continue to operate independently, in free mode. As traffic patterns and levels change in the future, the potential benefits of coordination should be re-visited.

4.2.2 Flashing Yellow Left Turn Arrow Control

According to MnDOT a national study has demonstrated that drivers found flashing yellow left-turn arrows more understandable than traditional yield-on-green indications and that drivers made fewer mistakes thus improving roadway safety during heavy traffic and also reducing delays associated with signals when traffic volumes are lighter.

With respect to changing the left-turn control along Highway 15 and along Highway 7 to four-section heads with the flashing yellow arrow option:

- The only intersection currently using protected-only left turn control (i.e., left turn permitted on green arrow only) is the intersection of Highway 15 and Highway 7. It is recommended that this control be retained 24 hours a day due to the dual-left turn lanes in the northbound direction and the slight curvature in north/south roadway which under permissive control could lead to a safety problem caused by a left-turning vehicle in one direction (e.g., northbound) being prevented from seeing an oncoming vehicle in the (southbound) through lane due to a vehicle in the adjacent (southbound) left-turn lane.
- On all other approaches of the ten intersections, where a left arrow is installed, the left turns are controlled in a protected-permissive mode, where left turns are permitted both on a green arrow indication and on a green ball indication, yielding to oncoming traffic. In each of these cases, the protected-permissive operation is accomplished through a five-section head (red ball, yellow ball, green ball, yellow arrow, green arrow). To be consistent within the City, it is recommended that all five-section heads be converted to four-section heads with flashing yellow arrow at the same time. However, for the following reasons it is recommended that this change occur in conjunction with a future roadway project rather than immediately:
 - The five-section head remains an acceptable traffic signal configuration for accommodating protected-permissive left turns, according to the Minnesota and Federal Manual of Uniform Traffic Control Devices (MUTCD).
 - The existing protected-permissive control using five-section heads appears to be understood well by the local community.

- Cost of new equipment. Converting existing signals to use flashing yellow arrow control can require a significant investment in new hardware and control equipment. Costs typically start at \$50,000 per intersection and would vary among individual intersections due to the type and condition of equipment. Therefore, older systems may not be converted until a major signal revision or reconstruction project is planned. The signal system equipment includes:
 - A traffic signal controller at each intersection, to allow the capability of the flashing yellow arrow operation. The cost of replacing the signal cabinet and controller could range between \$30,000 and \$40,000.
 - Signal heads and Mastarms. Each five-section head would need to be replaced with a four-section flashing yellow arrow head (from top to bottom, a red arrow, steady yellow arrow, flashing yellow arrow, green arrow). Along with the replacement of the five-section head with a four-section head on the overhead mastarm, an additional three-section head (red ball, yellow ball, green ball) would need to be installed on the mastarm directly over each through lane. Currently, the five-section head is generally placed over the lane line between the left turn lane and the through lane, and the head contains indications for both left-turning and through traffic. Because the four-section head contains only arrows, a new head needs to be installed for the through lane. At most intersections, therefore, a total of three new heads would need to be installed for each direction with a left-turn phase: one four-section head on the pole located on the far left side, one four-section head on the overhead mastarm, and one three-section head on the overhead mastarm. In many intersections, the end of the mastarm is located on the lane line between the left turn lane and the through lane, and the five-section head is located at the end of the mastarm to control both the left turn and through movements. As indicated by MnDOT, the four-section head should be placed directly over the center of the left turn lane, and the signal heads for through movements should be located over the center of each of those lanes. Consequently, at several intersections the mastarm is too short to properly position the new four-section head. At a minimum, a mastarm extension, and in some cases an entirely new mastarm would need to be installed to accommodate the new head. Signal heads are relatively inexpensive, but the cost of hardware (actual head, wiring, etc.) and mastarm replacements could cost up to \$30,000 per intersection.

4.3 Complete Streets Assessment

This assessment reviewed the benefits and opportunities for pursuing the concept of "complete streets", in the City of Hutchinson. Complete Streets represent multi-modal corridor where streets are designed and operated to enable safe access, along and across the street, for all users including pedestrians, bicyclists, motorists and transit riders of all ages and abilities.



Hutchinson has a long history of actively supporting pedestrian and bicycle infrastructure. Although the City has been constructing and maintaining sidewalks in many parts of the community for generations, efforts accelerated in the early 1990s under a partnership with the Federal Highway Administration (FHWA) and the Finnish Road Administration (FinnRA). This effort focused on how to

become a "Bicycle and Pedestrian Friendly Community" by integrating bicycle and pedestrian efforts into both the recreational and transportation infrastructure, as well as into the community culture. The original "Hutchinson Project" study also included a review of transit operations. The former municipal transit system is currently part of Trailblazer Transit (a McLeod and Sibley County partnership), and it has been constantly involving. It now includes no regular routes, although it is an active and fairly well used on-demand transit system.

The Hutchinson Project included significant community outreach, as well as the development of a long-term infrastructure plan based on an origin-destination study. Since that period the City has developed a substantial system of on-street and off-street trails, bike lanes and sidewalk. The backbone of this system has been the development of the Luce Line Trail through the community, with separated-grade crossings at virtually all major road crossings. This has been integrated with an ever growing system of sidewalks and trails that have been constructed incrementally as development and street improvement projects have occurred, based on the 1998 Comp Plan.

The City has utilized several alternatives in areas that didn't feasibly allow construction of separated trail/bicycle facilities. In some areas, on-street painted bike lanes have been utilized. Although these have worked well for experienced bicyclists, many people in the community have indicated that they are not comfortable using the system, and many have expressed safety concerns for use by inexperienced riders. On routes with less and slower traffic, the City has utilized a "Share the Road" approach, which sometimes includes signing. As noted in the recent Adams Street and School Road North projects, the City continues to work toward the construction of separate multi-use trails when corridors with proposed improvements are addressed. Improvements such as these are considered on every roadway project in the City, but implemented only where appropriate.

As the City and its "Hutchinson Project" system has grown and matured, and the Complete Streets approach and initiative has developed, the City has decided to look at integrating these efforts. Many of the primary corridors that remain to be addressed as part of the light traffic system are fully developed, and balancing the needs of all transportation uses in the corridor tends to be more complex. This analysis is the first phase of a formal assessment of the City's infrastructure that will focus on how to integrate a Complete Streets policy and plan that will provide a process and support for developing multi-modal corridors.



Source: completestreets.org

4.3.1 What is a Complete Street?

The National Complete Street Coalition (www.completestreets.org) defines complete streets as a transportation corridor for everyone. Where the streets are designed and operated to enable safe access, along and across the street, for all users including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. There is no singular design prescription for Complete Streets; each one is uniquee and must respond to the community or neighborhood context. A complete street may include: sidewalks, bike lanes (or wide paved shoulders), multi-use pathways, bus lanes, comfortable & accessible public transportation stops, frequent & safe crossing opportunities, median islands, accessible pedestrian signals, curb extensions, narrower travel lanes, roundabouts, and more.

4.3.2 Complete Street Benefits

Complete streets offer many benefits, regardless of community size or location.

- Complete streets provide accessible and efficient connections between residences, schools, parks, public transportation, and commercial/retail destinations whereby benefiting economic growth and stability.
- Complete street help promote "active living". Health experts are encouraging walking and bicycling as a response to the obesity epidemic.
- Complete streets can improve safety conditions by designing transportation improvements that enhance pedestrian travel by installing raised medians and redesigning intersections and sidewalks, which can substantially reduce pedestrian risk.
- Streets that accommodate more than one travel choice give users an option to avoid
 congestion that results from traffic volumes exceeding the capacity of a given roadway.
 Complete streets policies are one strategy to increase the overall capacity of a
 transportation network.
- Streets that provide room for bicycling and walking help children get physical activity and gain independence. More children walk to school where there are sidewalks and trails, and children who have and use safe walking and bicycling routes have a more positive view of their neighborhood. Safe Routes to School programs, gaining in popularity across the country, will benefit from complete streets policies that help turn streets into safe routes for children.
- Complete streets are good for air quality. Poor air quality in our developed areas is linked to increases in asthma and other illnesses. Yet if each resident of an American



Source: www.completestreets.org_fact-sheet

community of 100,000 replaced one car trip with one bike trip just once a month, it would cut carbon dioxide (CO2) emissions by 3,764 tons of per year in the community. Complete streets allow this to happen more easily.

• Integrating sidewalks, multi-use pathways, bike lanes, transit amenities, and safe crossings into the initial design of a project makes fiscal sense because the expense of retrofits

later can be very costly and impactful on the social environment.

4.3.3 Complete Street Policy

Adopting a complete streets policy means the City of Hutchinson would plan and design community roads to enable safe access for all users, regardless of age, ability, or mode of transportation. The policy shall have a goal that would create street connectivity and aims to create an integrated, comprehensive, and connected network for all travel modes. The policy shall apply to new and retrofit projects, but also needs to be flexible to allow a phased approach and even exceptions due to unique circumstances and because accommodations are needed on all corridors. A strong statement about context can help align transportation and land use planning goals, creating livable and strong neighborhoods.

The City can create a complete street policy at any time, but should not adopt and implement a policy until they are completely committed to the processes, procedures, and affects on the community context. The policy could be in the form of a council resolution, departmental policies, policies adopted as part of a plan, or design guidance documents. However, a policy must do more than simply state the community's support for Complete Streets. The policy shall include a vision, provide clear direction and intent, and grant the flexibility in design and approach necessary to secure an effective process and outcome.

4.3.4 Application/Implementation

An adopted policy statement or formal commitment to the Complete Streets approach is only the beginning. The National Complete Streets Coalition has identified four key steps to take for successful application of a policy:

- 1. Restructure or revise related procedures, plans, regulations, and other processes to accommodate all users on every transportation project.
- 2. Develop new design policies and guides or revise existing to reflect the current state of best practices in transportation design. Communities may also elect to adopt national or state-level recognized design guidance.
- 3. Attend and/or host workshops and other training in order to educate staff, community leaders, and the general public so that everyone understands the importance of the Complete Streets vision.
- 4. Develop and institute better ways to measure performance and collect data on how well the streets are serving all users.

Hutchinson recognizes that the complete street approach is a work in progress that will take many years to realize a comprehensive and connected network throughout the community. As a starting point, the City has identified a set of "top tier complete street candidate corridors" (see Figure 10). The identified routes involve several road authorities (state, county, city) and therefore in order to create an integrated and connected network the planning, design, and implementation steps must be a collaborative effort among jurisdictions. MnDOT has an established Complete Street policy that requires the consideration of all users when improvements are proposed along the trunk highway system (Highways 7, 15, and 22). McLeod County does not currently have an adopted complete street policy, but the City should continue to work closely with the county on future county road improvements within and immediately surrounding the community.



Figure 10 – Top Tier Complete Street Candidates

The end result of a complete street policy and successful implementation will be that every transportation project in the City will consider ways to make the street network more accessible and safer for drivers, bicyclists, pedestrians, and transit users.

4.4 Northeast Ring Road Assessment

This special study assessed potential traffic affects a future arterial roadway located in the northeast part of Hutchinson would have on the existing roadway network. A network of roadways (Ring Roads) along the outskirts of the City of Hutchinson has been considered for

decades. Portions of the network have already been completed including the new Highway 22 alignment on the east side of the city, and McLeod County State Aid Highway (CSAH) 115 (Airport Road/York Road/Vale Ave) on the south and south-west side of the City. The Northeast segment of the Ring Road system has been discussed at a conceptual level, but never taken to a greater level of design and public involvement until recently. McLeod County has initiated a more detailed study of design concepts for a new county highway alignment that would serve this portion of the County as well as an alternative route to Highway 15 through downtown Hutchinson. The southern termini of the new county highway

alignment is proposed to be the intersection of Highways 7 and 22, while the northern termini would be a reconstructed Highway 15 and 210th Street intersection located north of the City. Again, the overall intent of the NE Ring Road is to connect to the new Highway 22 alignment along with McLeod CSAH 115/Airport Road to complete an eastern alternative route around downtown Hutchinson.



4.4.1 McLeod County Project Development Process

A full range of conceptual alignment alternatives for the Northeast Ring Road has been considered including five alignment corridors with several sub-options (eleven alternatives total). As part of the alternative development process, McLeod County conducted a high level comparative screening analysis that considered social, economic, and environmental constraints for each of the conceptual alignment alternatives. Table 2 shown below is an alignment comparison table prepared by the McLeod County Highway Department. As shown in the table, the alignment alternatives have varying levels of project impacts and costs. The County has presented the alignment corridors and sub-options to the public for

review and comment. Appendix C contains aerial graphics depicting the general alignment of each of the alignment corridors considered.

ALL ALTERNATIVES COMPARISON Alt 58 Alt 4 Total Centerline Mile: 34 **Existing Road Miles Used** 0.5 0.0 0.0 0.0 1.0 New Road Miles Needed 3.6 3.4 2.6 2.8 3 # of Impacted Wetlands 14 7.4 75 0.3 3.2 Wetland Impacts 10.9 Existing R/W Acres Used 15.9 13.5 9.2 10.1 6.3 5.1 42 New R/W Acres Required 52.8 33,4 65.6 54.6 Side Street Reconstruction Acres 9,0 9,5 Number of Intersection **Existing Road Miles Used** 5423,000 50 \$900,000 \$900,000 5900,000 50 New Road Miles Needer 2,097,000 \$1,917,000 1,701,000 Acres of Wetlands Destroyed \$134,100 \$42,120 \$195,840 54,680 \$57,600

Table 2 – Northeast Ring Road Alignment Comparison and Screening

4.4.2 Potential Traffic Affects

\$3,910,000 \$3,700,000 \$3,470,000 \$4,030,000

Reject/Consider Consider Dismiss Dismiss Consider

New R/W Acres Required

An assessment of available land use and traffic information was conducted in order to determine the potential traffic affects a new Northeast Ring Road would have on the community.

\$961,200

Dismiss Consider Consider

\$4,900,000 \$4,100,000 \$3,990,000 \$3,560,000

\$1,031,400

5909,000

Dismiss

\$1,180,800

Dismiss

\$4,430,000 \$3,340,000 \$3,570,000

According to Hutchinson's Future Land Use Plan, the land area located in the northeast potion of the community's growth area is planned for a mix of Commercial, Business Park, and Residential developments. The commercial land use district is located in close proximity to Highway 7 and the intersection of Highway 22. The business park land use district is located in a second tier north of the commercial district and residential development is located further north in the vicinity of County Road 61 and County Road 79. Several areas are planned to remain in agricultural use throughout the estimated 20-year planning horizon of the Future Land Use Plan.

Other previously prepared planning documents and studies were reviewed to assist in determining the potential affects a northeast ring road could have on traffic patterns. A feasibility study completed for the United Farmer Cooperative Shuttle Plant Facility in Brownton, MN was reviewed. The study was completed in 2011 and shows that a large portion of the rail facilities "market draw area" extends north and northeast of Hutchinson and would potentially even pull grain supplies that would otherwise utilize the Port of Savage for shipping (see Figure 11 on following page. As a result, a high number of heavy commercial vehicles (grain trucks) are anticipated to be destined to/from the shuttle facility located approximately 12 miles south of Hutchinson on Highway 15. Figures 12 and 13 depict the corn and soybean market boundary and directional commodity flows, respectively.

In 1998, a detailed Origin-Destination (O-D) Study was completed as part of the City's Transportation Plan. The O-D results are slightly dated, but the purpose of utilizing the information was to gain a general understanding of community-wide travel patterns. A new study may find slightly different results and should be considered as part of the Northeast Ring Road project development process.

2010 Grain Terminal Project
Area Production and Usage Overview

MAP KEYS
OF Grain
Description
Descript

Figure 11 – Brownton Shuttle Facility Market Draw Area

Source: United Farmers Cooperative 2010 Shuttle Plant Feasibility Study

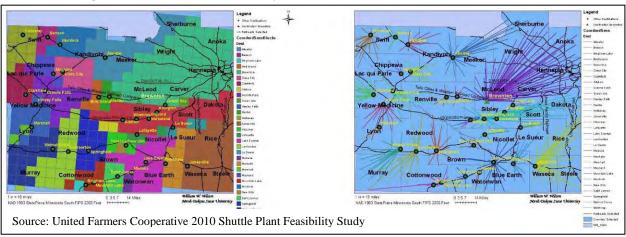
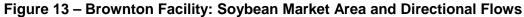
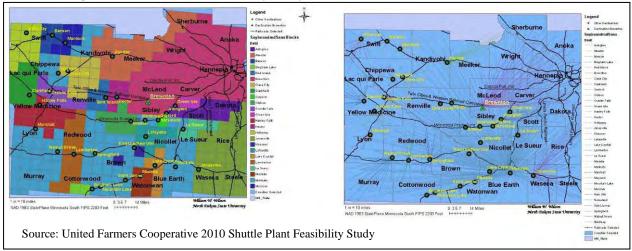


Figure 12 - Brownton Facility: Corn Market Area and Directional Flows





The 1998 study information was collected at roadside survey stations where drivers provided travel information such as origins, destinations, and trip purpose (work, shopping, medical appointment). At the time of the O-D study the City was interested in knowing if existing trips could be diverted to new roadways such as the Northeast Ring Road and/or other peripheral routes. Following is a summary of conclusions from the O-D study that pertains to the Northeast Ring Road Assessment:

- A high percentage of traffic on Highway 15 is local trips that involve people moving through the community or into the downtown area. For example, only approximately 20 percent of the northbound trips entering the City from the south were considered "through" traffic that stayed on Highway 15 and continued through Hutchinson to locations further to the north. Likewise, only 9 percent of the trips entering from the north on Highway 15 passed directly through the City.
- Nearly 18-percent of Highway 7 westbound traffic was destined to the northeast portion of the City (Hutchinson Technologies and other office/industrial uses). A substantial change has occurred with this percentage due to work force levels at HTI. Another 2-percent of Highway 7 westbound trips were destined for northbound Highway 15;
- Traffic on northbound Highway 22 was primarily destined to areas in Hutchinson located south of downtown. Approximately 8-percent of the northbound trips on Highway 22 passed through Hutchinson and was destined for northbound Highway 15 north of Hutchinson. It should be noted that the O-D data collection occurred prior to the

construction of the new Highway 22 alignment along the eastern edge of the community;

- The 1998 O-D study information showed that the majority of traffic (55 percent) entering the City from the south (or northbound on Highway 15) is destined to locations in the southern portion of town or the downtown area. As mentioned above, only 20 percent of the northbound trips were considered "through"
 - traffic. In addition, the through traffic on Highway 15 only represented approximately 5-percent of the total traffic in downtown Hutchinson.
- Traffic entering the City from the north (Highway 15 southbound) was again primarily destined to locations within the community as only 9 percent of the trips passed directly through the City.

Current MnDOT traffic volumes (2011) were also reviewed including the amount of heavy commercial vehicles that are travelling on Highways 7 (east of Highway 15), 15, and 22 (south of Highway 7). The percentage of heavy trucks using Highways 7, 15, and 22 range from approximately 6-percent to nearly 11-percent of the total traffic. In downtown Hutchinson the average percent of heavy commercial truck traffic on Highway 15 is approximately 9-percent and the percentage of heavy trucks on Highway 15 both north and south of Hutchinson (south of CSAH 115/Airport Rd. and north of CSAH 12/North High Dr.) is 10-percent.

4.4.3 Findings and Conclusion

The proposed Northeast Ring Road would benefit connectivity among primary transportation corridors (e.g. Highway 22, 7, and 15) in this part of McLeod County and the City of Hutchinson. A new arterial corridor would also provide an alternative route for regional traffic.

The presence of a Northeast Ring Road would provide an alternate route to Highway 15 through the downtown area for heavy commercial truck traffic entering the City from either the north or south that are destined to locations outside of the community. While this type of traffic only accounts for approximately 10 percent of the total trips on Highway 15 it would benefit mobility and safety in the downtown area. For example, a completed eastern ring road would likely capture heavy commercial (grain) trucks that originate north of the City that would be destined to the new United Farmer Cooperative Shuttle Plant in Brownton, MN. While the Northeast Ring Road would be a longer distance to travel (approximately 2.5 – 3 miles) it would allow these thru trips to avoid the downtown area, which is less desirable due to slower travel speeds resulting from higher levels of traffic, signal controlled intersections, and conflicts with local trips and pedestrians on Highway 15.

Considering all the readily available land use and traffic information, the proposed Northeast Ring Road would help foster new or redevelopment in that portion of the community and serve as an alternative connection between Highway 7/22 and Highway 15. However, the proposed route is not likely to have a significant effect on travel patterns throughout the community or greatly reduce the level of traffic in the downtown area. Based on the historic O-D data, it is estimated that the completion of the NE Ring Road divert only 5-10 percent of the total trips on Highway 15 through the downtown area. While this is not a substantial level of traffic it would prolong the need for capacity improvements along Highway 15. A new study may find slightly different results and should be considered as part of the Northeast Ring Road project development process. Furthermore, the removal of heavy commercial trucks that are not destined to the downtown area would provide benefits to traffic operations, safety, and the overall downtown environment. Updated origin-destination information would provide the data needed to complete a more detailed and accurate assessment of travel pattern affects that would be realized if a Northeast Ring Road were someday constructed.

4.5 Highway 15 – South Frontage/Backage Road Assessment

This technical memorandum documents an assessment of existing and potential future frontage/backage roads adjacent to Highway 15 near the south end of Hutchinson. The area of the City between South Grade Road and Airport Road (CSAH 115) has experienced substantial commercial development over the past decade. Development in this part of the community is anticipated to continue with several tract of vacant land available for future commercial development. As a result, the 20-year traffic forecasts for this segment of Highway 15 are projected to be over 17,000 trips per day, which exceeds the threshold of a two-lane roadways ability to operate at acceptable levels of service. The City has recognized the need to provide a connected and efficient system of local supporting roadways along with limiting access, both public roadway intersections and/or private driveways/entrances, and managing the traffic signal operations along the corridor, which will help preserve the long-term capacity of Highway 15. Local roadway improvements have already been made in some locations to provide parallel routes to serve local trips without having to access onto Highway 15.

4.5.1 Existing Frontage/Backage Roads

The City has established a frontage/backage road system along both sides of Highway 15 (see Figure 14). Montreal Street, located on the east side of the highway, extends north from Airport Road/CSAH 115 to Denver Avenue. The intersection of Montreal Street and Airport Road is setback approximately 550 feet from Highway 15 providing adequate distance to not adversely impact safety or operations at the Highway 15/Airport Road intersection.

A new roundabout intersection improvement is programmed for this intersection and the spacing distance to Montreal Street appears sufficient for continued safe traffic operations. Vacant land is available immediately north of Denver Avenue, but this property is owned by Ridgewater Community College and no expansion plans for the campus have been proposed. The area between Century Avenue and South Grade Road is highly developed with commercial



and institutional uses and no continuous north-south frontage/backage road.

Land immediately west of Highway 15 is primarily developed from South Grade Road to Edmonton Avenue. An existing frontage road is accomplished through a series of "cross access easements" or an internal private business road through the connected parking lots for the mall shopping area, Wal-Mart, Best Buy, Target, and others providing local connections between South Grade Road and Edmonton Avenue. In addition, Market Street serves as an existing backage road, located one block to the west (behind the businesses), between Denver Avenue and Century Avenue. A large parcel of vacant land currently exists between Airport Road/CSAH 115 and Edmonton Avenue.

4.5.2 Additional Frontage/Backage Road Opportunities

Limited future opportunities to extend the frontage/backage road system exist on the east side of Highway 15 due to an already existing backage road (Montreal Street) and existing developments (Ridgewater Community College and developments north of Century Avenue). However, a short extension of Montreal Street is possible to the north and should be considered if the community college ever decides to develop improvements on the southern end of their property. In addition, the extension of Denver Avenue to the east to connect with Bradford Street should be planned as the area develops. This roadway extension would further enhance local circulation on the east side of Highway 15 and would minimize the need to local trips on the trunk highway.

Several opportunities to expand the frontage/backage road system remain along the west side of Highway 15. The land between Edmonton Avenue and Airport Road primarily remain undeveloped. The City should continue to consider a backage road that would align with the internal business road (near the Target Store) on the north and extend south to Airport Road. The intersection with Airport Road should be located west of Highway 15 a similar distance as Montreal Street (550 feet) on the east side of Highway 15. This will ensure adequate distance to not adversely impact safety or operations at the Highway 15/Airport Road intersection and will not impact the soon to be constructed roundabout at this location.

Other options include the extension of Market Street to the north and south. An extension of Market Street to the north appears to be a feasible option along the back side (west) of the businesses if there are future issues with the access road through the business parking lots. If possible, the north termini of an extended Market Street should be aligned with Harrington Street to create a standard four-legged intersection. The extension of Market Street south towards Edmonton Avenue and ultimately Airport Road appears feasible and should be pursued as development occurs in the area. It should be noted that while it does not appear this roadway improvement would be restricted due to the proximity of the airport runway, the City may need to coordinate these improvements with the MnDOT Office of Aeronautics and/or the Federal Aviation Administration (FAA). If Market Street is extended to the south then an east-west connection should be completed along Edmonton Avenue.

4.6 Downtown Highway 15 Reconstruction Concepts

MnDOT District 8 has acknowledged the future need for the full reconstruction of Highway 15 (Main Street) through Hutchinson's downtown area in the MnDOT District 8 long range plans. While no specific date/year has been identified and no funding has been formally programmed, the inclusion of this improvement in MnDOT's planning documents sets forth the need for early planning, design, and coordination. To initiate the planning process, the City completed a high-level conceptual analysis and design option for Highway 15 from the 2nd Avenue NE/NW intersection to the 4th Avenue SE/SW intersection. The goal of this process was to define an option that would improve the downtown environment for pedestrians, while maintaining the necessary safety and mobility functions of the highway. The successful interaction between downtown businesses, pedestrians/shoppers, and the transportation system is vital in the long-term sustainability of downtown.

A conceptual design process considered future reconstruction options for Highway 15. Furthermore, additional streetscape enhancements were identified that can serve both as aesthetic improvements to establish a greater sense of identity for the downtown area and provide functional benefits of fostering pedestrian activities and calming traffic through downtown.



4.6.1 Existing Downtown Conditions

Highway 15 is a regional route that links Hutchinson to trade centers such as St. Cloud and New Ulm and is used by commuters, heavy commercial vehicles, tourists, and agricultural equipment.



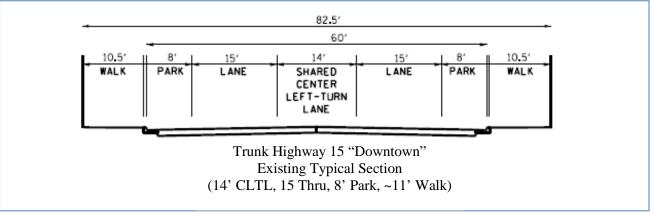
Through downtown Hutchinson, Highway 15 is a two-lane section with back-to-back left turn lanes and parallel parking on both sides. Short right turn lanes have been stripped at a few intersections (1st Ave. N, Washington Ave., 2nd Ave. S) and have been accomplished through the removal of parking spaces. The typical roadway section (Figure 15) in downtown consists of 15-foot driving lanes in each direction, a 14-foot center left turn lane (back-

to-back at intersections), and 8-foot parking lanes on both sides. There are approximately 10.5-feet of sidewalk along each side between storefronts and the Highway 15.

Existing Frontage/Backage Road Future Frontage/Backage Road or Roadway Extension Right-in/Right-Out or Left-in Access Only Highway 15 Full Access Intersection Montreal St. el yawagiH

Figure 14 - Highway 15 South - Frontage/Backage Road System

Figure 15 – Existing Highway 15 Typical Section – Downtown Hutchinson



Downtown parking is not only provided along Highway 15 but is readily available along side streets and also within several downtown parking lots. However, previous studies demonstrate, for both weekday and weekend use, that parking spaces along Highway 15 are highly utilized. Therefore, the removal of a large number of spaces along Highway 15 is not desirable and could have significant effects on Main Street businesses, even with reasonable parking provided behind Main Street buildings.¹

The Main Street Bridge and the Highway 7 and Highway 15 intersection were reconstructed in 2006. Any future improvements along Highway 15 will need to safely and efficiently tie into this section of the highway.

4.6.2 TH 15 Conceptual Design Process

Previous studies and planning efforts for the downtown area were reviewed including the "A Future Vision – A Revitalization Plan for Downtown Hutchinson", (2003) to better understand future desires for the appearance and function of the downtown area.

The design process began with the development of ten options that were sketched up in cross section views. Initially, several options included narrowing lanes widths and sidewalks in order to accommodate on-street bike lanes along Highway 15. These design configurations were dismissed from consideration due to safety concerns with the high amount of truck traffic that uses Highway 15, the fact that bikes are not currently encouraged in front of the downtown businesses, the presence of adequate north/south parallel bike routes on either side of Highway 15, and adverse effects on the width of adjacent sidewalks. Therefore, the

process focused on maximizing the space between storefronts and Highway 15 in order to allow more opportunities for sidewalk dining, sidewalk shopping, placement of public art, and/or other amenities. The Imagine Hutchinson planning process identified several of these opportunities and enhancements. The recommendations for the Downtown Area from the Imagine Hutchinson Plan will be considered in future preliminary roadway designs.

_

garti pasta

¹ A Future Vision - A Revitalization Master Plan for Downtown Hutchinson, Minnesota, March 2003.

A number of additional design options were developed and assessed by a group of design engineers, planners, and architects. The goal was to define a single option that could be taken forward to a higher level of design, as well as, be presented with streetscape amenities. It

should be noted that several of the designs appear to be viable options and could still be pursued by the City. As part of the assessment, it was recommended that 10-foot parking lanes be provided to better accommodate vehicle doors swinging out into the sidewalk in a downtown area in combination with narrowing of the adjacent travel lane. The identified option increases the sidewalk width enough to allow streetscape



elements (planters, benches, trash receptacles, etc.) to be added, while also maintaining safe lane widths along the highway. Curb bump-outs were added where appropriate to maximize the sidewalk space near an intersection and decrease the roadway crossing width, which improves safety for pedestrians. The construction of bump-outs would require a slight reduction in the number of parking spaces located near an intersection. The identified typical section (see Figure 16) for the Highway 15 Downtown Area is illustrated below and shown on Figures 17 and 18.

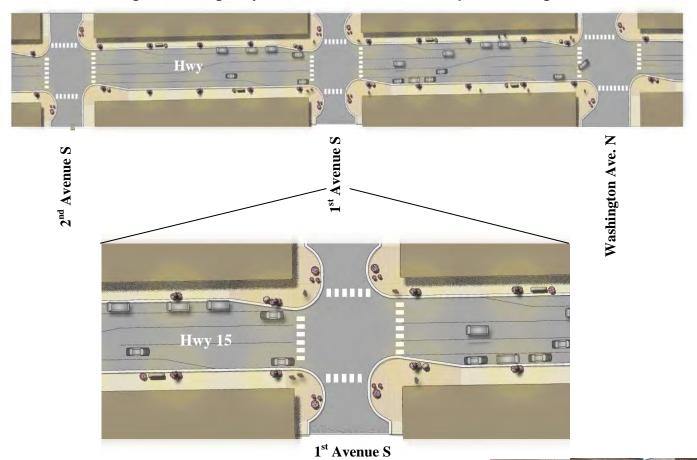
13' 11' 10' 11' 10' 13' Walk Park Lane Shared Center Left Turn Lane Turn Lane Walk Walk Turn Lane 82.5'

Figure 16 – Proposed Highway 15 Typical Section – Downtown Hutchinson

Trunk Highway 15 "Downtown" Potential Future Typical Section (13' CLTL, 11 Thru, 10' Park, 13' Walk)

Right of Way

Figure 17 - Highway 15 - Architectural Streetscape Rendering



4.6.3 Streetscape Enhancements

A supportive streetscape design concept was developed for the option. The components of the streetscape design are intended to provide aesthetic appeal to downtown, which will establish a greater sense of identity and to provide functional benefits that will foster pedestrian activities in the downtown area.

The City has already established a framework of streetscape elements (ornamental lighting fixtures, pole banners, etc.) with



the previous downtown sidewalk and landscape improvements, major improvements to the Highway 7, 15, and 22 corridors, and recent projects along Adams Street and Washington Avenue. As previously considered in the 2003 Downtown Master Plan, additional streetscape elements along Highway 15 could include special treatments at crosswalks (colored concrete pavers or unique striping/markings), planter pots, and hanging baskets, benches, special concrete finishing/jointing, and continued ornamental lighting. Several of these elements are shown in the typical section and are included in the architectural rendering (see Figure 17). In-ground plantings (ornamental trees) have been and will continue to be considered, however, there are challenges with vegetative streetscape enhancements in a downtown area including limited soil volume availability (which impacts the longevity and health of the trees), reduced business visibility, road chemicals, surface water drainage, and the difficulty of providing economically feasible growing conditions.

REE BELOW SEE BELOW TH 15 DOWNTOWN RECONSTRUCTION OPTIONS 2ND AVE N 13" LTL, II' THRU, 10' PARK/RTL 001 × 130°LT Thirtings of Figure 18 - Downtown Highway 15 - Future Reconstruction Plan View EXISTING RIGHT OF WAY 1ST AVE N \oplus PARCEL BOUNDARY PROPOSED SIGNAL EXISTING SIGNAL 2ND AVE S PROPOSED CONCRETE SIDEWALK PROPOSED ROADWAY 13'× 135' LTL WASHINGTON AVE \oplus 3RD AVE S MATCHLINE SEE ABOVE NATCHLINE 1ST 4TH AVE S



5.0 Analysis of Future Needs and Characteristics

This transportation system issues analysis and needs assessment examines the transportation system that currently serves the City of Hutchinson and documents its current and anticipated future deficiencies. Future deficiencies and recommendations are based on effects on the current system with an application of long-range (20-year) traffic projections. The transportation system analysis includes the following elements:

- Development of 20-year traffic projections;
- An inventory and assessment of the roadway system's existing and future capacity conditions and safety/traffic operations using 20-year traffic projections;
- An inventory and determination of the suitability of the current functional and jurisdictional designation of the local and regional roadway system in the City of Hutchinson;
- Consideration of access and corridor preservation techniques; and,
- Review of programmed or planned transportation improvements.

5.1 20-Year Traffic Volume Projections

Traffic volume projections were prepared for the year 2030 using a combination of the Twin Cities Collar County Traffic Model, MnDOT State Aid Traffic Growth Factors for McLeod

County, historical MnDOT Traffic Flow Maps, the City's 1998 Transportation Plan, and current and planned land use maps for the City. Future traffic projections for major collector and arterial roadways throughout the City are illustrated on Figure 19.



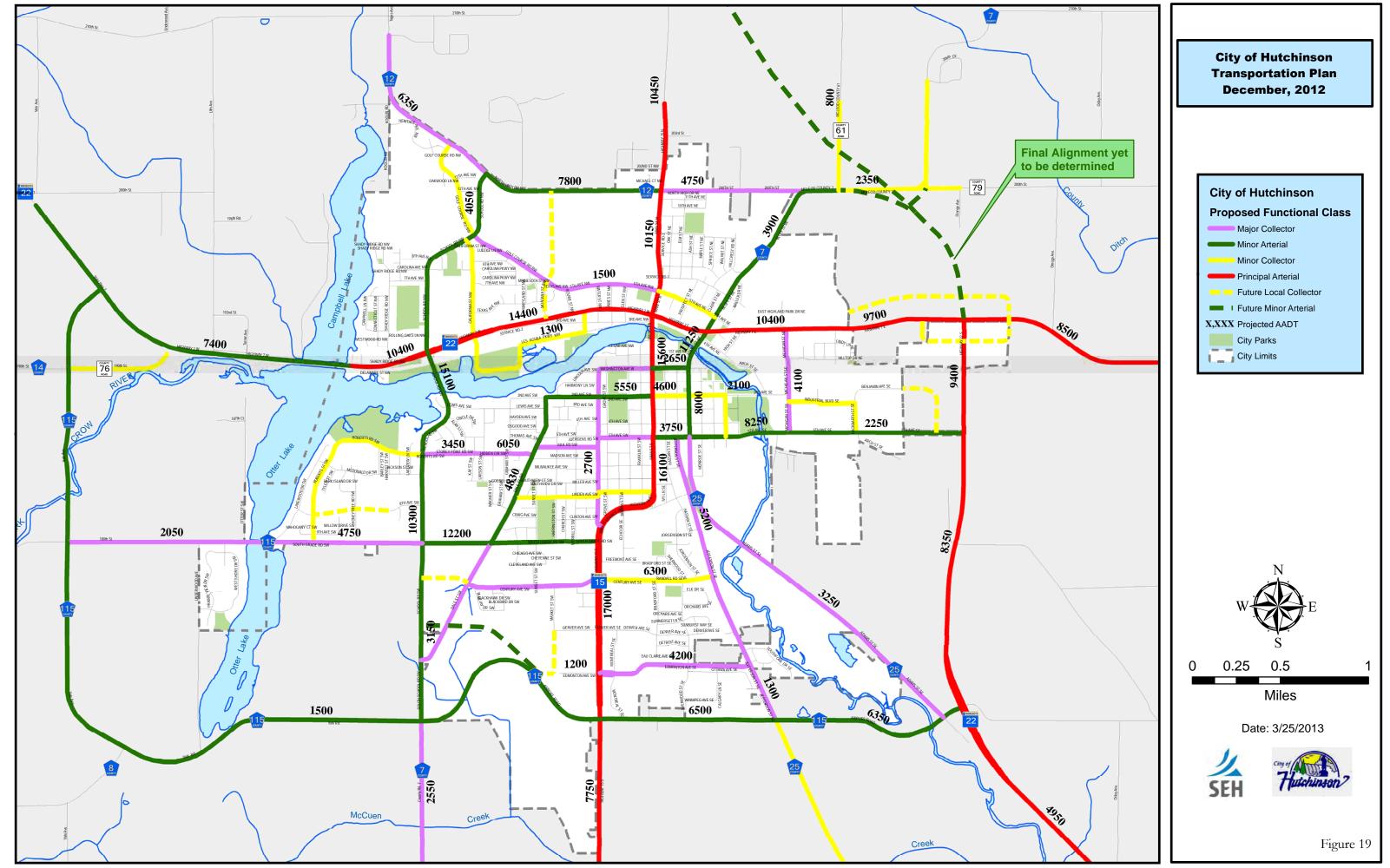
Hutchinson has a well-planned system of roadways that fulfill



travel desires of residents and employees in the community. However, as development and travel demand increase, issues may arise regarding roadway capacity.

To gain a clearer understanding of the primary areas of concern regarding future roadway capacity constraints, an assessment of forecast operational concerns throughout the City has been completed using 20-year traffic projections along with planning level capacity guidelines (see Table 1 in Section 2.3).

This Page Left Blank Intentionally



This Page Left Blank Intentionally

This assessment indicates a number of roadways in the City of Hutchinson will be nearing and potentially exceeding traffic volumes that could result in operational deficiencies if improvements are not constructed. The following routes have future volumes that may result in unacceptable service levels in the future.

- Highway 15 Downtown Area
- School Road between Highway 7 and South Grade Road
- South Grade Road between School Road and Highway 15

In advance of these traffic levels being realized, preserving the existing capacity on these routes should be further studied along with long-term capacity expansion options.

5.3 Safety Assessment

Since the frequency, severity and distribution of reported crashes indicate some "hot spots" it is recommended that these areas be regularly monitored in the future to determine if conditions deteriorate to a point of concern that corrective actions need to be implemented. Several of these areas were identified in Section 2.3 – Existing Safety and Crash Analysis. Additional locations may become apparent as a result of new development and increases in traffic volumes. Many of these locations may in fact be the result of an aging system that was built prior to modern design standards. Implementation of current roadway design standards will help eliminate many safety concern areas located throughout the community.

5.4 Future Functional Classification System

The existing functional classification system (see Figure 4 found in Section 2.2) for roadways in Hutchinson was reviewed to ensure appropriate network connectivity is maintained and that the appropriate classification is assigned based on 20-year projected traffic volumes. Additional criteria considered in determining if a roadway's functional classification should be changed included:

- Estimated Trip Length
- Trip Type
- Spacing
- Continuity
- Mobility
- Connections to Activity Centers
- Accessibility
- Speed

Based on this review, several possible functional classification changes were identified and are listed below in Table 3and illustrated on Figure 19 found in Section 5.2. These changes are not proposed to occur until traffic volumes increase and/or the actual function of these roadways change, which is expected to be directly tied to future developments within the community.

Table 3 – Recommend Future Functional Classification Changes

Roadway	From	То	Current Functional Classification	Future Functional Classification
2 nd Avenue SE	Michigan Street	Huron Street	Major Collector	Local (if 2 nd Ave Bridge closure occurs)
2 nd Avenue SE	Huron Street	Hwy 15	Major Collector	Minor Collector
Huron Street	5 th Avenue SE	2 nd Avenue SE	Local	Minor Collector (if 2 nd Ave Bridge closure occurs
Edmonton Avenue	Jefferson Street	Hwy 15	Minor Collector	Major Collector
Century Avenue	Hwy 15	Dale Street	Minor Collector	Major Collector
School Road/CSAH 7	Dale Street	Airport Road	Major Collector	Minor Arterial
5 th Avenue SW	Lynn Road	Hwy 15	Minor Collector	Major Collector

5.5 Future Jurisdictional Classification System

As discussed in Section 2.1, roadway jurisdiction is important because it affects a number of organizational functions and obligations (i.e. regulatory, maintenance, construction, and financial). An investigation of the existing jurisdictional system (see Figure 1 in Section 2.1) versus the appropriate designation based on the types and volume of trips a roadway serves, functional classification, and maintenance ability was conducted. The goal in reviewing jurisdiction is to match the function of a roadway with the appropriate organizational level (government jurisdiction) that is best suited to handle the route's function.

5.5.1 Jurisdictional Transfer Guidelines

Issues and factors that must be considered when determining potential jurisdictional changes include: historical practices, type of trips served (purpose and length) by the roadway, existing and forecast volume of traffic, access controls, existing and future functional classification designation, legal requirements, and funding and maintenance issues. A set of jurisdictional guidelines by governmental level (state, county, and city) shall provide a basis to review the routes in Hutchinson for potential jurisdictional transfers, but are not to be used to determine if a jurisdictional transfer is feasible and/or politically acceptable, nor do they establish a timeframe under which a transfer is to occur. Instead, the guidelines define a common sense approach for arriving at logical jurisdictional designations. Once there is agreement on how the jurisdictional designations should be established, an on-going jurisdictional transfer process will need to be developed. This process should address issues such as the financial implications for construction and maintenance of the facility, operational implications (perceived level of service, ability to maintain), perceived fairness in the distribution of route responsibilities, and timing of transfer. It is not anticipated that all guidelines must be met in order for a jurisdictional designation to be recommended. However, the more criteria a route meets, the stronger the case for considering a future change in jurisdiction.

State Jurisdiction Guidelines

State jurisdiction (U.S Highway and Trunk Highway) is focused on routes that commonly can be characterized as follows:

- classified as either a principal or minor arterial;
- typically longer routes that provide for statewide and interstate travel, serving longer regional trips that connect larger population and trade centers;

- commonly spaced at intervals that are consistent with population density, such that all developed areas of the state are within reasonable distance of an arterial. (As a guide, rural arterial routes are considered to "serve" a community if it is within 10 miles or 20 minutes travel time on a minor arterial.);
- typically have higher design features (such as paved shoulders, turn lanes, and properly spaced access points), which are intended to promote higher travel speeds (mobility) and have less focus on direct property access; and
- typically carry the major portion of trips entering and leaving urban areas.

County Jurisdiction Guidelines

Typically, in rural areas, County jurisdiction (County State Aid Highways and County Roads) is focused on routes that can be characterized as follows:

- functionally classified as a minor arterial, major collector, or minor collector;
- provide essential intra-county connections/links not served by principal and/or other minor arterial routes. They serve larger populations or traffic generators (business centers) that are not directly served by arterial routes;
- commonly spaced at intervals that are consistent with population density so as to provide reasonable access to arterial or collector routes in developed areas; and
- often provide links between local traffic generators and outlying rural areas.

Local/City Jurisdiction

Roadways that primarily provide property access and serve local traffic circulation are normally under local jurisdiction (city). These routes typically constitute up to 80 percent of the entire system mileage in an urban area and can be characterized as follows:

- typically shorter in length and carry lower traffic volumes; and
- primarily provide land access and traffic circulation to residential neighborhoods and employment centers such as commercial/retail, office, and industrial areas.

5.5.2 Candidates for Potential Jurisdictional Transfer

The majority of jurisdictional assignments for roadways within the City of Hutchinson appear to be properly aligned according to the guidelines listed above. One short-term candidate for potential jurisdictional transfer would be the portion of Jefferson Street SE between Edmonton Avenue SE and McLeod CSAH 115/Airport Road. This short segment of Jefferson Street SE is still under McLeod County jurisdiction and should be considered for jurisdictional transfer to the City of Hutchinson since it primarily serves as a local city street. In addition, the continued development or redevelopment throughout the community may drive the need to revisit jurisdictional assignments for various roadways including the city acquiring the jurisdiction of existing township roads that exist within the City's "Future Growth Area". Furthermore, if McLeod County pursues the construction of a Northeast Ring Road, it would be expected that portions of County Roads 61 and 79 could become candidates for jurisdictional transfer to the City or township as the County would take on additional road mileage with the new Northeast Ring Road.

For any jurisdictional transfer to occur, the process would need to follow the provisions outlined in Minnesota State Statutes §162.02 and §163.11. Furthermore, involved jurisdictions would need to enter into an agreed-upon process. Such a process may involve the following elements:

- A non-binding schedule with a target time frame for completing the jurisdictional transfer.
- Obtaining municipal consent for the jurisdictional transfer of a CSAH routes to a local agency if the route falls within the municipal boundary.
- A clear understanding of relevant statutory requirements including the requirement that a
 route that reverts to the township requires a public hearing, completion of repair or
 improvements to meet standards for comparable roadways in that jurisdiction, and
 continue maintenance for a minimum two year period before the date of revocation, as
 well as other limitation of the establishment, alteration, vacation or revocation of County
 highways.
- The transfer of responsibility for operational and maintenance requirements, including utility permitting, driveway access permits, changes to traffic controls and signing, and level of routine regular maintenance.

5.6 Right-of-Way Preservation

There are many different techniques available to protect right-of-way corridors for future road improvements. The City may determine the need to preserve roadway right-of-way in developing and/or redeveloping areas. The basic approaches for preserving right-of-way can be summarized as follows:

- Land acquisition (purchase of easements, title purchase, and eminent domain) Land acquisition is an approach applied only when specific improvements are eminent. The applicability of acquisition is directly linked to the availability of funding.
- Landowner agreements (development agreements, transferable development rights) Landowner agreements are often limited in effectiveness when dealing with a large project area due to the potentially larger number of individual landowners involved. By definition landowner agreements are applied on a parcel-by-parcel basis and are most effective when dealing with larger land holdings and a small number of owners.
- Land use regulations (development exactions, setback ordinances, official map, and subdivision regulations) Land use regulation techniques are facilitated through the comprehensive planning and zoning process. Certain regulations such as setbacks can be applied to individual parcels, while others such as adopting an official map are typically
 - developed for an entire corridors and require a more substantial level of planning and corridor definition.
- Access management (limiting property access) - Access management principals should be a part of all levels of transportation planning. Access management principals are further discussed in the following section. To be



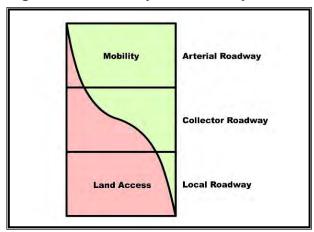
successful, it is important that access management guidelines are applied consistently and uniformly at the time development/platting occurs.

In summary, the applicability of these preservation options is dependent on many factors including available funding, the immediacy of development, and the timing of the need for the transportation improvements.

5.7 Access Management

Access management is an effort to maintain the effective flow of traffic on the network so each roadway can provide its functional duties while accommodating access needs of adjacent land.

Figure 20 - Roadway Functionality



Successful access management requires cooperation between land development and transportation interests in order to protect the public's investment in roads. The roadway functionality graphic (Figure 20) illustrates the relationship between land access and roadway mobility. As shown in the figure, there is a direct correlation to the amount of access provided and the ability to move traffic along a roadway. Higher levels of access reduce a roadways ability to move through-traffic. Therefore,

principal and minor arterials that have a high mobility function should have low level of access and local roads that focus less on mobility should be allowed to have a higher level of access.

Figure 21 - Relationship Between Access Points and Crash Rates

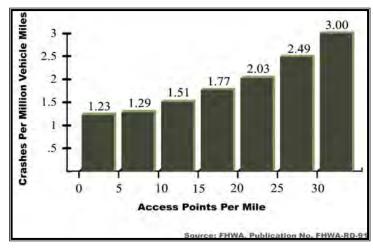


Figure 21 shows the relationship between increased levels of access and increased crash rates. By law reasonable access must be provided to each parcel. Therefore, early coordination between land development and roadway access needs to occur.

The City of Hutchinson can control access onto city roadways only and access onto other roadways becomes the responsibility of the state, county, or townships. Access onto local roadways is generally managed through local subdivision, zoning regulations, access permits, and development standards. In

Hutchinson, access spacing guidelines are recommended as a strategy to effectively manage existing access and to provide access controls for new developments along City streets. The access spacing guidelines for Hutchinson (shown in Tables 4 and 5) are consistent with current practices in other communities.

When the City receives a development proposal that proposes access onto a roadway under the jurisdiction of the state or county/township, the City will coordinate the review of these proposals with the appropriate agencies. The City will also participate in the design process with the appropriate agency when roadways are proposed for construction or reconstruction to ensure proper design and location of access points.

Figure 22 - Proper Driveway Location

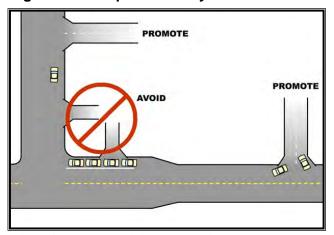
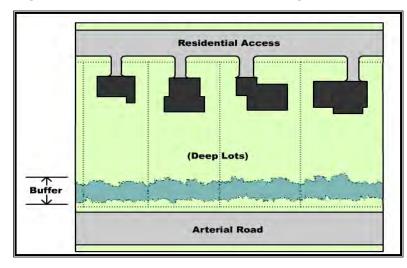


Figure 22 provides a sample access planning application designed to minimize vehicle conflicts, improve safety, and maintain reasonable levels of access to adjacent land use.

Another access management example is when a new subdivision is proposed along an arterial route, it should be reviewed with not only access to the lots within that particular plat, but also in relation to adjacent properties (see Figure 23)

with a focus on providing alternative access to the arterial through a connected local roadway. The internal street network should be designed to accommodate/connect to adjacent parcels that may someday experience similar levels of land development. The ability to minimize the number of access points (both public streets and private drives) to arterial and major collector roads that have a functional duty of providing mobility over land access is a primary objective of access management.

Figure 23 – Minimize Direct Access to Higher Function Roadways



As noted, access guidelines should be implemented using different methods. Any process should also deal with situations outside the guidelines, such as hardship cases. The City's Internal Design and Access Review provides for such consideration.

Table 4 - Hutchinson Urban Public Street Spacing Guidelines

	Type of Roadway and ADT Affected By Access (1) (9)					
Type of Public Access Requested	Controlled Access Arterial Freeway Facility	Multi-Lane Divided Arterial or Collector Over 10,000 ADT	Multi-Lane Undivided Arterial or Collector 8,000-25,000 ADT	Two-Lane Arterial or Collector 3,000-10,000 ADT	Two-Lane Arterial Less than 3,000 ADT	Two-Lane Collector or Local Roads Less than 3,000 ADT
Local: Low-Volume, Non- continuous Streets ^{(2) (3)}	No Direct Access	1/4 mile spacing with no median opening ⁽⁴⁾	1/4 mile spacing with turn lanes ^{(6) (7)}	1/8 mile spacing with turn lanes ⁽⁷⁾	1/8 mile spacing ⁽⁷⁾	1/16 mile spacing
Local: Medium-Volume, Non-continuous Streets ⁽²⁾	No Direct Access	1/2 mile spacing with signals and turn lanes ⁽⁵⁾	1/4 mile spacing with signals and turn lanes ⁽⁶⁾	1/4 mile spacing with turn lanes ⁽⁷⁾	1/8½ mile spacing with turn lanes	1/8 mile spacing with turn lanes
Collector: Low-Medium Volume Through Streets ⁽²⁾	No Direct Access	1/2 mile spacing with signals and turn lanes ⁽⁵⁾	1/4 mile spacing with signals and turn lanes	1/4 mile spacing with signals and turn lanes	1/4 mile spacing with turn lanes	1/8 mile spacing with turn lanes
Collector-Arterial: High Volume Through Streets ⁽²⁾	1 mile spacing (interchange)	1/2 mile spacing with signals and turn lanes	1/2 mile spacing with signals and turn lanes	1/2 mile spacing with signals and turn lanes	1/2 mile spacing with signals and turn lanes	1/4 mile spacing with signals and turn lanes
Arterial: High Volume Streets and Expressways ⁽²⁾	1-2 mile spacing (interchange)	1 mile spacing with signals and turn lanes	1 mile spacing with signals and turn lanes	1 mile spacing with signals and turn lanes	1 mile spacing with signals and turn lanes	1/2 mile spacing with signals and turn lanes

Table Notes:

- 1 The urban access guidelines are applicable to MnDOT, County, and City roads. **Bold text** are guidelines that may be modified (see Notes).
- 2 All volumes represent 20-year forecasts. "Low Volume" <3,000 ADT; "Medium Volume = 3,000 to 8,000 ADT; and "High Volume"> 8,000 ADT.
- 3 Non-continuous streets refers to cul-de-sac or short length local streets (less than 1/2 mile) which do not necessarily cross the roadway in question.
- 4 Additional access may be permitted in the form of right-in/right-out if the corridor extends through a mature small town CBD or if the facility is under the jurisdiction of the county or city.
- 5 For four-lane county or city roads, the guidelines may be relaxed to 1/4 mile spacing.
- 6 When retrofitting an existing corridor, direct access may be permitted after considering turning conflicts, speed, accident history and capacity issues.
- 7 Continuous left turn lanes or a raised median with left turn lanes may be considered if retrofitting an existing corridor and access guidelines cannot be achieved.
- 8 Property access off of arterial streets should be minimized to the extent practical.
- 9 All access locations should have adequate stopping sight distance, drainage, spacing form adjacent access, and alignment.

Table 5 – Urban Private Driveway Spacing Guidelines

Minimum Driveway Distance From Intersecting Street						
	Nearest Intersecting Street (e) (f) (g)					
				Minor Arterial ^{(c) (d)}		Minimum spacing Between Adjacent
Street With Proposed Driveway ^(a)	Local Street	Minor Collector	Major Collector ^(d)	Low Density	High Density	Driveways
Local Street						
Private Residential ^(b)	40 feet	40 feet	50 feet	50 feet	50 feet	40 feet
Individual Commercial/Multi-Family	50 feet	50 feet	90 feet	90 feet	90 feet	50 feet
Multiple Commercial	90 feet	90 feet	125 feet	125 feet	125 feet	100 feet
Minor Collector						
Private Residential ^(b)	40 feet	40 feet	50 feet	50 feet	50 feet	50 feet
Individual Commercial/Multi-Family	50 feet	50 feet	90 feet	90 feet	90 feet	50 feet
Multiple Commercial	90 feet	90 feet	125 feet	125 feet	125 feet	100 feet
Major Collector						
Private Residential ^(b)	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted
Individual Commercial/Multi-Family	90 feet	90 feet	220 feet	220 feet	220 feet	200 feet ^(h)
Multiple Commercial	125 feet	125 feet	220 feet	220 feet	220 feet	200 feet ^(h)
Minor Arterial (Low Density) ^{(c) (d)}						
Private Residential ^(b)	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted
Individual Commercial/Multi-Family	Not Permitted	Not Permitted	Not Permitted	660 feet	660 feet	230 feet ⁽ⁱ⁾
Multiple Commercial	Not Permitted	Not Permitted	Not Permitted	660 feet	660 feet	230 feet ⁽ⁱ⁾
Minor Arterial (High Density) ^{(c) (d)}						
Private Residential ^(b)	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted
Individual Commercial/Multi-Family	Not Permitted	Not Permitted	Not Permitted	Not Permitted	Not Permitted	230 feet ⁽ⁱ⁾
Multiple Commercial	Not Permitted	Not Permitted	Not Permitted	Not Permitted	660 feet	230 feet ⁽ⁱ⁾

eneral Comments:

- Areas marked "Not Permitted" indicate that:
 - Direct access to residential uses should be prohibited on major collectors and arterials, and
 - When direct aces is requested for higher intensity land uses (commercial or multi-family) and the intersecting streets are of different classifications, access should be granted from the street with the lower functional classification.
- The "Minimum Driveway distance From Intersecting Street" guidelines refer to full access driveways. Driveways may be located within these minimum distances but must be approved by the City Engineer and should be limited to right-in/right-out access.
- 3 Access will not be permitted onto street within right turn lanes or taner areas
- 4 The City reserves the right to review and adjust these guidelines on a case-by-case basis. Departure from the guidelines may be

Table Notes:

- (a) Maximum curb cut width is 24 ft. unless the site plan is approved by City Engineer (Internal Design & Access Review).
- (b) Private Residential includes single-family, two-family, townhome, quadraminium, and manor home dwellings.
- (c) Apply specific design criteria.
- (d) Driveways onto arterials or major collectors should be prohibited if possible. If Driveways cannot be prohibited, the number of accesses must be minimized.
- (e) If the nearest intersecting street is a signalized minor collector, driveways may be located less than 125 ft. from the corner, but access should be limited to right-in/right-out only.
- (f) If the nearest intersecting street is a signalized major collector, driveways may be located less than 220 ft. from the corner, but access should be limited to right-in/right-out only.
- (g) If the nearest intersecting street is a signalized minor arterial, driveways may be located less than 660 ft. (low density) or 1,320 feet (high density) from the corner, but access should be limited to right-in/right-out only.
- (h) Assumes a speed of 40 mph or lower.
- (i) Assumes a speed of 45 mph or higher.

In existing corridors where substantial development has occurred, the number of existing access points usually exceeds access guidelines. Unless these areas are undergoing redevelopment, access management must be approached differently. The access management strategy for such areas should entail minimizing new accesses, while consolidating/reducing existing access points as redevelopment occurs. The following access suggestions provide alternatives for minimizing access and for addressing access issues when the guidelines cannot be met:

- Consolidate and Limit the Number of Accesses for Individual Properties
 Access consolidation techniques are most applicable in situations where a substantial
 amount of land development has already occurred. Consolidation simply reduces the
 number of access points from driveways thereby decreasing the number of potential
 conflict points. Consolidation can be accomplished at the time of redevelopment of a
 parcel(s). The implementation of this technique must be accompanied by good internal
 vehicle circulation in parking areas and on local streets. The remedy for poor site design
 is too often a request for additional access to the highway. Several commercial
 developments within the community currently have multiple access points that may or
 may not be critical for everyday business operations.
- Shared Access Points or Cross Access Easements for Adjacent Properties
 Cross-access easements are another form of access consolidation that involves agreements between adjacent property owners to maintain a joint/shared access point or to promote internal site circulation. This technique can be especially applicable along highway sections where a number of adjacent individual residential/commercial lots have already been developed, but too few to make construction of a public street feasible.
- New Developments Shall Obtain Access From an Adjacent Road or Frontage/Backage Road

When a request for land development is submitted, specific access management techniques can be required of the development prior to granting development approval. Access can also be granted on an interim basis pending further land development in the area that would enable construction of supporting roads to provide access to the site. The City's development approval process (i.e. platting) could require the property to dedicate right-of-way to accommodate the future construction of a supporting roadway (frontage/backage road). Streets in individual developments should be aligned to provide access to other developments. This promotes neighborhood connectivity, and provides quick and efficient routes for emergency vehicles and other services (i.e. mail, garbage and street maintenance activities).

- <u>Develop Proper Secondary Street Spacing</u>
 New developments shall be required to provide proper intersection spacing for future intersection control (i.e. signalization).
- Promote direct residential access points onto local routes, instead of onto arterials or collectors. Direct residential access onto arterial or collector routes slows traffic flow and can result in safety concerns when traffic levels increase. A proper technique is to require new developments that are located at an intersection (corner lot) obtain access from the secondary (intersecting) roadway rather than from the major collector or arterial roadway. The access to the local street should be designed in a manner that will not adversely affect the safety and operations of the local street and/or the intersection.

• Median Restrictions

If access points cannot be eliminated, consider turning movement restriction (e.g., left-in or right-in/right-out only) through installation of raised medians or other channelization or signing. The primary function of median barriers is to restrict the types of movements at intersections and/or access points, which consequently reduces the number of conflict points and potential crashes. A conflict point is a location on the roadway where normal traffic operations or patterns intersect (through traffic and turning traffic). Intersections along a roadway can have many points of conflict with each point increasing the probability of crashes occurring in the area. By restricting the types of movements at intersections, the conflict points are dramatically reduced. Figure 24 depicts a total of 32 conflict points associated with a standard four-legged full access intersection with no restrictions on turning movements. A center median barrier creates a situation where left turns and cross street through movements are prohibited. As a result the number of conflict points is reduced from 32 to only four (see Figure 25).

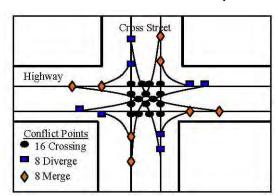
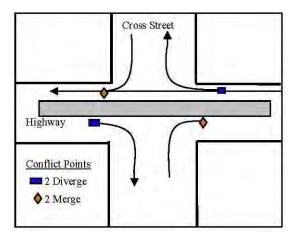


Figure 24 – Intersection With Full Access (No Restrictions)





5.8 Alternative Modes of Transportation

Alternative modes of transportation generally consists of pedestrian, bicycle, and transit services. Non-motorized transportation, such as pedestrians and bicyclists, are legitimate users of the transportation system and should be able to use the transportation infrastructure safely and without unreasonable delay. Unfortunately, motorized transportation, such as passenger cars and commercial vehicles, can often dominate the transportation infrastructure due to their disproportionate size and numbers. Astute planning and design of transportation infrastructure is one component necessary in achieving an integrated motorized and non-motorized transportation system that is relatively safe and efficient for all users.

Several projects are in the planning phase for non-motorized (pedestrian/bicycle) transportation in the City of Hutchinson. Potential bicycle and pedestrian travel projects have



been identified including the development of the Dakota Rail Regional Trail and Trailhead (former Depot building). The Dakota Rail Regional Trail currently extends from the city of Mayer in Carver County to the city of Wayzata in Hennepin County. Further discussion on the Dakota Rail Regional Trail is included in Section 6.0 – Trail System Plan. The City of Hutchinson also has several trail and "bicycle friendly" route improvements planned that will complete important connections in the non-motorized transportation network. Furthermore, Section 3.5 of this plan provides a discussion and conceptual rendering of

pedestrian improvements along Main Street (Highway 15) through downtown Hutchinson.

In general, new developments in the Hutchinson area should be encouraged to address bicycle and pedestrian accessibility. Also, efforts should be taken to connect residential developments with existing and planned bicycle facilities such as the Luce Line State Trail

and Dakota Rail Regional Trail. In commercial areas such as downtown or developing corridors such as TH 7 or TH 15 near the southern end of town, the provision of bicycle parking facilities should be encouraged to accommodate bicycle travel. In constrained areas (i.e. downtown sidewalks), these facilities should be located where they do not disrupt or



interfere with other pedestrian traffic. Bike corrals located along side streets or open spaces (parks) are a preferred option as long as they are located in relatively close proximity to the rider's destination(s).

The original "Hutchinson Project" study included a review of transit operations. The former municipal transit system is currently part of Trailblazer Transit (a McLeod and Sibley County partnership), and it has been constantly expanding its fleet of buses and services. Trailblazer Transit does not include fixed route services, but it is an active and fairly well used ondemand transit system.

This Page Left Blank Intentionally

6.0 Pedestrian and Bicycle System Plan

Bicycle facilities and trail systems are valuable community assets and are an important transportation mode for recreational and other trip purposes. Within the Hutchinson area, there is an existing network of sidewalks and trails. For many years, the City of Hutchinson has promoted the installation and use of sidewalks, trails and paths within the City as part of an effort to be a "Bicycle and Pedestrian Friendly" Community. It is the intention of this effort to make it possible and safe for people who would like the option of walking or biking, either for transportation or recreational purposes, to be able to travel safely throughout the City and access schools, recreational facilities, businesses, and other destinations.

In 1993 the City joined in partnership with MnDOT and the Finnish National Road Administration to initiate the design of a pilot community for walking, bicycling, and transit - a model of new transportation options and enhanced livability. Hutchinson was chosen as a pilot city because of its optimum conditions for a demonstration project of this type and the community's enthusiasm for the concept. In 1996 a series of technical memorandums were developed to document studies and findings related to development of the City of Hutchinson Light Traffic Plan (herein referred to as the Pedestrian and Bicycle Plan). The City has utilized the Plan to prioritize pedestrian and bicycle improvements and continues to update the map, which illustrates existing and proposed facilities.

6.1 System Overview – Existing Conditions

Hutchinson currently has a number of designated bicycle facilities, with the Luce Line State Trail being a primary trail corridor running east-west through the community. An update to the Hutchinson Pedestrian and Bicycle Plan Map was completed in December 2012 and is shown in Figure 26. The figure displays the existing trail facilities within Hutchinson.

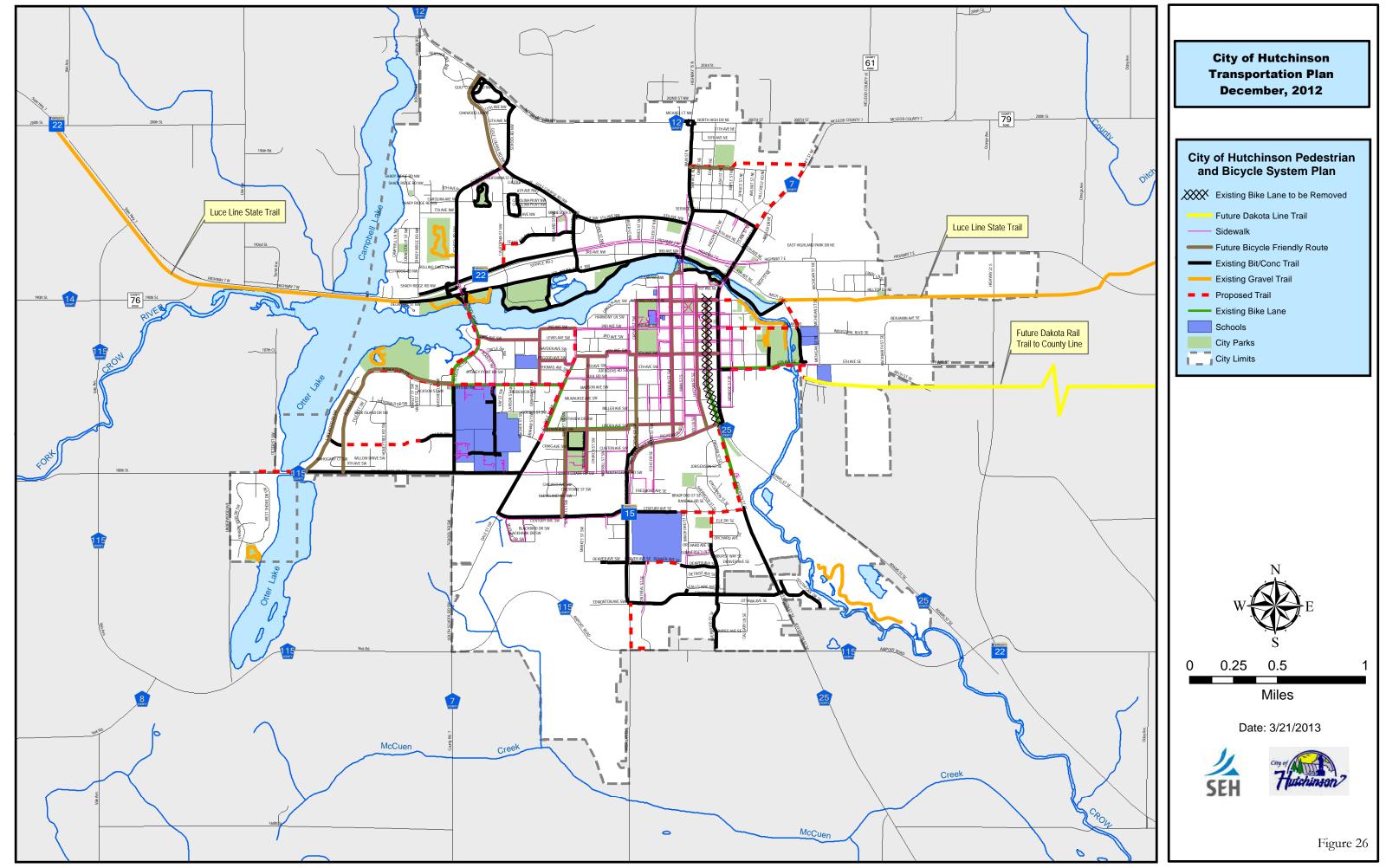


6.1.1 Existing Multi-use Trails

Well-planned and designed multi-use trails can provide good pedestrian and bicycle mobility. Trails can serve both commuter and recreational cyclists. The following points are critical to developing successful facilities:

- Connection to land-uses, such as shopping malls, downtown, schools, and other community destinations;
- Good design by providing adequate width and sight distance and avoiding problems such as poor drainage, blind corners, and steep slopes;
- Proper maintenance with regular surface treatments and repairs.
- Well-designed street crossings, with measures such as bike and pedestrian activated signals, median refuges, and warning signs for both motor vehicles and path users;
- Scenic qualities, offering an aesthetic experience that attracts cyclists and pedestrians;
- A well-connected system that provides shorter trip lengths than the road network, with connections between dead-end streets, cul-de-sacs, or short-cuts through open spaces; and
- Proximity to housing and businesses increases safety.

This Page Left Blank Intentionally





The Luce Line State Trail is a state-established trail maintained by the Minnesota Department of Natural Resources. This scenic recreational trail stretches over 60 miles from the Twin Cities western suburb of Plymouth to the small town of Cosmos in west-central Minnesota. The trail also crosses through the communities of Wayzata, Long Lake, Independence, Watertown, Winsted, Silver Lake, Hutchinson, and Cedar Mills. The Luce Line State Trail is an all season recreational trail that provides recreational opportunities such as biking, hiking, horseback riding, snowmobiling, and skiing. The Luce Line State Trail offers a



variety of scenery and an opportunity for families to participate in outdoor activities and community events. The portion of the Luce Line State Trail through the City of Hutchinson is displayed in Figure 26.

Several other multi-use trails are located throughout the City. These routes primary follow existing transportation corridors (city/county roads). Pedestrians may also use sidewalks where available. The existing network of sidewalks is depicted in Figure 26.

6.1.2 On-Street Facilities/Bike Friendly Routes

Bicycle travel along a roadway can be accommodated by designating bicycle routes or providing on-street facilities such as striped bicycle lanes. Currently, the City has a number of striped bicycle lanes including routes along School Road, Roberts Road, Dale Street, Linden Avenue, and 5th Avenue SE.

6.1.3 Accessibility to Community Resources

Accessibility to community resources such as schools and parks is an important aspect of any pedestrian and bicycle network. These community



resources were identified on the updated Pedestrian and Bicycle Plan to determine areas that may lack accessibility. Potential pedestrian and bicycle improvements will be identified to maximize connections to these community resources. Figure 26 identifies the existing and proposed trail system in relationship to various community resources.

6.2 Future Pedestrian and Bicycle Plan

The intent of the City's Pedestrian and Bicycle Plan is to provide decision makers with a vision and guidance document for developing a comprehensive network of pedestrian, bicycle routes/corridors, and support facilities to serve resident and visitor needs. The overall system needs to include an interconnect network of pathways (trails, bikeways, and sidewalks) for the purpose of providing alternative transportation and recreational opportunities throughout the community.

The updated Hutchinson Pedestrian and Bicycle Plan Map, completed in December 2012, displays future planned multi-use trail/pathway corridors and bicycle friendly routes that are proposed to enhance the non-motorized transportation network.

6.2.1 Proposed Multi-Use Trails

The updated Pedestrian and Bicycle Plan Map includes proposed trail segments that will provide additional mileage and create a more connected system of trails (see Figure 26). The Dakota Rail Regional Trail is a 44 mile former railroad corridor located in the counties of Hennepin, Carver, and McLeod. The route currently passes through Wayzata, Orono, Minnetonka Beach, Minnetrista, St. Bonifacius, and Mayer. Future phases of the trail corridor extend the Dakota Line Trail west to the City of Hutchinson. The Hutchinson Trail Depot, located at Adams Street and 1st Avenue NE, is planned to serve as a trailhead for the Dakota Rail Trail corridor. Improving and connecting existing trail segments could provide a trail corridor from the eastern City limits to a possible trailhead facility.

6.2.2 On-Street Facilities/Bike Friendly Routes

The updated Pedestrian & Bicycle Plan Map (see Figure 26) identifies future bicycle friendly routes including, but not limited to, the following roadways:

- Roberts Road SW
- Lakewood Drive
- Lewis Avenue SW
- Washington Avenue
- Hassan Street

- Franklin Street
- Grove Street
- Harrington Street
- Sunset Street
- Golf Course Road NW

In order to better define the presence of these routes for both users and motor vehicles, the City will need to consider improved signing and/or pavement striping. An established marking system (e.g. one sign or pavement marking per city block) should be considered in the establishment of the network of Bicycle Friendly Routes. Centerline striping on trails is also desirable for enhancing trail operations and safety. These items are relatively low cost and provide route information and present awareness for all users of the roadway. Examples of possible signage and/or pavement stripping improvements are provided below:

Signage Options









Striping Options







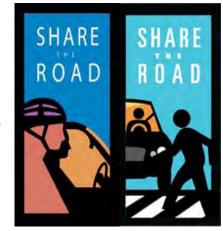


The State Minnesota has a Bicycle and Pedestrian Coordinator in its State Department of Transportation (MnDOT) to promote and facilitate the increased use of non-motorized transportation, including developing facilities for the use of pedestrians and bicyclists and

public educational, promotional, and safety programs for using such facilities.

Public Education

In addition, the City of Hutchinson has participated in programs dedicated to educating bicyclists, pedestrians and motorists on the safe use of transportation infrastructure to improve safety. Community events and programs such as bike rodeos and safe routes to school promotions help teach people the basics of safe walking and bicycling in schools, at special venues, and throughout the community. Local law enforcement can also greatly assist in ensuring safe transportation (both motor vehicle and non-motorized) through the review



and enforcement of specific laws that pertain to pedestrians and bicyclists.

Routine Maintenance

It is important to maintain safe operating conditions along pathways (trails, bike lanes, and sidewalks). Sight distance limitations and surface hazards (loose dirt/gravel, debris, overgrown vegetation, old storm drains, and joints/cracks) must all be considered and maintained to ensure the conditions are safe and favorable for users. The surface hazards listed above can not only cause bicyclist to move into the travel lane, these hazards can obscure the view of upcoming curves or traffic entering from driveways or side streets. Loose debris can also cause unsafe conditions because cyclists will avoid riding across the debris in fear of losing control or experiencing a flat tire and instead may swing over and into the travel lane.



Strategically located crosswalks are another important safety feature in a pedestrian and bicycle network. While in Minnesota it is the law for motor vehicles to yield to pedestrians crossing the roadway, the safest location is a at a designated crosswalk that is clearly marked and/or controlled by an automated system. The City has already implemented several crosswalk features such as painted crosswalks, portable base





signage, and traffic signals with integrated pedestrian push button activation.



Pedestrian safety along TH 7 near the intersection of Montana Street has been raised as an issue. A possible solution for a midblock crossing or crossing at a non-signalized intersection

would be the installation of a pedestrianactivated beacon or signal system. Several such products exist including the system known as HAWK (High-Intensity Activated CrossWalK beacon). Pedestrian hybrid beacons like the HAWK are designed for use in locations that do not meet traffic engineering standards for a conventional traffic signal system. HAWK signals can also provide visually impaired pedestrians with audible information when the walk signal is activated. A HAWK system can



cost \$80,000-\$100,000, which is about half what a normal signal. This type of system has limited effect on traffic operations since it is dark the vast majority of the time and is only operational when activated by a pedestrian.





The HAWK consists of a Red-Yellow-Red signal format for motorists. The signals remain off until a pedestrian activates the system by pressing a button. First, a flashing yellow light warns motorists that a pedestrian is present. The signal then changes to solid yellow, alerting drivers to prepare to stop. The signal then turns solid red and shows the pedestrian a "walk" symbol. The signal then flashes red lights and the pedestrian is shown a flashing "don't walk" and countdown timer. Drivers

are allowed to proceed during the flashing red after coming to a stop and making sure there is no danger.



Other less expensive pedestrian activated devices used to increase yielding rates on multilane roads with limited effect on traffic include flashing amber warning signals, in-road warning lighting, blinking pedestrian signs, and pairs of Rectangular Rapid Flashing Beacons (RRFB).

The RRFB system includes yellow LED beacons that employ a stutter flash pattern similar to that used on emergency vehicles. When activated, the rectangular rapid-flash LED flash beacons indicated to drivers that someone is waiting to cross or is currently walking across the street. This type of crosswalk treatment can provide enhanced communication and safety

between pedestrian and drivers at busier crosswalk locations where there is not already a traffic signal. The cost range of a RRFB system is approximately \$25,000-\$40,000 and would depend upon the type of features needed at a particular location (e.g. solar-powered, hardwire vs. wireless push buttons, type and amount of signage, and other pavement markings).



Safe Routes To School (SRTS)

The SRTS program is intended to help encourage kids to walk and bicycle to school more often through infrastructure improvements, education, and promotional activities. On a broader level, SRTS programs can enhance children's health and well-being, ease traffic congestion near the school and improve air quality and improve community members' overall quality of life. For these reasons and others, the City encourages the Hutchinson School District to consider establishing SRTS plans for each of the four public schools in the community. Both federal and state resources (funding) is available to assist in the preparation of these plans and implementation funding (education programs and infrastructure improvements) can be applied for through the MnDOT Federal-Aid Area Transportation Partnership.

More information of the SRTS program is available by visiting the MnDOT web site at: http://www.dot.state.mn.us/saferoutes/index.html

6.3 Americans with Disabilities Act (ADA) Transition Plan

The Americans with Disabilities Act (ADA), enacted on July 26, 1990, is a civil rights law prohibiting discrimination against individuals on the basis of disability. ADA regulations

require all public agencies such as
Hutchinson develop a Transition Plan
detailing policies and practices for
implementing physical pedestrian
improvements within the public right-ofway of the City. The goals of an ADA
Transition Plan is to optimize the
pedestrian experience, to provide safe and
usable pedestrian facilities for all
pedestrians, and to assure compliance
with all federal, state and local regulations



and standards. In 2010, the Minnesota Department of Transportation (MnDOT) adopted a statewide ADA Transition Plan for improvements being proposed on the Trunk Highway system and State Aid system. As a result, several ADA compliant improvements have already been implemented throughout the City.

The Minnesota Local Road Research Board (LRRB) has published the "ADA Resource Guide for Local Agencies", which includes a model transition plan and process guidelines for providing accessibility within the public rights of way. It is recommended that the City develop and adopt an ADA Transition Plan utilizing the guidance information provided by the LRRB. Hutchinson's plan shall detail how the City will make their streets and roads accessible to disabled individuals, including the installation of curb ramps or other sloped areas at locations where walkways cross roadways. The ADA Transition Plan shall identify and prioritize disabled access projects, estimate project costs, develop an implementation schedule, outline funding strategies, and include a process for reporting (grievance and monitoring programs).

This Page Left Blank Intentionally

7.0 Implementation Plan

The implementation section summarizes the improvements that have been identified in the Transportation Plan, including the Issues Map prepared by the Transportation Focus Group. Since available funding is not adequate to meet all identified transportation needs, the timing of the improvements will be determined as the City advances through the development of future Capital Improvement Programs and completes any future technical studies focused on the particular issue areas.

7.1 Roadway/Intersection Policies and Improvements

Hutchinson will strive to maintain a connected street network as it grows, providing alternative routes for moving around the city. A truly unified town requires good connections among neighborhoods and to activity centers. Based on the analysis completed for this report, the following recommendations and actions, beyond improvements which have already been programmed, have been developed for the City's transportation system:

- Consider future roadway extensions including, but not limited to, Montana Street (north towards CSAH 12/North High Drive), Energy Park loop, Market Street (south towards Edmonton Avenue, and Edmonton Avenue (west towards Dale Street). These improvements will likely be development driven.
- Continue to monitor intersection operations and safety and will make appropriate improvements (lane geometry changes, pavement markings, lighting, signage, correct skews/sight lines, etc.) as deemed necessary to improve operations or alleviate safety concerns. Site specific technical studies that investigate intersection level of service, crash rates, and/or severity rates may be necessary to determine the appropriate improvement(s). The Transportation Issues Map (see Figure 7 found in Section 2.3) identifies several intersections that will need to be observed and likely studied in the future.
- Continue to monitor functional classification designations and pursue changes as recommended in Table 3.
- Consider the potential options for the long term use of the 2nd Avenue Bridge over the South Fork Crow River, due to the structural and operational deficiencies of the existing bridge structure.
- Consider the adoption of a comprehensive Complete Streets policy that will include requirements for considering all modes of transportation when roadway improvements are being considered.
- Through the platting and subdivision review processes, continue to protect and preserve future frontage/backage road corridors (i.e. extension of Market Street, Edmonton Avenue, etc.)
- Continue to support the identification, preservation, and construction of a Northeast Ring Road being considered by McLeod County. The City will coordinate with the County on future planning and land development opportunities that may be the catalyst for completing the eastern peripheral roadway.
- Consider an updated origin-destination survey in conjunction with the Northeast Ring Road project development process to gain an up-to-date understanding of local and regional travel patterns in, through, and surrounding the community.

- Upon completion of the NE Ring Road, the City will work with McLeod County and MnDOT on whether signing changes should be made to promote the use of the ring road rather than Highway 15.
- According to the 20-year traffic projections, capacity concerns have been identified along Highway 15. The City will coordinate with MnDOT on future improvements, including the planned reconstruction of Highway 15 through downtown. The conceptual "downtown" design and typical section prepared as part of this plan (see Section 4.6) shall be utilized to highlight the design feature the City would like incorporated into the reconstruction of Highway 15.
- Explore alternative local links that reduce dependence on Highways 7 and 15, which can maintain access for local residents during peak travel periods and preserve the operating capacity of the two highway corridors.
- As future improvements are proposed at existing signalized intersections, continue to pursue signal upgrades (coordination of multiple signal systems and adding flashing yellow left turn arrows).
- Evaluate existing intersection control (stop signs) along primary travel routes that have frequent intersections from criss-crossing of local roadways. The evaluation will assist in determining if there is excessive or deficient intersection control along a corridor.
- Continue to invest in improved pavement conditions.
- Continue to maintain and replace signage in accordance with all requirements, including federal retro-reflectivity standards, to ensure appropriate signage is in place for the traveling public.
- Continue to upgrade their Municipal State Aid system and local city street to modern day design standards, which will help preserve operational and safety conditions.

7.2 Pedestrian, Bicycle, and Transit Policies and Improvements

The success of a multi-modal system can be measured by five key criteria:

- *Directness:* The system should provide relatively direct routes to destinations without taking people far out of their way.
- *Integrity:* The system should connect to places and provide continuity, rather than leaving users in dead ends or uncomfortable places.
- *Safety:* The system should be physically safe to its users and not present hazardous conditions.
- *Comfort:* The system should understand the various capabilities and comfort levels of its users. For example, senior citizens may take a relatively long time to cross a street, and some bicyclists are not comfortable riding in mixed traffic. The system should reflect these differences.
- Experience: Trails should provide users with a pleasant and scenic experience.

Based on these criteria, the following recommendations and actions have been developed for the City's pedestrian, bicycle, and transit system:

• Continue to value active living opportunities (pedestrian/bicycle trails) that strengthen and enhance community life.

- Consider modifications to provisions for adding sidewalks or trails on or adjacent to public roadways and in public rights-of-way in a systematic manner. Priority should be given for routes that meet the following criteria:
 - Routes connecting to the Luce Line State Trail, future Dakota Rail Trial, and major destinations (for example major employers, Downtown Hutchinson, business centers, schools, recreational facilities, and other commonly used public facilities);
 - Major commercial areas where foot traffic is essential.
 - Along collector and arterial roadways with higher traffic volumes
 - Other areas indicated by the City.
- Continue to implement the Bicycle Friendly Route system shown on Figure 23 and
 establish a means for adequately marking these routes so bicyclists and drivers of motor
 vehicles can easily identify the presence of these routes. The use of regular signage or
 pavement markings (i.e. one sign or marking per city block) should be considered in the
 establishment of the network of Bicycle Friendly Routes.
- Continue to develop the Depot Trailhead facility.
- Support paving the Luce Line State Trail and extending the Dakota Rail Trail into Hutchinson. The City should explore opportunities to provide a safe crossing over the South Fork Crow River (i.e. trestle bridge, 2nd Avenue Bridge, separate trail bridge).
- Continue to explore pedestrian safety improvements throughout the community, including the Montana Street and Highway 7 crossing.
- Consider the development of an ADA Transition Plan that defines how the City will make their streets and roads accessible to disabled individuals. The Transition Plan should identify and prioritize disabled access projects, estimate project costs, develop an implementation schedule, outline funding strategies, and include a process for reporting (grievance and monitoring of the policy).
- Coordinate with and support the Hutchinson School District in future planning, design, and implementation of a Safe Routes To School program.
- Development of a "light traffic" plan to specifically address community and regional pedestrian/bicycle/trail-user/transit needs, infrastructure and facilities
- Continue to support transit services throughout the community and surrounding region.

This Page Left Blank Intentionally

_						-	-
Л	_	-	^	•	\sim	·	^
_			_			İΧ	_
, ,	~	M	v		v	-	, ,

Hutchinson Traffic Flow & Safety Questionnaire (2012) and Responses



Local Traffic Flow & Safety Questionnaire (2012)

The City of Hutchinson would like to gather input and feedback from citizens, other agencies, local organizations and businesses regarding the current status of **Local Traffic Flow & Safety** within and around the City of Hutchinson. Our objective is to identify and prioritize traffic flow and safety issues that impact the traveling public. These issues may pertain to specific streets, intersections, trails, sidewalks, bike lanes, crosswalks and other locations/items. We encourage your participation in the below **Questionnaire** and in providing **additional written comments**. There will also be a **Public Open House** (Wednesday, March 21st, 5:30 to 7:30 PM within the City Council Chambers – 111 Hassan St. SE) to obtain as much direct information as possible from interested individuals.

	NW NE	SW	SE	Downto	wn
	sponses:				
	• SW – 315				
	• <i>NW</i> – <i>143</i>				
	• SE – 134				
	• NE – 96				
	 Downtown – 16 Total – 704 				
	• 10tal – 704				
	In general, how would you rate	e the traffic fl	ow in the Cit	v of Hutchinsor	? (Please circle one)
	← Needs Improvement		2 3	4 5	Excellent →
, _	4				
e	sponse Average: • 3.04 – slightly towards E	Excellent			
	5.04 – stignity towards L	acenem			
	In general, how would you rate	e traffic safety	y in the City o	of Hutchinson?	(Please circle one)
	← Needs Improvement	1	2 3	4 5	Excellent 🗲
e	sponse Average:				
	• 3.27 – slightly towards E				
	t specific areas where traffic flo	w (F) and saf	ety (S) could	be improved in	order of priority?
115					

- 1. *Main Street/TH 15 & 3^{ra} Avenue S. (130)*
- 2. Main Street/TH 15 flow & safety (102)
- 3. Main Street/TH 15 & 5th Avenue S. (68)
- 4. Main Street/TH 15 downtown (62)
- 5. TH 15 & CSAH 115-Airport Rd. (30)
- 6. *Main Street/TH 15 & 2nd Avenue S. (14)*

	 TH 7 & California/Montana intersections (9) TH 15 & South Grade/Lynn/Service Rd. area (9) Cashwise/Holiday service road misaligned intersection (9) TH 7 flow, safety, speed, etc. (8)
	11. South Grade Road SW speeds by Middle School & Otter Lake areas (8)
	12. School Road & TH 7 Service Road/SuperAmerica (8)
	13. School Road flow, safety, speed, etc. (8)
	14. Main Street/TH 15 uncontrolled access from side streets (8)
	15. Roberts Road SW flow, safety, speed, etc. (7)
4.	How would you characterize the traffic flow and safety near the schools? (Please circle one)
	← Needs Improvement 1 2 3 4 5 Excellent →
ъ	
Re	sponse Average:
	• 3.45 – moderately towards Excellent
W	hat specific areas of improvement would you suggest?
D.	
<u>ke</u>	sponses
	1. Middle School – flow, disobey 'No Left Turn', etc. (22)
	 Park Elementary – flow, safety, speed, drop-off, etc. (19) High School – flow, safety, speed, etc. (18)
	4. High School – more patrol in morning & at dismissal (15)
	5. High School – careless driving (11)
	6. Middle School – speed limit too high (10)
	7. Speed zones by all schools (5)
	8. High School – too many drop-offs, encourage busing/walking, etc. (5)
5.	The City has been focusing on becoming "Bicycle and Pedestrian Friendly" by creating a bicycle and pedestrian network that connects destinations (schools, shopping, recreational areas, etc.). How much effort should the City put into bicycle and pedestrian safety and access? (Please circle one)
	\leftarrow Less Effort 1 2 3 4 5 More Effort \rightarrow
D.	
<u>ke</u>	<u>sponse Average:</u> • 3.31 – moderately towards More Effort
	5.51 – moderately towards more Effort
W	here could the bicycle and pedestrian network be improved?
Re	<u>esponses</u>
	1. Bicycle/pedestrian/motorist education – rules, laws, right-of-way, crosswalks, etc. (68)
	2. Enforcement/encouragement/signage of right-of-way to pedestrians (60)
	3. Support expansion of bicycle/pedestrian network (51)
	4. Against trails/paths or "there are enough" (31)
	5. Crosswalks – more visibility, better maintenance, improved snow removal, etc. (21)
	6. Bicycles/scooters/skateboards observe traffic laws (18)
	7. Encourage use of bicycle/pedestrian network – trails & TH 7/School Rd. underpass (16)

9. Bicycle/pedestrian facility implemented along Century Ave. SE – TH 15 to Jefferson (11)

8. Minimize/eliminate use of on-street bicycle lanes (15)

2

10. Better maintenance of trails/walks – surface condition & snow removal (11)

6. The City has worked on the signing and striping at crosswalks, and a state law requires that vehicles stop when a person is in a crosswalk. **Do you feel safe using crosswalks in the City?** (Please circle one) *←Disagree 1* 2 3 4 5 Agree →

Response Average:

• 3.13 – slightly towards Agree

Would you like to see additional crosswalk enforcement to address this situation? (Please circle one)

5

←Disagree 1

3

Agree 🛨

Response Average:

• 3.61 – moderately towards Agree

What other suggestions do you have to help improve traffic flow and safety within the City of Hutchinson? What other specific areas of concern do you have? (Please attach a separate sheet if necessary)

Responses

- 1. Traffic signal timing/synchronization (45)
- 2. Main Street/TH 15 bypass (25)
- 3. Enforcement of stop signs/traffic signals (25)
- 4. Enforcement of speed limits (25)
- 5. Main Street/TH 15 & 5th Avenue S. 4-way stop or traffic signal (15)
- 6. Main Street/TH 15 4-lane roadway thru City (14)
- 7. Address inattentive/distracted driving (12)
- 8. Enforcement of jay-walking laws (10)
- 9. Enforcement of speed limits 5th Ave. S (9)
- 10. Against roundabout implementation (7)
- 11. Enforcement patrol more (7)
- 12. TH 7 & 15?? (7)
- 13. Traffic signals not enough time to cross (6)
- 14. Enforcement turn signal use (6)
- 15. Human nature unless you can change it, doubt you can do much better (6)

_			••	
Λю	n	nn	uv	
Au	JUE	enc	11 A	
[-				_

Transportation Focus Group Meeting Summaries

Memorandum



To: Transportation Focus Group Members

CC: Jeremy Carter, City Administrator

From: Dan Jochum, Planning Director; Kent Exner, City Engineer

Date: 1/3/2013

Re: 12/7/2011 Transportation Focus Group Meeting Summary

The following document summarizes the December 7, 2011 Transportation Focus Group Meeting for the City of Hutchinson Comprehensive Plan Update; it is not meant to be a complete record of discussion which took place, but rather a summary of the various topics and issues raised and discussed.

Date of Event: December 7, 2:00 pm to 4:00 pm

Location: Hutchinson City Center – Council Chambers

Attendees:

Dan Jochum John Olson Kent Exner Donn Winckler Chad Czmowski Brian Mohr

Dolf Moon

Agenda

- 1) Hutchinson Area Transportation Study Issues Map (1998) review previously identified issues/topics
- 2) TH 15 Focused Discussion review TH 15 current performance/condition, future vision, utility needs
- 3) Complete Streets Initiative review status of policy, potential local approaches, plan implications
- 4) Regional Transportation Items TH 22 IRC, TH 15 Corridor, TH 7 Corridor, state/regional trails, etc.
- 5) Next Steps & Future Meeting

Meeting Summary

Donn Winckler provided feedback regarding the goals and strategies that were discussed last month. Donn suggested integrating the changes in the goals and policies.

Kent Exner gave an overview of the previous meeting and went over the meeting summary. He also provided an overview of the agenda for today's meeting.

1) Hutchinson Area Transportation Study Issues Map (1998) – review previously identified issues/topics

The group went through the Transportation Study Issues Map from 1998 and marked off old issues that have been addressed and discussed new issues that have arisen since the 1998 plan. The following is a list of new issues to be considered:

- Stop Sign reduction policy
- South end of Jefferson near Airport Rd safety issues
- Century Ave SW extension
- Edmonton SW from Target to potential new school site
- South Grade Road at Cash Wise
- Frontage Roads near Mall, Buffalo Wild Wings, and Cashwise
- ADA requirements of future projects
- State trail paving to east (Luce Line and Dakota Rail)
- Left turn lanes at 5th Ave and Highway 15
- Completion of industrial park loop
- Montana St. NW extension
- School Rd South narrowing and adding trail like School Rd North
- South Grade Rd/Hwy 15 realignment
- Internal traffic flow on commercial developments on south end of town
- Denver Ave fill in gap
- Highway 7 ped crossing at Montana
- Highway 15 downtown signal timing
- Airport crosswind runway displaced threshold add length to runway
- Monitor impacts of grain terminal in Brownton
- 2) TH 15 Focused Discussion review TH 15 current performance/condition, future vision, utility needs

This item was tabled until the next meeting.

3) Complete Streets Initiative – review status of policy, potential local approaches, plan implications

Exner provided a handout regarding complete streets. Some cities the same size as Hutchinson have adopted complete streets policies.

In addition, Exner provided a handout map from the Hutchinson Project of 1996, which was a light traffic plan, as well as a trails map for discussion purposes.

Finally, discussion took place regarding the amount of stop signs within the City and where they are appropriate.

4) Regional Transportation Items – TH 22 IRC, TH 15 Corridor, TH 7 Corridor, state/regional trails, etc.

Not discussed. Will be discussed at future meeting.

5) Next Steps & Future Meeting

Exner will send out an invitation for the next meeting which will likely be in January.

Memorandum



To: Transportation Focus Group Members

CC: Jeremy Carter, City Administrator

From: Dan Jochum, Planning Director; Kent Exner, City Engineer

Date: 1/3/2013

Re: 11/2/2011 Transportation Focus Group Meeting Summary

The following document summarizes the first Transportation Focus Group Meeting for the City of Hutchinson Comprehensive Plan Update; it is not meant to be a complete record of discussion which took place, but rather a summary of the various topics and issues raised and discussed.

Date of Event: November 2, 2:00 pm to 4:00 pm

Location: Hutchinson City Center – Council Chambers

Attendees:

Dan Jochum John Brunkhorst Kent Exner John Olson Chad Czmowski Pat Weidemann Brian Mohr Donn Winckler

Dolf Moon

Agenda

- 1) City Comprehensive Plan Process review status of ongoing comprehensive planning efforts
- 2) Hutchinson Area Transportation Plan (1998) review past document contents and current applicability
- 3) Hutchinson Area Transportation Study Issues Map (1998) review previously identified issues/topics
- 4) Potential Supporting Information/Organizations identify potential data and feedback resources
- 5) Next Steps & Future Meeting

Meeting Summary

Kent Exner welcomed the focus group members and introductions were completed. Mr. Exner gave an overview of the purpose and intent of the focus group.

1) City Comprehensive Plan Process – review status of ongoing comprehensive planning efforts

Dan Jochum updated the group on the entire comprehensive planning process. There have been several steering committee meetings and public information meetings. He noted the 2002 Comprehensive Plan goals and strategies are being reviewed for inclusion into the updated plan.

Exner further went on to review what the expectations were for the transportation plan. Weidemann noted that public safety should be brought to the table in regards to the transportation update.

2) Hutchinson Area Transportation Plan (1998) – review past document contents and current applicability

Exner noted that the 1998 Transportation Plan is a quality document and very thorough. It included the following:

- Roadway functional classification
- MSA route information
- ADT information
- Traffic Forecasts
- Special Study Area TH15/TH7
- Accident Rates
- Origin and Destination studies

Exner noted the City does not plan to go into as much detail with the 2012 update as was done in 1998. It was further noted that MnDOT does not have the resources they used to to assist communities with detailed transportation studies.

Weidemann suggested the City prioritize Highway 15 it the City believes it is a significant issue so it can be placed on the list for potential reconstruction. He also noted that ADA is a very important issue and needs to be addressed on an ongoing basis on projects.

The discussion turned to what should the 2012 Transportation Plan update include. It was suggested that the plans be organized around specific issues/topics that need to be addressed. Weidemann suggested to just have a transportation section in the Comprehensive Plan and to not even have a "stand alone" transportation document. He also suggested moving beyond the 1998 Plan and do not try to summarize it or try to incorporate it into the new plan section. Weidemann also suggested incorporating Towards Zero Death information into the plan

section. The entire group seemed to support not reinventing the 1998 Plan and just having a chapter for transportation in the overall plan.

3) Hutchinson Area Transportation Study Issues Map (1998) – review previously identified issues/topics

To be discussed at December Meeting

4) Potential Supporting Information/Organizations – identify potential data and feedback resources

Not discussed. City staff will coordinate.

5) Next Steps & Future Meeting

The next meeting will be on December 7, 2011 at 2:00 PM at City Center in the Council Chambers.



Transportation Plan Focus Group

February 8, 2012 2:00 PM Hutchinson City Center – 111 Hassan St. SE

Meeting Summary

- 1. December Meeting Info review meeting summary and Transportation Goals & Strategies section
 - Previous meeting summary reviewed
 - Goals & Strategies finalized
- 2. Transportation Issues Map review map, address revisions/additions, group/prioritize issues
 - Map reviewed and a few revisions/comments provided
 - Group completed a simple "dot exercise" to preliminarily prioritize issues
- 3. TH 15 Focused Discussion review TH 15 current performance/condition, future vision, utility needs
 - Item briefly discussed, further discussion to occur at next meeting
- 4. Light Traffic Map review trail group discussion/issues, sidewalk inclusion, bicycle boulevard concept
 - Group reviewed draft map and provided revisions/comments
 - Group agreed that a "bike friendly route" concept should be included and further examined
- 5. Public Input website/e-mail survey, public open house/presentation, City Council meeting update
 - City staff to administer traffic safety/flow survey similar to 2005
 - Public input open house scheduled for Wednesday, March 21st
- **6.** Regional Transportation Items TH 22 IRC, TH 15 Corridor, TH 7 Corridor, state/regional trails, etc.
 - Item not addressed
- 7. Next Steps & Future Meetings
 - City staff to administer survey and public meeting, then schedule future meeting



Transportation Plan Focus Group

May 2, 2012 2:00 PM Hutchinson City Center – 111 Hassan St. SE

Meeting Summary

- 1. Traffic Flow & Safety Questionnaire review rating results and feedback/input
 - Preliminary rating results were reviewed, overall ratings were slightly to moderately higher than 2005
 - City staff to compile written responses and report at next meeting
- 2. Transportation Issues & Light Traffic Maps review revised maps
 - Maps reviewed and finalized
 - Sidewalks from Hutchinson Project maps were revised to Bike Friendly Routes
- 3. TH 15 Focused Discussion review TH 15 current performance/condition, future vision, utility needs
 - MnDOT has indicated plans to address reconstruction of TH 15 downtown within next ten years
 - Initial utility studies show that significant reconfiguration/reconstruction may be necessary
 - Group believes that traffic flow is adequate with nearly no congestion
 - Group believes that on-street parking is valuable/necessary within the downtown area
 - Traffic signal functionality/coordination should be reviewed
 - Pedestrian crossing improvements should be addressed
 - Roadway geometric changes to calm traffic would be beneficial to adjacent properties and pedestrians
 - MnDOT stressed that the City should continue to review potential improvements
- **4.** Northeast Ring Road brief review of status/concept
 - Group discussed the concept of a NE alternative route for TH 15
 - Potential traffic flow dynamics were discussed, trucks, downtown traffic, destinations, etc.
- **5.** Regional Transportation Items TH 22 IRC, TH 15 Corridor, TH 7 Corridor, state/regional trails, etc.
 - Group agreed that regional transportation items could be briefly addressed within the current Transportation Plan, but should not be the focus
- **6.** Document Preparation task group expectations and consultant involvement
 - Consultant will begin Transportation Plan document preparation utilizing Task Group drawings/input
 - Timeframe goal is to complete the document preparation by the end of 2012
- 7. Next Steps & Future Meetings
 - Future meeting to be scheduled when draft document is available



Transportation Plan Focus Group

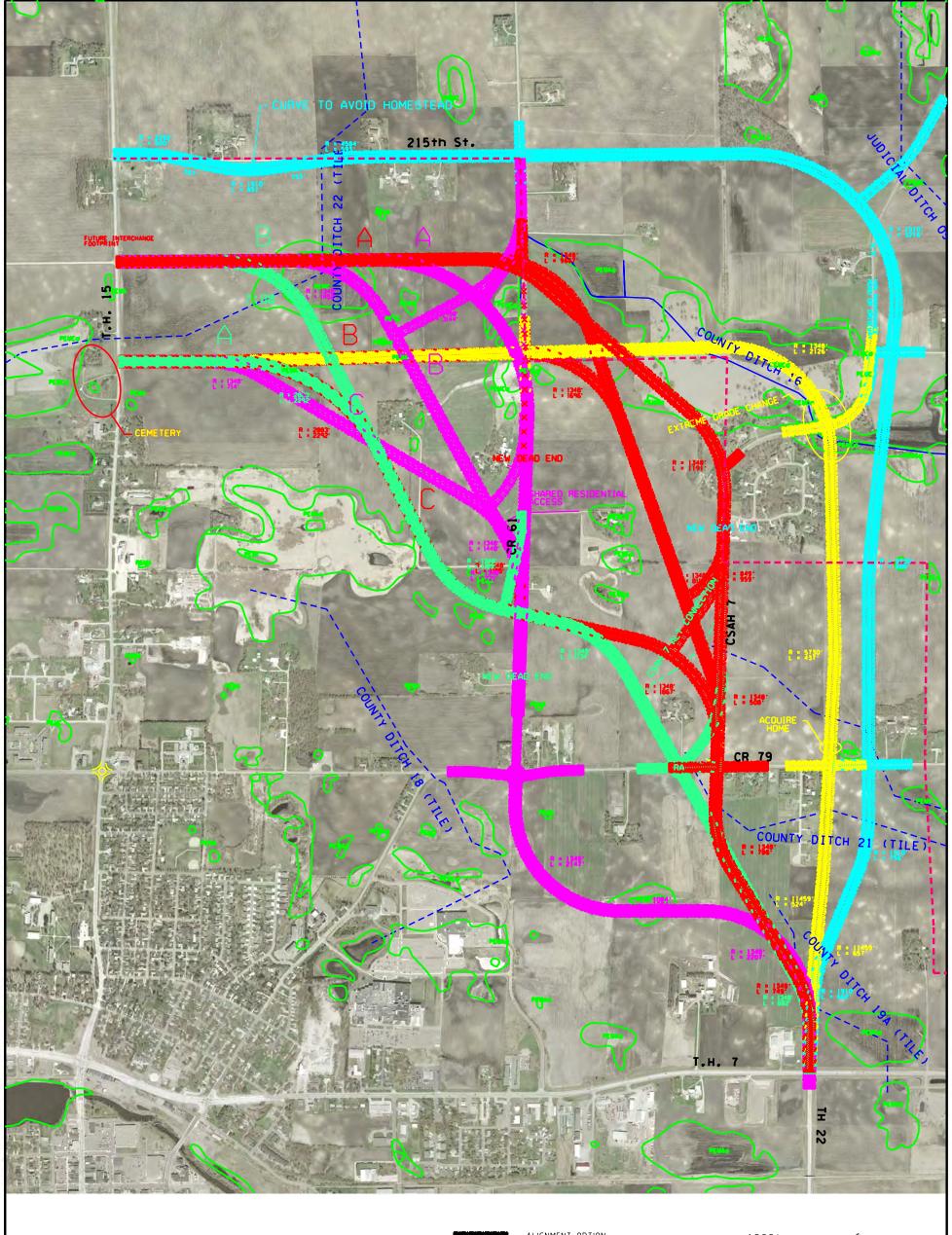
November 14, 2012 2:00 PM Hutchinson City Center – 111 Hassan St. SE

Meeting Summary

- 1. Transportation Plan Technical Memo's review draft documents
 - 20-year Average Daily Traffic Projections
 - City-Wide Crash History
 - Complete Street Assessment
 - Traffic Signal Assessment
 - Highway 15 Downtown Reconstruction Options
 - 2nd Avenue SE Bridge Assessment
 - Northeast Ring Road Assessment
 - Draft technical memo's reviewed with general approval from the group
- 2. Traffic Flow & Safety Questionnaire review rating results and feedback/input
 - Summary of the questionnaire ratings and feedback/input was reviewed
 - Information will be forwarded to Consultant for inclusion within the Transportation Plan document
- 3. Transportation Issues & Light Traffic Maps review final drafts
 - Transportation Issues Map revised to include major response items from the questionnaire
 - Minor revisions made to the Light Traffic Map
 - Bike friendly route concept to be further examined, signage, striping, mapping, public education, etc.
- **4.** Document Preparation expectations and schedule
 - Consultant to finalize Technical Memo's in the near future, then begin preparation of Transportation Plan document
 - Transportation Plan info to be provided via e-mail to Task Group when available
- **5.** Next Steps & Future Meetings??
 - Public Input Open House scheduled for Wednesday, November 28th (5:30 7:00 PM)
 - Tentatively set future meeting for Wednesday, December 12th (2:00 PM)

	Ap	pen	dix	C
--	----	-----	-----	---

McLeod County Northeast Ring Road Concept Design Options





ALIGNMENT OPTION
WETLAND
DITCHES
URBAN BOUNDARY

1200'

SCALE IN FEET





MCLEOD COUNTY HIGHWAY DEPARTMENT CSAH 122 NORTHEAST RING ROAD CONCEPT ALTERNATIVE ALL

ALIGNMENT PARAMETERS

- DESIGN SPEED: 60 MPH
- -R/W CORRIDOR: 150'
- ACCESS POINTS: MEET MN/DOT STANDARDS
- MINIMIZE IMPACTS
- CONSTRUCTABILITY

Appendix D

Transportation Plan Final Draft Overview and Proposed Work Plan

Post-Tensioned Rock Anchors



MEMORANDUM

TO: Mayor & City Council

FROM: Kent Exner, DPW/City Engineer

RE: Transportation Plan Final Draft Overview & Proposed Work Plan

DATE: February 26, 2013

• Plan Preparation Approach

- City staff administered majority of efforts info gathering, meetings, survey, drawings/maps, analysis, coordination, etc.
- SEH compiled, expanded upon and refined information/drawings and prepared associated studies/conclusions – ultimately composing the final document
- Two documents produced/provided summary for inclusion within the Comprehensive Plan and the stand-alond 2013 City of Hutchinson Transportation Plan document

Recognitions

- Focus Group MnDOT, McLeod Co., MMRDC, School District, City Council, City staff
- o General Public outreach meeting participation and survey input/feedback
- o City Staff Focus Group participants, Pat V., Pat E. & others
- o SEH coordinated effort with Comprehensive Plan allowed for cost-effective and collaborative approach to creating a quality plan
- o City Council allowing for/prioritization of the planning process

Vision

- Proposed Statement "The transportation network in the City of Hutchinson will facilitate the efficient movement of citizens, visitors, and commerce within and through the city on a safe, well maintained, convenient, coordinated, and fiscally responsible network of routes using a balanced multi-modal transportation system."
- Summary Statement "The Hutchinson Transportation Plan has been developed to balance the need for convenient and efficient access for local residents and businesses while maintaining mobility and safety on the transportation system for all users."
- O Vision statement reflected by the plan's goals, objectives and policies
- o Goals
 - Preserve and Enhance the Transportation System
 - Improve the Functionality & Safety of the Transportation System
 - Balance Transportation Needs with the Hutchinson's Land Use Principals
 - Improve Connectivity Throughout the Community
 - Enhance Transit Opportunities and Usage
 - Implement the Transportation Vision Through Strategic Funding, and Objective and Definitive Decision Making, with the Collaboration of Jurisdictions (MnDOT, McLeod County and Surrounding Townships)

• Key Future Plan User Info

- Crash Data
- ADT Forecasting
- o Roadway System Functional Class Analysis
- Issues Map
- Survey Data
- o Pedestrian/Bicycle System Map
- Special Study Areas

• Work Plan Priority/Action Items

- Near Term (1 2 years)
 - Review of Municipal State Aid (MSA) system versus ADT and Functional Class info
 - TH 15 (Main Street) corridor project feasibility review (utilities, ped safety features, parking, streetscaping, business impacts, cost estimates, etc.)
 - Study/analyze future 2nd Avenue SE bridge crossing
 - Participate in potential Northeast Ring Road origination/destination study
 - Support of Luce Line Trail improvements
 - Coordinate/administer Dakota Rail Regional Trail feasibility study
 - Review Main Street area traffic signal timing/interconnectivity
 - Coordinate/administer Complete Streets Policy document preparation
 - Coordinate/administer ADA Transition Plan preparation
 - Develop approach to several pedestrian/bicycle related items (bicycle-friendly route concept, signing/striping, crossings, sidewalk/trail improvements/maintenance, etc.)
- o Intermediate Term (3 5 years)
 - TH 15 (Main Street) project planning in conjunction with MnDOT and property/business owners
 - Develop approach to address TH 15 (south area) corridor access/safety issues
 - Progressively administer MSA projects
 - Develop City's Northeast Ring Road feedback/input/position
 - Address Main Street area traffic signal timing/interconnectivity
 - Administer plan to address 2nd Avenue Bridge crossing needs/approach
 - Coordinate Dakota Rail Regional Trail concept development, plan preparation and funding source identification
 - Implementation of Complete Streets Policy
 - Implementation of ADA Transition Plan
 - Development of a "light traffic" plan to specifically address community and regional pedestrian/bicycle/trail-user/transit needs, infrastructure and facilities
- \circ Long Term (6-10 years)
 - Establish MnDOT's plans/schedule for TH 15 (Main Street) project
 - Establish Dakota Rail Regional Trail project plans/schedule
 - Determine approach/concept pertaining to future City transit service needs
 - Identify TH 22 Inter-Regional Corridor connector approach/position
 - Continue to nurture positive relationships with other agencies and stakeholders

• Working Group Approach

- O Potential collaborative group effort similar to approach utilized for the preparation of recent plans (Transportation, Comprehensive & Downtown)
- Include identified combination of group participants and possibly request others to participate and/or review specific items/issues as needed
- Possibly meet quarterly

Questions/Thoughts/Concerns/Comments/Compliments?????