

***FINAL* Region IV
Regional Planning Affiliation
Long Range Transportation Plan**



Approved November 21, 2019 by the Siouxland Regional Transportation Planning Association (SRTPA)
Policy Board
Completed by the Siouxland Interstate Metropolitan Planning Council (SIMPCO)

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INTRODUCTION

I. Overview

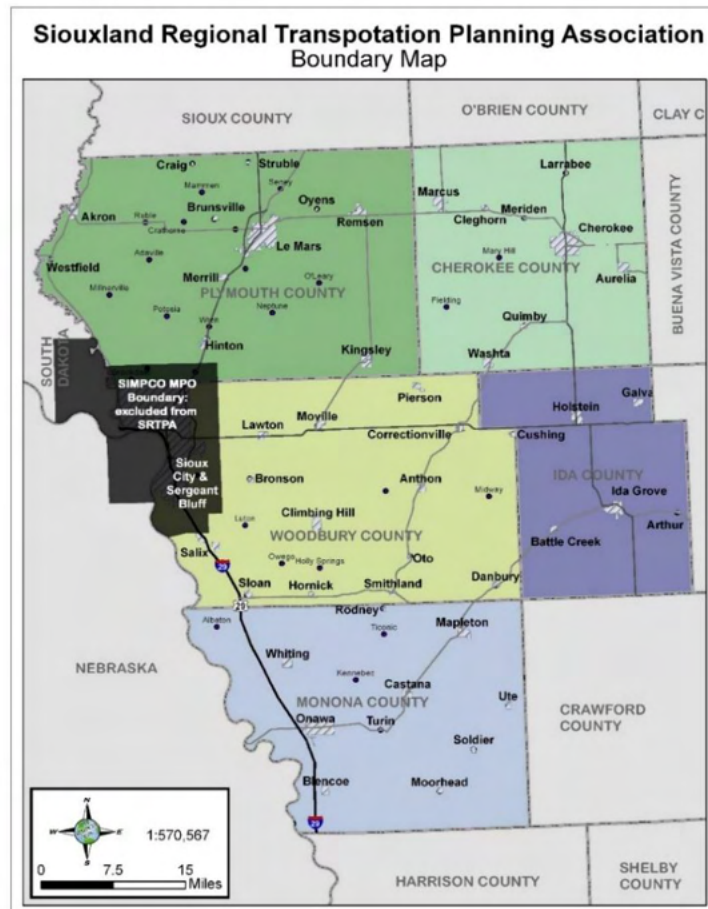
The 2045 Siouxland Regional Transportation Planning Association (SRTPA) Long Range Transportation Plan (LRTP) is an update to the 2040 LRTP. This plan continues the 3C process (Cooperative, Continuing and Comprehensive) that has been the hallmark of transportation planning for 50 years. The LRTP is a tool for developing safe and efficient transportation improvements for the SRTPA through the year 2045. These improvements encompass all modes of transportation including transit, bicycle and pedestrian travel in addition to street and highway. In accordance with the Fixing America's Surface Transportation (FAST) Act, this plan addresses the deficiencies of SRTPA's transportation system, analyzes the system's projected demand, and identifies projects and policies to both preserve and enhance mobility.

The 2045 SRTPA LRTP is organized into the following sections:

- ***Introduction*** – outlines the planning area, SRTPA, purpose of the plan, and the process used for developing the plan.
- ***Plan Goals and Objectives*** – identifies the long range transportation goals and objectives which have been agreed upon by the local stakeholders.
- ***Regional Background and Trends*** – gives a brief description of the socio-economic characteristics within the region.
- ***Existing Regional Transportation System*** – describes the multimodal transportation system within the region. In addition, this section identifies levels of usage, condition, safety, and mobility.
- ***Planning and the Environment*** – describes the environmental issues that SRTPA faces and gives a synopsis of environmental mitigation activities that SRTPA can become involved in not relating to any specific project.

- Future Regional Transportation Opportunities, Threats, Solutions, & Alternatives** – considers how the transportation system will serve the region in the next twenty – five years given key trends in population, the economy, traffic and the condition of the system. This section also outlines the transportation opportunities in the future, identifies the negative possibilities in the future, identifies possible solutions to mitigate these issues, and discusses the alternatives identified by stakeholders.
- Financial Summary and Conclusion** – gives a detailed listing of projects by transportation mode for years 1-5, which are being proposed for SRTPA in the near future and identifies the funding sources needed to support the first five years of the plan. Years 6-25 outlines a sketch plan for SRTPA’s long-range transportation system. Major needs for new facilities, capacity, rehabilitation, replacement, and preservation will be included.

Map I.1: SRTPA Boundary



A. *The Siouxland Regional Transportation Planning Association*

S RTPA is responsible for developing transportation plans programming projects for the region. Displayed on Map I.1 on page I-2, S RTPA includes Cherokee, Ida, Monona, and portions of Plymouth and Woodbury County (portions of Plymouth and Woodbury County that are within the SIMPCO Metropolitan Planning Organization (MPO) planning area are not included in S RTPA). S RTPA is represented by the following units of government:

- Cherokee County
- City of Cherokee
- City of Le Mars
- Ida County
- Monona County
- Plymouth County
- Woodbury County

SIMPCO functions as S RTPA, responsible for the submission of transportation planning documents to the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Iowa Department of Transportation (IDOT), and public distribution.

S RTPA's functions are directed by a ten member Policy Board consisting of seven voting members. The seven voting members features one member from each of the following County Board of Supervisors: Cherokee County, Plymouth County, Ida County, Monona County and Woodbury County; one member from the City Council of the City of Le Mars and the City of Cherokee. Non-voting members include a representative from the IDOT, FHWA Iowa Division, and FTA.

The S RTPA Policy Board is advised by an eleven member Technical Advisory Committee that consists of eight voting members. The eight voting members is made up of one staff member from the counties of Cherokee, Plymouth, Ida, Woodbury, and Monona; one staff member from the following cities; City of Le Mars and Cherokee; one staff member from the Siouxland Regional Transit System (SRTS). Non-voting members include a representative from the IDOT, FHWA Iowa Division, and FTA.

The SIMPCO professional staff is available to aid local officials and concerned citizens in implementing various community improvement programs in an overall effort to enhance the region. Staff members encourage and assist local leaders in several programs, with strong emphasis on the benefits of regional cooperation and coordination.

B. Long Range Transportation Plan

S RTPA 2045 LRTP updates the 2040 LRTP adopted by the Policy Board in 2014. The 2045 plan serves as a revision of the issues covered in the previous plan by encompassing all modes of transportation. This plan is intended to identify the key projects from each of these modes, which, when combined and implemented as a multi-modal system, will develop the safest and most efficient transportation system for S RTPA. Plan updates will occur every five years as recommended by the IDOT, maintaining consistency with forecasted transportation and land use conditions.

There are ten factors the LRTP considers as outlined in the FAST Act:

1. Support the economic vitality of the United States, the states, nonmetropolitan areas, and metropolitan areas, especially by enabling global competitiveness, productivity, and efficiency;
2. Increase the safety of the transportation system for motorized and non-motorized users;
3. Increase the security of the transportation system for motorized and non-motorized users;
4. Increase the accessibility and mobility of people and freight;
5. Protect and enhance the environment, promote energy conservation, and improve quality of life and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
6. Enhance the integration and connectivity of the transportation system, across and between modes throughout the State, for people and freight;
7. Promote efficient system management and operation;
8. Emphasize the preservation of the existing transportation system;
9. Improve the resiliency and reliability of the transportation system and reduce or mitigate storm water impacts of surface transportation, and;
10. Enhance travel and tourism.

C. Long Range Planning Process

S RTPA will develop and review this plan chapter by chapter. A time schedule (see Table I.1) has been developed and approved by the Policy Board to ensure that the S RTPA LRTP is approved by the IDOT deadline of November 2019. After completion of the draft plan, there will be a 30 – day public comment period and a public open house held by SIMPCO within the same timeframe.

Table I.1 Long Range Transportation Plan Meeting and Review Schedule

TASK	MEETING DATES
Review Schedule & Plan Outline	November 2018
Chapter 1: Introduction Chapter 2: Plan Goals & Objectives Chapter 3: Regional Background & Trends	January 2019
Chapter 4: Existing Regional Transportation System	March 2019
Chapter 5: Planning & the Environment	May 2019
Chapter 6: Future Regional Transportation Threats, Solutions, & Alternatives Chapter 7: Financial Summary & Conclusion	June 2019
Review Draft Plan	September 2019
Public Comment Period / Public Open House	September - October 2019
Final Approval	November 2019

D. Stakeholders

The primary stakeholders involved with the development of the LRTP include the county engineers and city staff on the Technical Advisory Committee, the county supervisors and councilpersons on the Policy Board, the public, freight shippers and providers of freight transportation, transit services, human service agencies, environmental and cultural organizations, Indian Tribal governments, and other interested parties. Other stakeholders were identified by contacting the different cities and towns within the region. Stakeholders were also identified by using an established S RTPA public participation mailing list which not only includes local jurisdictions but also agencies and organizations with a vested interest in transportation issues within the region.

Stakeholders may also be identified through public outreach. The draft LRTP can be found in its entirety on the SIMPCO web page (www.simpco.org) where the public can view and send comments directly to SIMPCO staff.

E. Amendments and Revisions

S RTPA 2045 LRTP is a working document and will be updated and revised as various local, regional, state, and national characteristics, factors, and requirements change, which ultimately affect the transportation network in and around the region. The LRTP will be updated at least once every five years. The review and updating will insure continual citizen involvement and the LRTP's overall viability as the S RTPA's long-range transportation planning document.

The plan shall be subject to public review for no less than 30 days, announced in the regional newspapers via public notice, and available in every courthouse and city hall within the region. This process shall be approved by both the S RTPA Technical Advisory Committee and the Policy Board. Amendments to this process shall be made in similar fashion.

PLAN GOALS & OBJECTIVES

I. Overview

Five years since the completion and adoption of the SRTPA 2040 LRTP, a few things have changed including a new transportation bill. Even with these changes, several of the concerns mentioned in the 2040 LRTP are still applicable and relevant today. This chapter will outline the major goals agreed on for transportation in the SRTPA and the specific objectives by which those goals will be achieved.

In January 2016, the SIMPCO MPO completed and adopted the SIMPCO MPO 2040 LRTP which laid out several desired goals to be achieved in the SRTPA. Several of these goals are directly transferable from the Urban to the Regional Planning Process and were subsequently borrowed from that planning process. These goals, in addition to goals specific to the regional planning process include the following:

A. Goal: Mobility

Develop, maintain and enhance the most effective and efficient transportation system for the movement of people and freight in the region.

1. Objectives

- Maximize the useful life of existing elements of the transportation system by constant and prompt condition surveillance and maintenance.
- Undertake and utilize the results of continuing applied research into pavement behavior, performance and cost effectiveness particularly as it relates to the impact of weather, very heavy loadings from specialized farm machinery, and developing wind energy. Research results can be procured via state and national research entities specializing in rural pavement issues. Iowa State University is a prime example.
- Minimize and/or eliminate localized congestion wherever it exists.
- Develop transportation investment decisions, which maximize the full benefits of the system while considering the full costs, such as life cycle.

- Plan for the use and preservation of alternative modes like rail, barge, pedestrian, and bicycle where applicable.

2. Implementation

- Use advanced pavement monitoring equipment to assess roadway pavement conditions on a regular basis.
- Do cost/benefit analysis of investment alternatives to determine the most useful and efficient options.
- Encourage the creation of bicycle facilities, sidewalks, trails, greenways and other non-motorized facilities in areas where appropriate.
- Develop a transportation plan giving priority consideration to transportation system improvements preventing crashes, injuries, and minimizing losses.
- Ensure that problem intersections with congestion are adequately engineered to minimize delay. Signal timing, intersection geometry and lane storage are key issues to be evaluated.
- Increase information available to the public on transportation choices and issues regarding maintenance.

B. Goal: Safety

Promote and implement transportation system improvements for all modes that minimize the occurrence of and potential crashes that might result in the loss of health, life, and property.

1. Objectives

- Develop a transportation plan giving priority consideration to transportation system improvements preventing crashes, injuries, and minimize losses.
- Promote the standardization of geometric design criteria across transportation agencies paying particular attention to known hazardous locations, particularly curves and intersections.

2. Implementation

- Keep transportation facilities in a state of good repair, including streets, buses, sidewalks, trails, and other modes, particularly where modes intersect such as highway-rail grade crossings.
- Focus on high crash areas for transportation improvements. Utilize advanced tools such as the Iowa Crash mapping software to locate and prioritize high crash areas.
- Minimize motor vehicle, truck, bus, train, bicycle, and pedestrian conflicts.
- Create a centralized safe driver campaign and educational program.
- Do not violate driver expectancy when planning projects, be consistent in approach.

C. Goal: Security

Promote and implement transportation system improvements for all modes maximizing security of the transportation system.

1. Objectives

- Develop a transportation plan giving priority consideration to security improvements particularly concerning vulnerable areas or modes.
- Support programs which ensure safe, secure operation of the transportation system for motorized and non-motorized users.
- Improve disaster, emergency and incident response preparedness and recovery.

2. Implementation

- Utilize Intelligent Transportation Systems (ITS) technology for surveillance of the transportation network and facilities wherever practical.
- Install optimal lighting, fencing, surveillance and other security measures on transportation facilities.
- Support activities that enhance the communication of emergency personnel within the region.
- Participate in public outreach programs that inform the public of security issues in the SRTPA. Encourage the public to take a proactive role in aiding with security such as reporting suspicious behavior etc.

D. Goal: Environment

Preserve and enhance SRTPA's unique and natural environmental features by protecting the integrity of air, land, water, energy, cultural, and aesthetic resources.

1. Objectives

- Minimize adverse impacts of the regional transportation system on the environment, such as noise and water runoff.
- Undertake and promote energy conservation programs in transportation.

2. Implementation

- Plan and develop a transportation system that preserves environmentally sensitive areas, conserves energy and natural resources, and minimizes adverse environmental impacts.
- Ensure that all environmental regulations pertaining to transportation system development are followed.
- New or reconstructed transportation facilities shall be designed to prevent and control soil erosion, minimize clearing and grubbing operations, minimize storm runoff, and avoid unnecessary changes in drainage patterns.
- Pursue and support transportation programs and modes (e.g. freight and passenger rail, bikeways etc.) that have lower environmental footprints, help conserve energy in a period of increasing energy prices and provide the community with travel alternatives. Work with other regional, state and national agencies to promote these alternatives.

E. Goal: Economic Development

Promote the balanced and sustained economic growth of the region through the fast and efficient movement of goods and people in a safe, energy efficient, and environmentally sound manner.

1. Objectives

- Give priority consideration to transportation projects and system improvements that facilitate local job creation and retention.

- Promote efficient land-use patterns along with appropriate commercial and industrial development and redevelopment locations in the rural towns.
- Prioritize transportation projects that to the maximum extent possible preserve existing agricultural land uses.
- Give consideration of the true cost and benefits of providing the transportation facilities necessary to move goods in the metropolitan area.

2. Implementation

- Continually inform elected officials of the need to keep funds flowing to SRTPA for economic development.
- Ensure that specific requests of the transportation system such as the need to transport large machinery like wind turbine blades and towers that support rural economic development are efficiently and competently handled.
- Assist prospective businesses with information on specific transportation services available in an area and render any local help possible with establishment of necessary new infrastructure to support such businesses.

F. Goal: Fiscal Responsibility

Utilize available personnel and financial resources efficiently, ensuring that the transportation system meets the users' needs in a timely fashion and remains financially stable.

1. Objectives

- Provide a balanced and viable funding mechanism for transportation systems and services within the region.
- Develop a positive working relationship with the system users, the public and political officials.
- Develop transportation investment decisions that consider the full costs and benefits.
- Give priority to funding those transportation needs identified in state, regional, and local transportation system plans.
- Consider the funding implications of federal and state actions on the regional transportation system and services.

2. Implementation

- Identify stable, long term sources of local, state, and federal funding for construction and maintenance of a multimodal transportation system to address the maintenance deficit for roads, bridges and other infrastructure faced by the rural towns/cities and counties, preventing further deterioration of the existing transportation system.
- Obtain funding to expand non-motorized transportation opportunities.
- Refine a system to prioritize projects for the allocation of Surface Transportation Block Grant Program (STBG) funds through a collaborative process that involves the major stakeholders and the general public. Utilization should be made of all decision making tools available like GIS Safety software, cost-benefit tools, pavement condition system etc.
- Identify and seek funding sources for bicycle-related road improvements and maintenance programs.
- Continue to support the optional management systems originally established under the no longer existing MAP – 21, which was replaced by the FAST Act, to generate information to establish priorities for allocation of transportation funds.

G. Goal: Accessibility

Develop a transportation system that is reliable and accessible to all potential users

1. Objectives

- Encourage multimodal accessibility to employment, shopping and other commerce, medical care, housing and leisure, particularly in the rural towns.
- Give appropriate consideration to the needs and requirements of disabled persons who are system users.
- Seek out and consider the needs of those who are underserved by the existing transportation system.
- Facilitate increased communication between government agencies and officials, the system users, the public, and other interested parties.

2. Implementation

- Use reliable public transit vehicles that accommodate all patrons.
- Design driveways and medians to meet appropriate access management standards.
- Review proposed projects regarding their impacts/benefits to specific populations and groups. Ensuring that no segment of the population is disproportionately affected in terms of access to the transportation system.

H. Goal: Connectivity / Compatibility

Encourage and implement system improvements which promote the efficient and effective movement of people and goods by integrating and linking various modes of transportation and plans, enabling users' access to the entire region.

1. Objectives:

- Identify a multimodal network of facilities to meet the requirements for moving people, goods, and service throughout the region.
- Encourage the development of efficient intermodal freight facilities, with access to all, to encourage effective shifts among modes.
- Identify future right-of-way needs and establish a program for protection and advanced acquisition prior to development occurring.

2. Implementation:

- Address truck accessibility and maneuverability to and within commercial and industrial areas.
- Encourage the establishment of a rail-to-truck intermodal freight container facility.
- Consider off-roadway travel corridors, such as drainage canal, railroad, and utility right-of-way property, as potential corridors.
- Develop a safe, usable pedestrian circulation system by providing sidewalks along all major streets adjacent to schools, between school sites and selected major streets, between school sites and parks or recreational areas, and add sidewalks, where necessary, to connect or complete either existing or proposed sidewalks in a manner that provides a complete pedestrian circulation system.

REGIONAL BACKGROUND & TRENDS

I. Overview

S RTPA serves as one of the Regional Planning Affiliations (RPA) for the northwestern Iowa region. S RTPA is located in an area of highly productive soils and generally adequate rainfall thus spawning a vibrant agricultural industry that is the backbone of the economy. The chapter explores various demographic and economic trends¹ and issues in the region that is anticipated to have a noticeable effect on S RTPA's transportation system.

A. Population

The population of the region has been gradually decreasing over the decades with the declines being more concentrated in the rural counties of Cherokee, Ida, and Monona. Sorting the population of the region as either urban² or rural, the distribution greatly favors urban. The population of the region being primarily urban is attributed to the population of Woodbury County overwhelmingly being urban and more populated than S RTPA's four other counties combined. It must be noted that a significant proportion of

Woodbury County's urban population is not within S RTPA; Woodbury County's population located within the region is more rural, similar in nature to the other four counties. Due to the nature of Woodbury County, it would be uncharacteristic to classify it as rural and discard the fact that it contains a major metropolitan area. The region's population is not anticipated to grow over the duration of this plan keeping in line with past trends. An extrapolation equation³ was used to forecast the 2020 to 2045 population based on decennial population figures dating back to 1940. According to the equation's MEAN/AVERAGE



S RTPA's Avg. Growth per Decade since 1940

-0.8%

S RTPA's % Change 2000 - 2010

-2.3%

S RTPA's Urban Population (2010)

64.9%

S RTPA's Rural Population (2010)

35.1%

Source: U.S. Census Bureau

¹ Demographic & Economic Trends – More in-depth data on this chapter's data can be viewed in Appendix A.

² U.S. Census Bureau defines an Urbanized Area as a population of 50,000 or more. Outside of an Urbanized Area, a population greater than 2,500 is defined as an Urban Cluster. The Urbanized Area and Urban Cluster population figures in Region IV was used to illustrate the urban and rural population distribution.

³ Extrapolation Equation is a method that takes aggregated data from the past to project into the future. The equation uses multiple projections which include the MINIMUM Projection, MEAN/AVERAGE Projection, and MAXIMUM Projection.

projection, the population of the region is forecasted to be 144,314 in 2020 and decline to 119,258 in 2045. An additional population trend in the region is the gradual aging. From 2000 to 2010, the median age of each of the five counties increased. Overall the median age of the region increased from 39.64 to 43.15 during the timespan and has since stabilized. Furthermore, the median age of the region is higher than both the state and the nation. Given the aging of the “baby-boom” generation, it can be forecasted that the median age will continue to increase due to the sheer size and dominating influence of this cohort in the population.

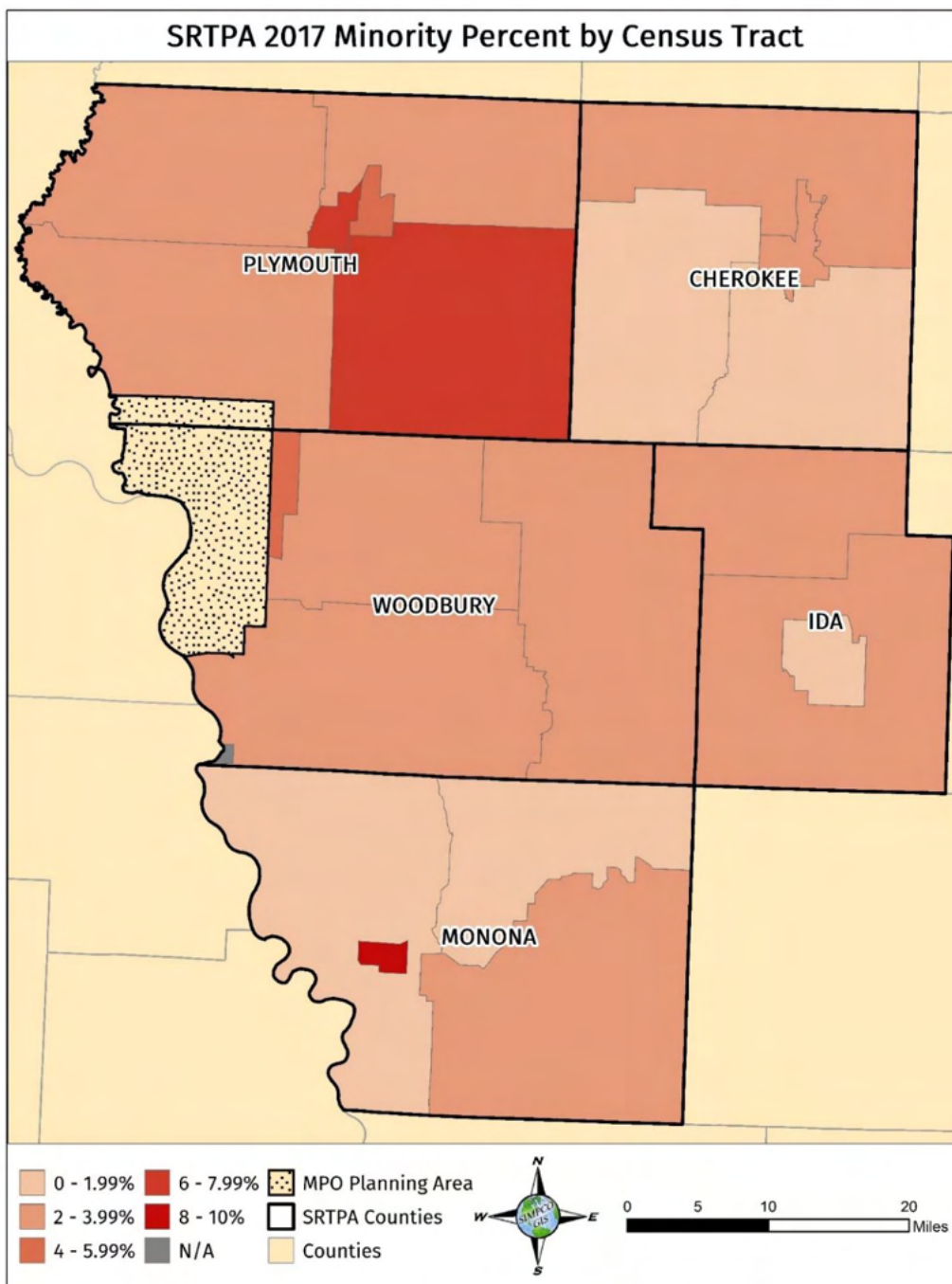


This scenario of an increasingly aging population will pose difficulties for SRTPA’s transportation system going forward. As the population ages, mobility decreases and this will be especially acute in rural areas where mobility is principally provided by personal automobiles. Isolation of persons who are no longer able to drive will become more common and will be a central theme to be focused on. The challenge for long term planning in this area will be, in addition to maintaining and improving the existing transportation system, the provision of alternative transportation modes for this older population. Maximum creativity will be


demanding in planning in such an environment given the well-known limitations of traditional transit in very low population density (rural) areas. Ideas like carpooling (using electronic technology to assemble rides) or simple neighborliness and SRTS on demand access can help in this regard.

As the importance of the agricultural processing industry has become more prevalent, SRTPA has gradually steered away from traditionally consisting of areas with low minority concentrations. A recent increase amongst the foreign-born population has become more evident as a larger proportion of the non-white population has begun to emerge throughout many of the towns within the region. The minority population accounts for roughly 10% of the region’s population. The minority population is well-diverse as the Black or African American, Asian, Some other Race, and Two or More Races population each account for roughly a fifth of the total minority population. On the following map, concentrations of the minority population amongst the region is displayed by Census Tracts. The highest

concentrations of the minority population reside in one census tract located in Monona County, and two census tracts located in Plymouth County ranging between six and ten percent. Among the three most diverse census tracts, the American Indian or Alaska Native population accounted for 81.8% of the minority population in the census tract located in Monona County and the Some Other Race population accounted for 65.4% and 46.3% in the census tracts located in Plymouth County.




B. Income



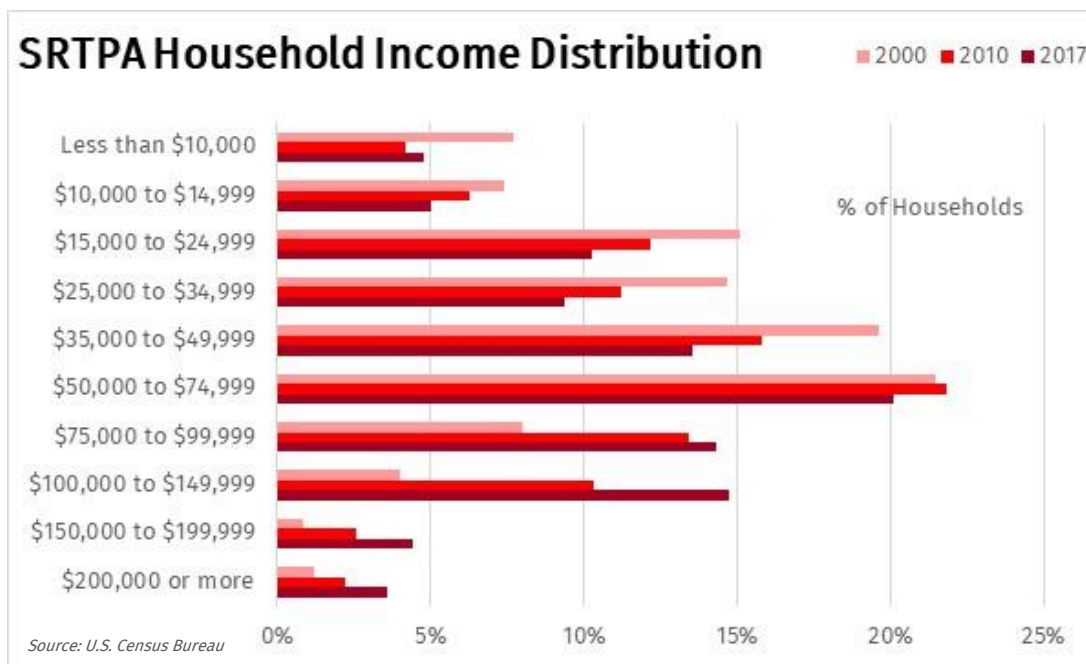
SRTPA's Median Household Income (2017)
\$54,894

SRTPA's Per Capita Income (2017)
\$29,862

Source: U.S. Census Bureau

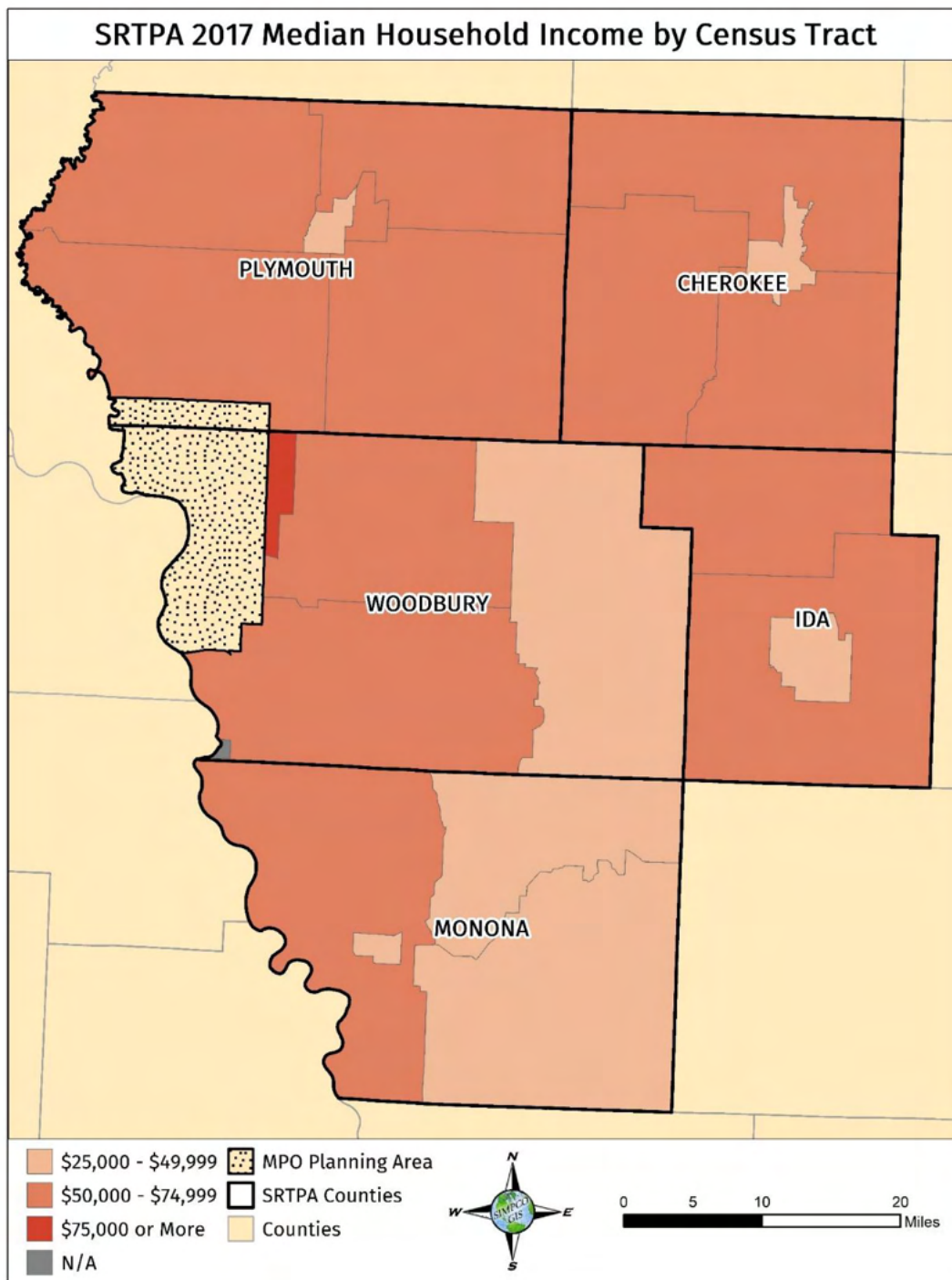


SRTPA has continued its trend of averaging a lower median household and per capita income than both the state and the nation, which stretches across multiple decades. At the county level, Plymouth County has been the rare exception, averaging a higher median household income than the state since 1990 and has recorded a higher average than the nation since 2000. Regarding per capita income, Plymouth County has recorded a higher average than the state since 2010 and Ida County's 2015 figures were higher as well. Despite averaging lower figures than the state and nation, the median household and per capita income of the region has continued to gradually increase in similar nature as the state and nation has over the past several decades.



The degree of income amongst the region has been trending upward since 2000. The U.S. Census sorts the degree of income into ten groups. Since 2000, households earning \$50,000 to \$74,999 has accounted for the largest proportion of the region's population. The proportion of households within this range has remained stable, accounting for on average 20% of the population. Although households earning \$50,000 to \$74,999 has consistently

accounted for the largest proportion of the population, the region overall on average has been earning more. Since 2000, the proportion of the population in each income range higher than households earning \$50,000 to \$74,999 has increased and the proportion of the population in each income range lower has decreased. On the following page, a map breaks down SRTPA's range of median household incomes by Census Tracts.




C. Employment

As mentioned previously, SRTPA has very rich soils (several inches to a few feet deep in many locations) created by the erosive effect of receding glaciation thousands of years ago. Additionally, the receding glaciation also affected the drainage patterns of rivers and led to regular alluvial flooding before the large upstream dams for flood control and hydroelectric power put an end to such occurrences. These flood events added many critical soil forming minerals further enhancing the soil. Thanks to this and regular, reliable rainfall, the principal economic activity in the region is agriculture and its related services and industries. In the following table, a comparison of the counties, region, and state agricultural data is displayed.

	Ag. Related Jobs	Number of Farms	Average Farm Size (acres)	Acres in Farmland	Total Land Area (acres)	Percent of Land in Farms
Cherokee	42.0%	805	419	337,334	369,220	91.4%
Ida	31.2%	547	477	260,962	276,165	94.5%
Monona	32.0%	538	629	338,164	444,206	76.1%
Plymouth	39.3%	1,331	407	541,817	552,250	98.1%
Woodbury	15.7%	973	458	445,641	558,614	79.8%
SRTPA	32.0%	4,194	478	1,923,918	2,200,455	87.4%
Iowa	21%	88,637	345	30,622,731	35,748,540	85.7%

Source: USDA Census of Agriculture 2012; Coalition to Support Iowa's Farmers

As the table indicates, farming has an overwhelming presence amongst SRTPA's economy with nearly 90 percent of all land uses being agriculture related. The principal crop items in the region features crop for grain and soybeans for beans. Total employment figures for farming are very difficult to come by given the informal and seasonal nature of farm work but the agriculture related job figure in the table as well as the number and size of farms gives some indication on the level of farm related employment activity. Supporting the farm output is a large agriculture processing and service industry. This industry takes the corn, soybeans, hogs/pigs, cattle, dairy etc. as input and manufactures processed food items for consumption nationally and internationally. Several well-known names in the food processing industry have large operations in or near the region. Examples include Tyson Foods Inc., BPI, Well's Dairy, Con Agra, Cargill, Sioux Honey Association and American Popcorn. Their products range from cut and ground beef, processed pork/ham, popcorn, milk, ice cream and other dairy products, soy oil, and processed cereal.

<u>SRTPA's Largest Employment by Industry (2017)</u>	<u>SRTPA's Unemployment Rate (2017)</u>	
1. Educational Services, & Health Care & Social Assistance – 23.6%	Region IV – 3.1%	
2. Manufacturing – 15.5%	Iowa – 4.1%	
3. Retail Trade – 12.7%	U.S. – 6.6%	

Source: U.S. Census Bureau

The distribution of employment by industry in the region has remained fairly consistent since 2000. Specifically, the three largest industries by employment has not changed from 2000 to 2017. Furthermore, their share of total employment amongst the region has undergone minimal change. Outside of the three largest industries, industries that experienced the largest growth during the timespan featured Public Administration (20.3%) and Arts, Entertainment, Recreation, Accommodation, and Food Services (9.6%). Industries that underwent significant declines in employment included Information (-45.1%), Agriculture, Forestry, Fishing and Hunting, and Mining (-17.3%), and Wholesale Trade (-15.7%).

Regarding the unemployment rate, the region has fared well since 2010, recording lower rates than both the state and the nation. The unemployment rate has been trending down since then as well. Within the region, the unemployment rate for Cherokee, Ida, Plymouth, and the portion of Woodbury County outside the MPO boundary has remained lower than 5% since 2010. It is not anticipated that the unemployment figures will change significantly during the timeframe of this plan as economic change tends to occur slower in this region. Barring significant economic discontinuity, the unemployment rate is projected to remain between three and five percent.

II. Summary

In summary, it can be stated that SRTPA has an aging population with economic activity centered on agriculture, agricultural services and industry. The area is primarily rural in nature with income and wealth concentrated in the towns, and racial diversity gradually increasing. The socio-economic aspects discussed in this chapter should be kept in mind when discussion of the regional transportation infrastructure comes up in subsequent chapters.

EXISTING REGIONAL TRANSPORTATION SYSTEM

STRENGTHS AND WEAKNESSES

I. Overview

Similar to the rest of Iowa, SRTPA is well served by multiple transportation links. The region enjoys the luxury of having multiple major highways, several railroads whose services impact the entire country, and is accompanied with the potential for barge traffic through the Missouri river nestled along the region's southwestern border.

A. Highways

SRTPA's transportation network consists of approximately 6,300 miles of road. The FHWA has created a road identification system, where roads are assigned to one of seven different Federal Functional Classifications¹ (FFC). The mileage distribution of roads via FFC is listed in the following table and displayed in the following map.

SRTPA Federal Functional Classification (FFC)	
FFC	Miles
Interstate	35
Other Principal Arterial	162
Minor Arterial	278
Major Collector	793
Minor Collector	847
Local	4,185
Total	6,300

Source: IDOT Office of Systems Planning FFC Classification

The range in Annual Average Daily Traffic (AADT) amongst SRTPA's transportation network is similar to the FFC hierarchy. Interstate is the highest FFC classification and has the highest AADT within SRTPA. The AADT decreases with each FFC with Local roads recording the lowest AADT. The different levels of AADT amongst SRTPA is displayed on the following SRTPA AADT map, page three.

¹ Key Traits of each FFC in the SRTPA FFC table is listed in the following:

Interstate: Designed with mobility and long-distance travel in mind. Link major urban areas in the U.S.

OPA: Serve major centers of metropolitan areas, provide a high degree of mobility through urban and rural areas.

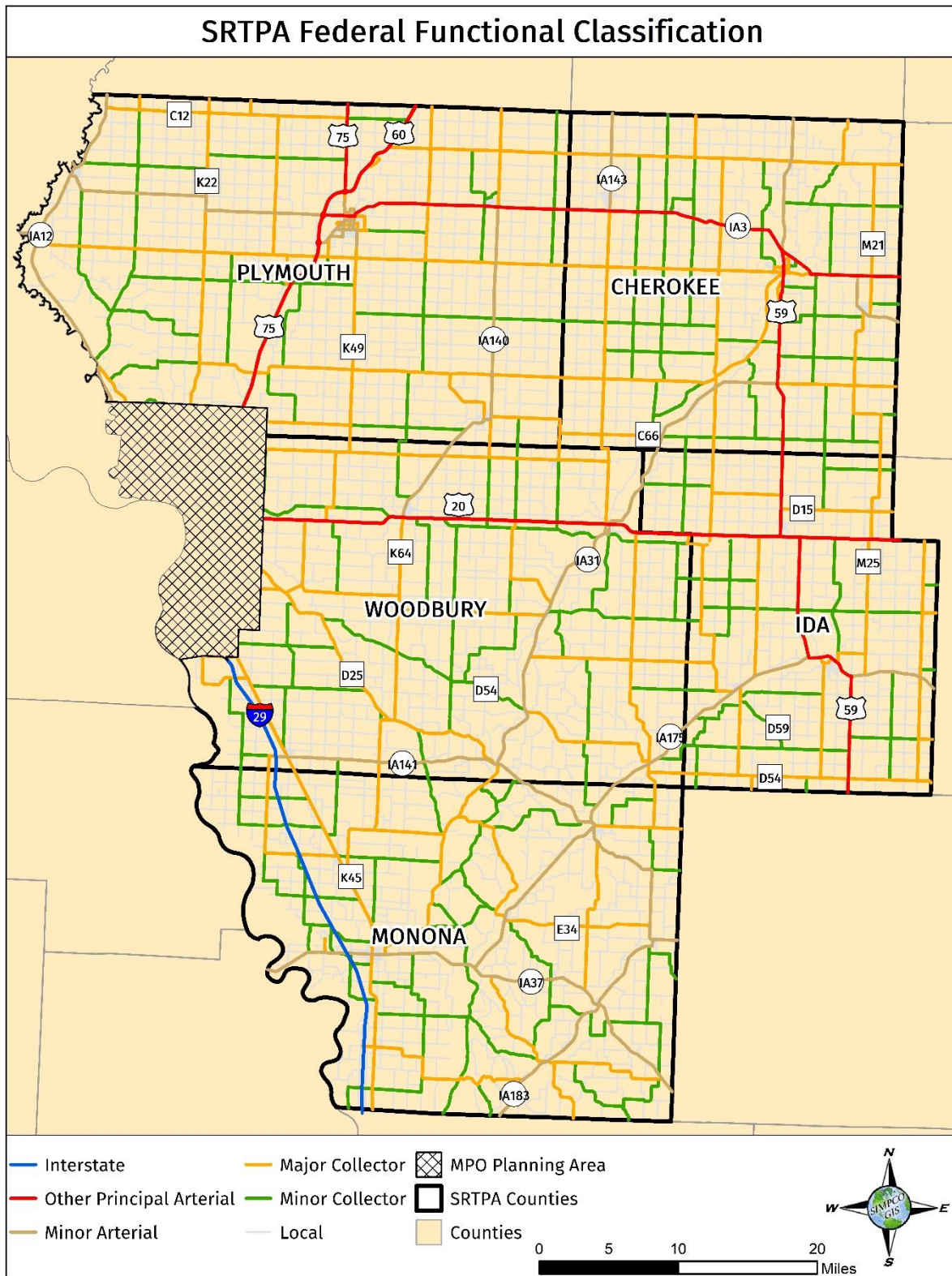
Minor Arterial: Provide service for trips of moderate length and offers connectivity to the higher Arterial system.

Collector: Gathers traffic from Local Roads and funnels them to the Arterial Network.

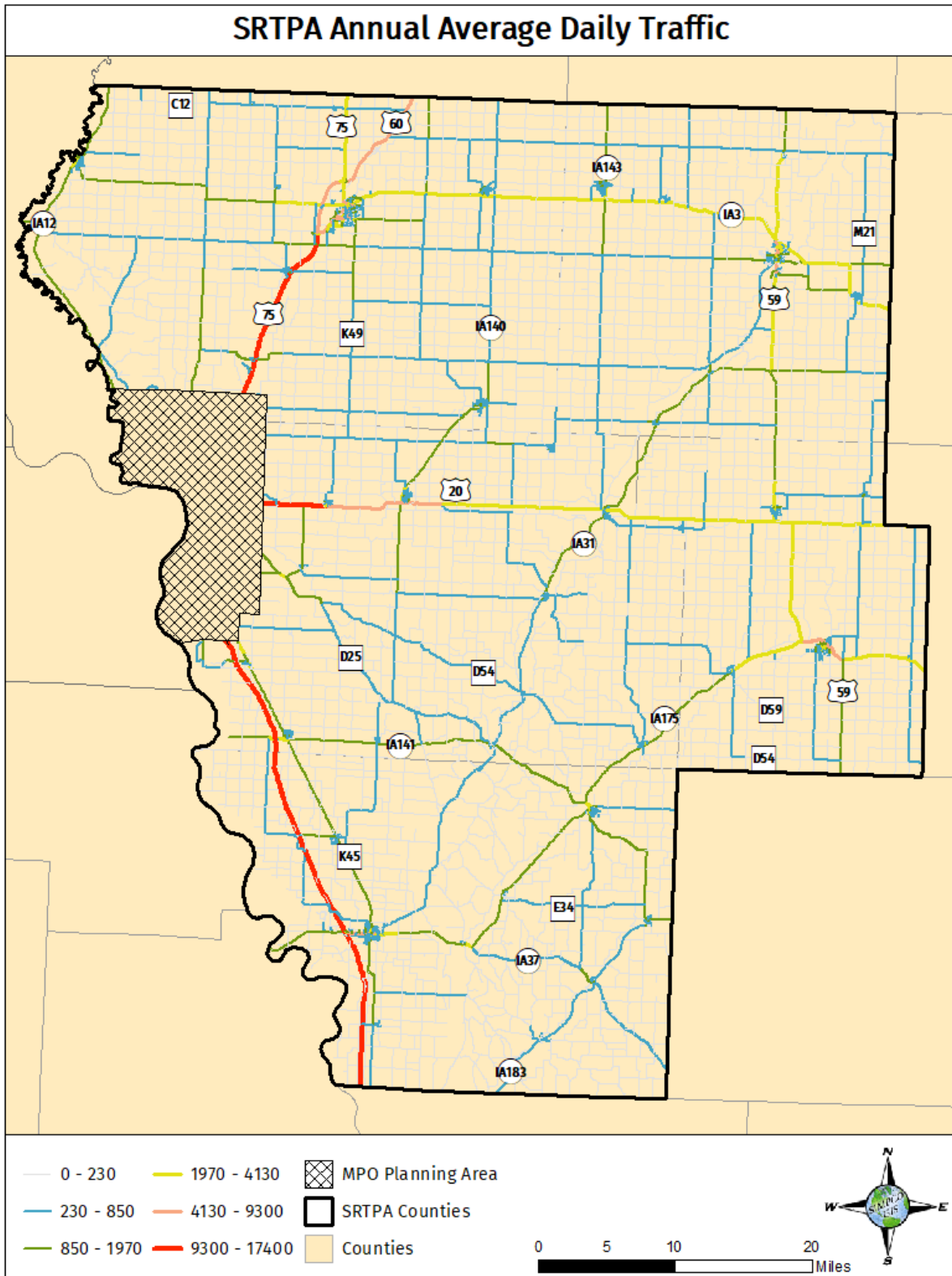
Major Collector: Longer routes, higher speed limits, higher traffic volumes, and more lanes than a Minor Collector.

Minor Collector: Offers more access than a Major Collector.

Map IV.1



Map IV.2



SRTPA has approximately 105 miles of four-lane freeway or expressway type roads with 39 of those miles being Interstate 29 in the southwest section of the region. Interstate 29 serves as principal north – south route through the area connecting Sioux City with Sioux Falls SD, Fargo ND and Winnipeg MB, CA to the north and Council Bluffs, IA, Omaha, NE, Kansas City, MO and points to the south. Four lane expressway sections run along US Highways 75 and 20 as well as Iowa Highway 60. Then there is a two lane, US highway 59, runs north – south from Laredo, Texas up to Landcaster, Minnesota.

US Highway 75 runs north – south through the area roughly paralleling I-29 but servicing the more populated Iowa towns such as Le Mars and Sioux Center versus Jefferson, Elk Point and Beresford, SD on its way north to Minnesota and Manitoba. Southwards, it passes through Sioux City towards Omaha and the South.

Iowa Highway 60 serves the very important role of connecting the recreational area around the Iowa Great Lakes region and southwestern Minnesota to the Sioux City area and points southwest. It runs from Le Mars northward to I-90 in Minnesota further continuing as Minnesota 60 towards the Twin Cities region.

US Highway 20, the longest road in the United States runs coast to coast from Boston, MA to Newport, OR. In the region it is a principal east – west arterial roadway linking the main communities and also serves as the principal thoroughfare to north central and eastern Iowa from the region.

US Highway 59 runs north – south through Cherokee and Ida Counties in the region. Before US Highway 59 held its current path from Laredo, Texas to Landcaster, Minnesota, it started in Port Arthur, Texas and used to end in Pembina, North Dakota.

Other state and US Highways like Iowa Highways 3, 12, 31, 37, 140, 141, 143, 175, and 183 primarily service the intra-regional traffic and as access to the inter regional facilities mentioned above. Traffic counts range from approximately 2,000 to 15,500 AADT on the main facilities. I-29, unsurprisingly has the highest volumes with rural sections of US 20 in eastern Ida County carrying some of the lower volumes. Some of the state highways have AADTs of less than 1,000. Starting with SAFETEA-LU and continuing through FAST Act, emphasis has

been placed on preservation of the existing system. This is a challenge with many of the regional roadways and bridges in need of maintenance work like overlays, reshouldering, construction, etc.

SRTPA is home to a significant amount of bridges due to the general Loess topography with numerous streams, creeks and rivers draining into the Missouri River. Plymouth and Woodbury County accounted for the most bridges amongst SRTPA counties. Furthermore, Plymouth County has the third most County bridges amongst all counties in the U.S. Table IV.2 indicates the number of bridges by owning jurisdiction.

Table IV.2

	Location of Bridges via Route Type					
	Interstate Highway	U.S. Highway	State Highway	County Highway	City Street	Other
Cherokee	0	13	12	207	13	1
Ida	0	11	14	152	6	0
Monona	6	0	36	123	4	0
Plymouth	0	35	38	378	5	0
Woodbury	28	36	37	296	61	0
SRTPA	34	95	137	1156	89	1

Not surprisingly, Woodbury County has the most Interstate Highway and City Street bridges due to the influence of the MPO including Sioux City and Sergeant Bluff in the total figures with their correspondingly greater number of roadways and interstate access points. Given the large number of bridges described and in many areas, relatively low volume traffic of less than 500 vehicles per day, timely maintenance of these bridges is proving to be a significant challenge.

Regarding the condition and functionality of SRTPA's bridges, nearly a quarter have been rated as poor and structurally deficient by the Federal Highway Administration. An additional indicator on the state of SRTPA's transportation network, specifically the interstate and primary road segments, is the Pavement Condition Index (PCI) rating. PCI indicates the condition of pavement and the index rating is expressed as a value between 0 and 100, with 100 representing excellent condition. When determining the PCI rating of a road segment the IDOT uses a series of variables including age, percent of life used, high/moderate/low

severity longitudinal cracking, IRI, aggregate class durability, pavement thickness, friction value, moderate severity patching, total asphalt depth, relative structural ratio, and base thickness. The most recent PCI rating given to SRTPA's interstate and primary roads was 72.8. Amongst the five counties in the region, Ida County had the highest rating at 81.2 whereas Monona County had the lowest rating at 65. There were several large segments of primary roads whose PCI ratings were below 50. Large segments of primary roads with a PCI rating less than 50 featured Highway 20 segment stretching east from Merville, IA 175 segment stretching from the Ida County border through Danbury to the Woodbury County border, IA 137 segment stretching from Turin to Solider, and Highway 183 segment stretching from Soldier to Ute. Small road segments stretching through several communities had a PCI rating less than 50 as well which included IA 3 in Le Mars and Remsen, IA 143 in Marcus, US 59 in Cherokee, IA 175 in Mapleton, and IA 137 in Onawa. The condition and functionality of bridges and the PCI rating amongst each county is broken-down in the following table.

	Condition			Functionality			PCI
	Good	Fair	Poor	Not Deficient	Structurally Deficient	Functionally Obsolete	
Cherokee County	36%	36%	28%	67%	28%	4%	73.3
Ida County	41%	44%	15%	85%	15%	0%	81.2
Monona County	32%	39%	30%	64%	30%	7%	65
Plymouth County	46%	30%	24%	74%	24%	1%	73.1
Woodbury County	42%	34%	24%	73%	24%	2%	73.8
SRTPA	41%	35%	24%	73%	24%	3%	72.8

B. Safety

Similar to the other RPAs in Iowa, SRTPA's safety concerns are primarily related to rural highway segments. Primary safety concerns include roadway profiles, roadway signage, especially at intersections and the increasing average age of motorists in the region. Generally, it is noted that the crashes on the rural high speed two-lane segments tend to be more serious than the more frequent but lower severity incidents in and around the towns. This is evident through the difference in the number of crashes within the SRTPA boundary versus the MPO area where the ratio between fatal/major injury crashes and Property Damage Only (PDO)/minor injury crashes is significantly larger for the region.

IDOT created a Highway Safety Improvement Program (HSIP), whose role is to reduce traffic fatalities and serious injuries on public roads. In 2010 HSIP released a 5% most severe safety needs report, which describes no less than 5% of the state's highway locations that are

exhibiting the most severe safety needs. The whole idea of this plan is to raise public awareness of highway safety needs and challenges. Iowa's safety needs fall into the categories of; single vehicles running off the road, vehicles crossing the centerline on two-lane highways, vehicles crossing the medians on freeways, horizontal curves, intersections, unbelted drivers and passengers, impaired drivers, and speeding. There were only seven instances where SRTPA was affected by the 5% safety needs, a link of this map can be found in appendix C.

SRTPA Crash Type (2013-2018)						
	<u>Total</u>	<u>Fatal</u>	<u>Major Injury</u>	<u>Minor Injury</u>	<u>Possible or Unkown Injury</u>	<u>Property Damage Only</u>
2018	1370	3	17	108	274	968
2017	3115	19	73	293	590	2140
2016	3247	19	68	308	680	2172
2015	3136	19	74	284	585	2174
2014	2899	14	81	244	508	2052
2013	2838	18	68	250	486	2016

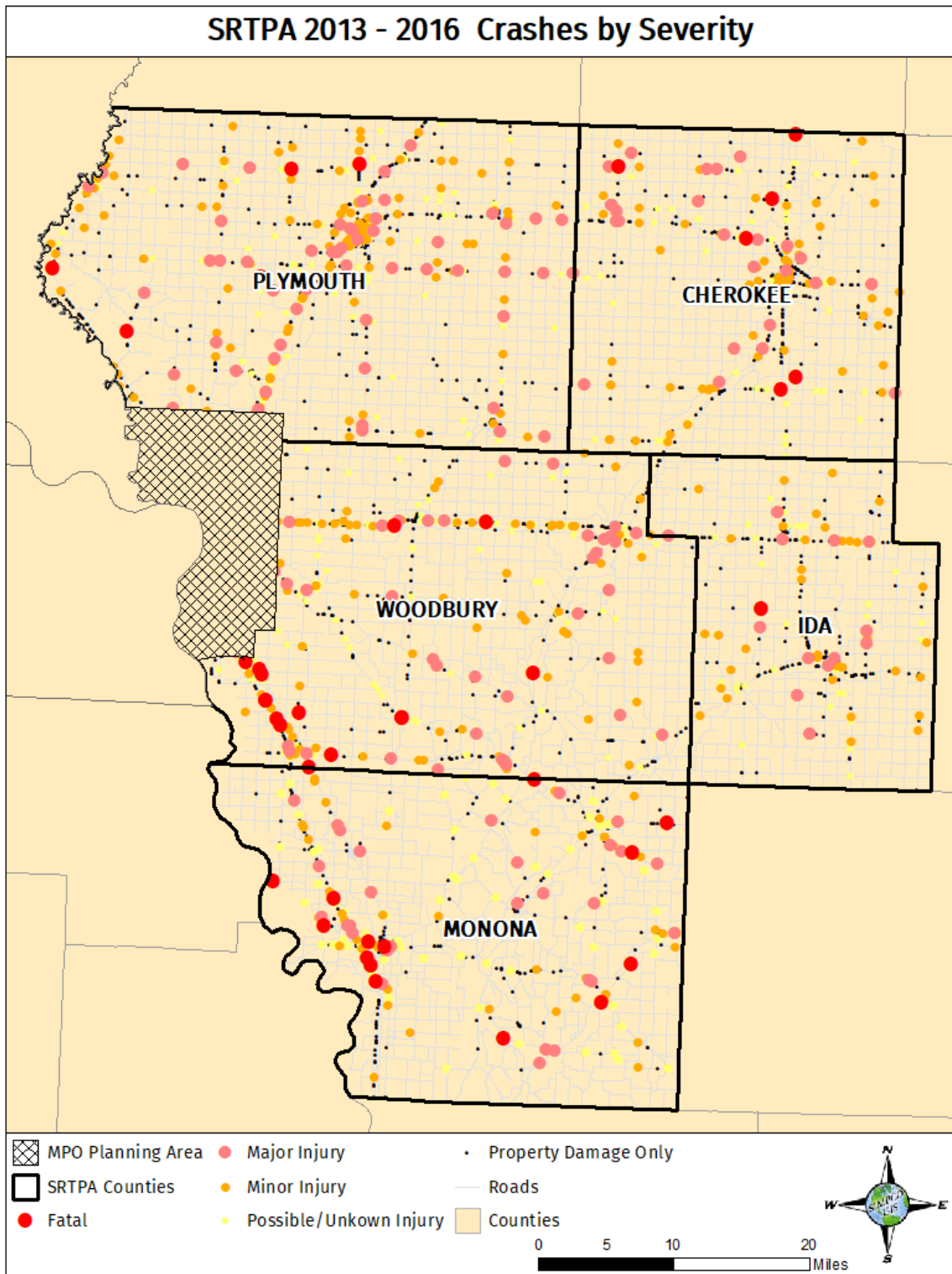
Source: Iowa Department of Transportation

Table IV.3 Crashes by County and Crash Type in SRTPA

Table IV.3 shows the total crashes by crash type throughout the region from the year 2013 to 2018. On the following page, the spatial distribution of crashes by

crash type is displayed in the SRTPA 2013-2016 Crashes by Severity map as well. The tendency to have more frequent but lower severity crash occurrences in areas with higher traffic volumes, slower speeds and more potential traffic conflicts is made evident in the map. The most severe crash type, Fatal, has a very-low frequency but occurs in areas and on roads with higher traffic volumes as well. Amongst the Fatal crashes (132) that occurred in 2018, more than half took place on SRTPA's interstate and primary roads. Interstate 29 had a significant amount of fatal crashes in comparison to the rest of SRTPA's primary roads, accounting for 16% of all fatal crashes. Interstate 29 recording the highest amount of fatal crashes contributed to Monona and Woodbury County recording the most as well at 27% and 26%. Plymouth County had a similar share of the total fatal crashes accounting for 21%. Plymouth County having a high share of fatal crashes is partially due to the amount of fatal crashes that occurred on US 75.

Map IV.3



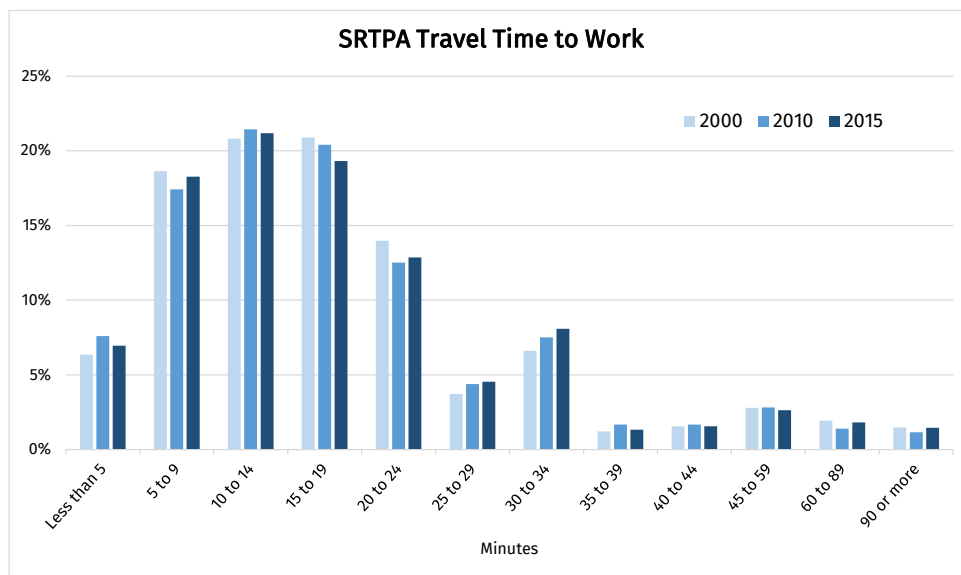
C. **Mobility**

No concerns regarding mobility exist amongst SRTPA. Excluding localized safety issues along highway alignments and intersections, no areas with low levels of service that would preclude mobility is present.

In general, the commute time for employees throughout the region is relatively short as approximately two-thirds of employees have a commute time of 19 minutes or less. The region’s average commute time in 2015 was 18.1 minutes. Monona County averaged the longest commute time. The following table shows the changes to the proportion of commuter’s average time to work using twelve time intervals between the year 2000 and 2015 in the SRTPA. It must be noted that these figures incorporate MPO travel times in Woodbury County as well.

The changes to the average commute time amongst SRTPA counties has generally remained the same, but is still less than the mean travel time of both the nation (25.9 minutes) and state (18.9 minutes) according to the 2015 U.S. Census Bureau/American Community Survey.

Figure IV.1



D. Freight

Trucking is not directly under the planning jurisdiction of SRTPA. Given the agricultural nature of the area, a significant percentage of the freight traffic on the roadways involves distribution of agricultural products. Examples include heavy farm trailers pulled by agricultural tractors delivering corn and soybeans harvested with combines to storage depots or grain elevators. Trucking accounts for approximately 22% of the AADT amongst SRTPA's interstate and primary roads. Nearly a quarter of SRTPA's road segments had trucking account for at least 31% of the AADT. Roads that had trucking account for the highest proportion of AADT featured all of Interstate 29, a large segment of Hwy 20 stretching east from Merville to the Ida County border, Highway 75 from the MPO border to the Le Mars, and Highway 60 stretching north from Le Mars to the Plymouth County border.

Regular road tractor trailer combinations are also heavily used to shuttle grain products and live animals such as cattle, hogs and poultry to processing centers in nearby towns and cities. The Well's Dairy processing plant is located in Le Mars and is a significant source of trucks utilizing the region's roadways. Generally, raw material like milk solids, milk etc. is brought in via train and truck and the output products are trucked out to destinations nationally and internationally. Heavy equipment manufacturers shipping their asphalt paving equipment, trailers, etc. are significant users of the road network as well. Warehousing and distribution activity is well represented in SRTPA with major companies such as Hy-Vee having a distribution center in Cherokee and shipping grocery products in and out over the regional road network as well.

Long distance truck transportation poses additional demands on the region's roadways. As mentioned above, I-29 serves the region and is a major corridor for NAFTA traffic from Mexico and the Southeast, to central and western Canada. This traffic is anticipated to grow, particularly with the rise of Alberta as a significant energy and manufacturing center. Truck traffic from Minnesota to the Southwest and Mexico also places heavy demands, particularly along the Iowa Highway 60 corridor. Freight facilities and warehouses within the region include Big Soo Terminal, Burlington Junction Railroad, Cloverleaf Cold Storage, L.G. Everist, Le Mars Public Storage Inc., Big Soo Warehouse, Heyl Truck Lines, Jacobson Companies, and Nor-Am Cold Storage.

E. Airports

Residing within the SIMPCO MPO, Sioux Gateway Commercial Service Airport is the lone Commercial² Service Airport located in the immediate vicinity of the SRTPA region. Additional Commercial Service Airports that are in close proximity to the SRTPA region include Eppley Airfield located in Omaha, Joe Foss Airfield located in Sioux Falls, and Fort Dodge Regional in Fort Dodge, Iowa. The highest classified airports within the SRTPA boundary include multiple General³ and Local⁴ Service Airports residing amongst the towns of Cherokee, Ida Grove, Le Mars, and Mapleton. Amongst these airports, the Le Mars Municipal Airport sees important business traffic and accommodates small business jets on a regular basis.

Sioux Gateway is recognized by the Federal Aviation Administration as a non-hub primary commercial service airport, which encompasses airports that enplanes more than 10,000, but less than 0.05 percent of the total U.S. passengers. The airport is in operation twenty-four hours a day for seven-days a week. Sioux Gateway currently has nonstop flights to Chicago, IL and Dallas, TX.

Table IV.4 General Characteristics of the five main airports in SRTPA.

SRTPA Airport Characteristics				
City	Airport	Type	Runway Length & Width	Fuel Type
Cherokee	Cherokee County Regional	General Service	4,000 ft. (L) 75 ft. (W)	Jet A & 100LL
		Local Service	3,172 ft. (L) 50 ft. (W)	
Ida Grove	Ida Grove Municipal	General Service	4,600 ft. (L) 75 ft. (W)	100LL
Le Mars	Le Mars Municipal	General Service	4,600 ft. (L) 75 ft. (W)	Jet A & 100LL
		Local Service	2,801 ft. (L) 60 ft. (W)	
Mapleton	Mapleton - James G. Whiting Memorial Field	Commercial Service	9,002 ft. (L) 150 ft. (W)	Jet A, 100LL, & automobile fuel
Sioux City	Sioux Gateway	Commercial Service	9,002 ft. (L) 150 ft. (W)	Jet A, 100LL, & automobile fuel

Source: Iowa Aviation System Plan 2010-2030; IDOT Office of Aviation

There is no cargo traffic of significance at any of the regional airports mentioned. Sioux Gateway Airport in Sioux City does have minimal air cargo service provided as part of the commercial airline service to Chicago.

In addition to the airport facilities, there are multiple Heliports located within the SRTPA boundary. The four existing Heliports within the SRTPA boundary reside in the towns of

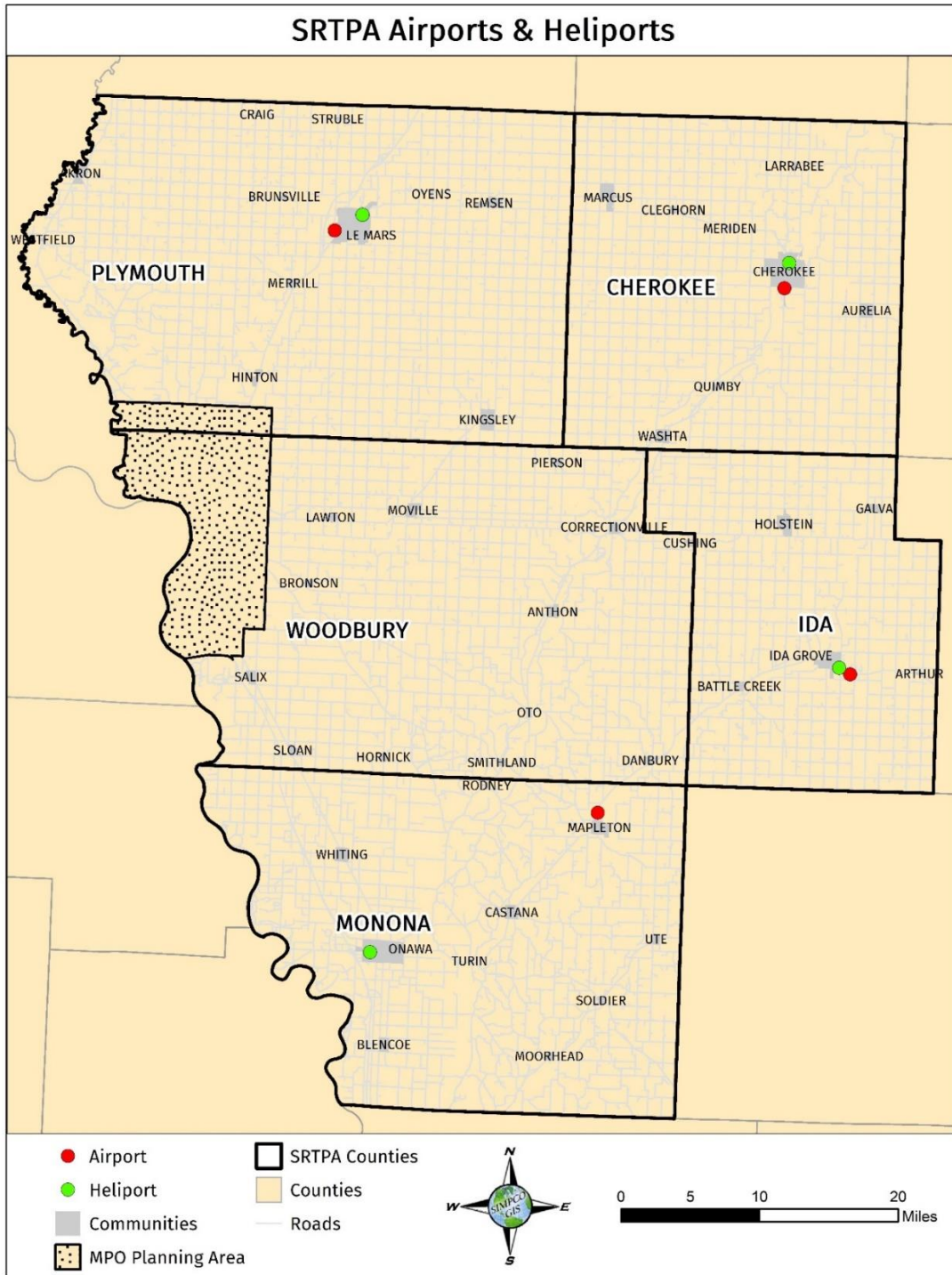
² Commercial Service Airport – Support some level of scheduled commercial airline service, support full range of aviation activity, meets most needs of the aviation system, and is an essential transportation/economic center of the state.

³ General Service Airport – Facilities/Services support most general aviation activity including small to mid-size business jets, and service as a community economic asset.

⁴ Local Service Airport – Support local aviation activity, offer few airport services, and have turf runways.

Cherokee, Ida Grove, Le Mars, and Onawa. There are two heliports located within the SIMPCO MPO boundary in Woodbury County as well. The geographic distribution of airports and heliports amongst SRTPA is displayed in Map IV.4.

Map IV.4 Airports

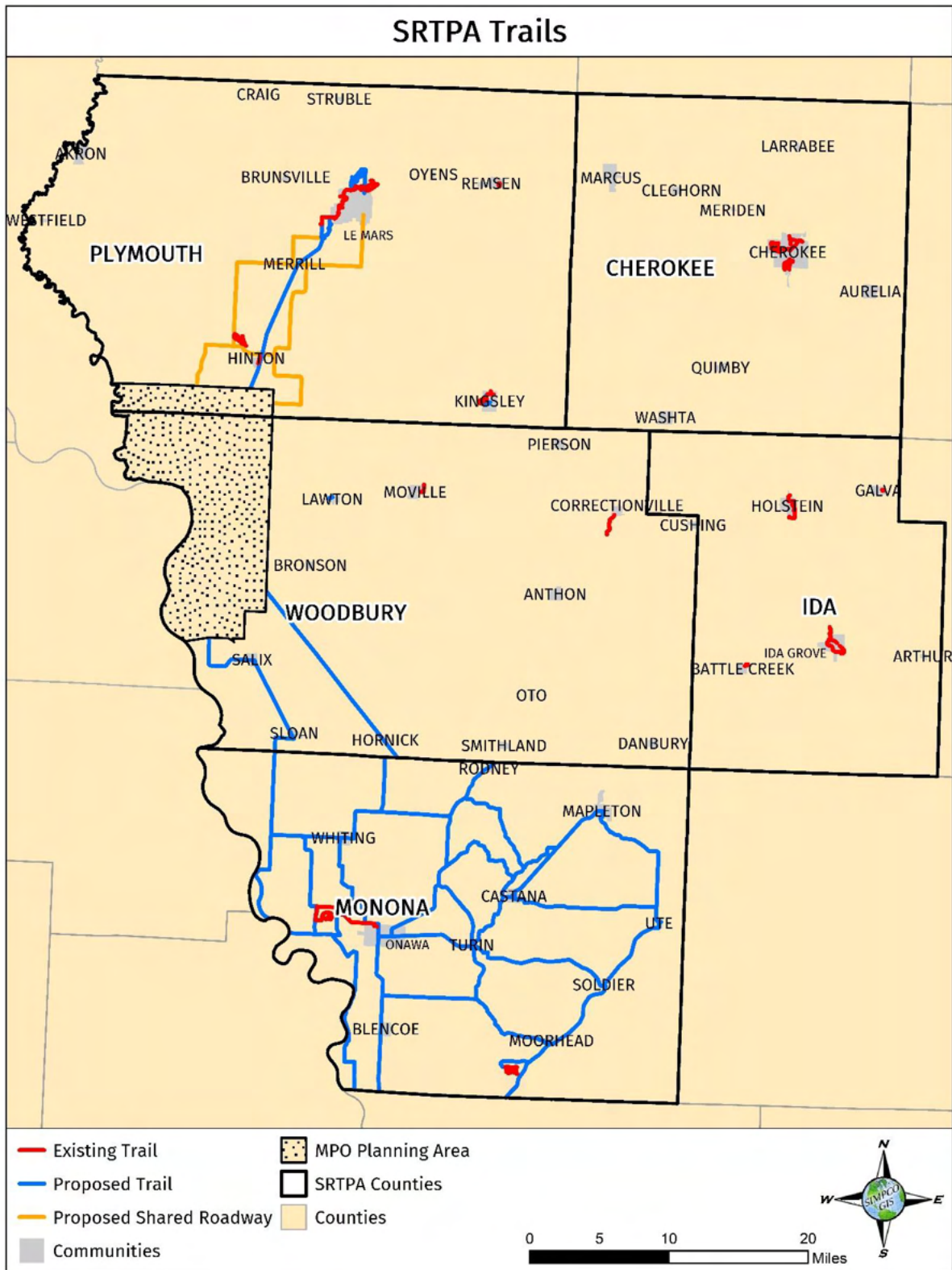


F. Trails

A variety of trails are distributed amongst communities within the SRTPA region. Communities and state parks are typically connected to aquatic centers, sporting facilities, and recreational uses by the existing trails. Exceptions to this general trend include the proposed Milwaukee Trail which would follow the right of way of the old Chicago, Milwaukee, St. Paul and Pacific Railroad which went defunct in the early eighties and the Lewis and Clark Multi-Use Trail along the Missouri River and the proposed PlyWood Trail that would follow a majority of US 75 right-of-way with the option of utilizing a section of old abandoned rail line in the area.

The Milwaukee Trail would run from the Sioux City environs southeast to the Woodbury County line. It may be possible for it to continue further south into Monona County where right of way is still available. The Lewis and Clark Multi-Use Trail is proposed to extend from its existing end location in south portion of the SIMPCO MPO and follow the Missouri River through Woodbury, Monona, Harrison, Pottawattamie, Mills and Fremont counties similar to the trail along the Mississippi in eastern Iowa. In 2013, landscape architecture students from Iowa State University developed a trails plan for Monona County. Students worked with the public and county officials in the development of the plan. The proposed trail plan for the county can be seen on Map IV.5.

Map IV.5 Trails



G. Barge – Waterborne Transport

No barge loading facilities of note exist within the SRTPA region. Located within the SIMPCO MPO boundary is CF Industries, a global leader in nitrogen fertilizer manufacturing, underwent an expansion in the Fall of 2013 was later completed in the Fall of 2016. The expansion featured the Missouri River as a means of transportation to ship super loads that weighed in at around 500 tons. Using the river virtually as a highway, CF Industries was able to ship materials in a timely and cost-effective manner. The river being a source of transit for the company was only temporary however. The key takeaway from CF Industries having the ability to use the Missouri River to transport products is that the potential of using barges to transport materials and supplies exists.

In 2009, the America’s Marine Highway Program (AMHP) was established by Section 1121 of the Energy Independence and Security Act of 2007 in an effort to reduce landside congestion through designating Marine Highway Routes. The routes that have formed the U.S. Marine



Highway System consist of navigable waterways including rivers, bays, channels, the Great Lakes, coastal, and open-ocean routes. Overseen by the U.S. Department of Transportation Maritime Administration, 25 all – water Marine Highway Routes have been designated through AMHP. In 2013, Marine Highway M-29⁵ was added to the U.S. Marine Highway System, establishing a connection between the middle section of the Missouri River in Sioux City, Iowa and the Marine Highway M-70 Route at Kansas City, Missouri. The approval on increasing freight transportation heading north to Sioux City through the Missouri River was finalized with the intent to slow freight traffic growth on local roads, Interstate 29, railroads, and bridges in the surrounding counties.

⁵ An overview on the U.S. Marine Highway System’s 25 Marine Highway Routes including M-29 detailing the applicant, supporters, landside routes served, route description, and attributes is provided in the following link. <https://origin-www.marad.dot.gov/wp-content/uploads/pdf/Marine-Highway-Route-Descriptions.pdf>

H. Rail

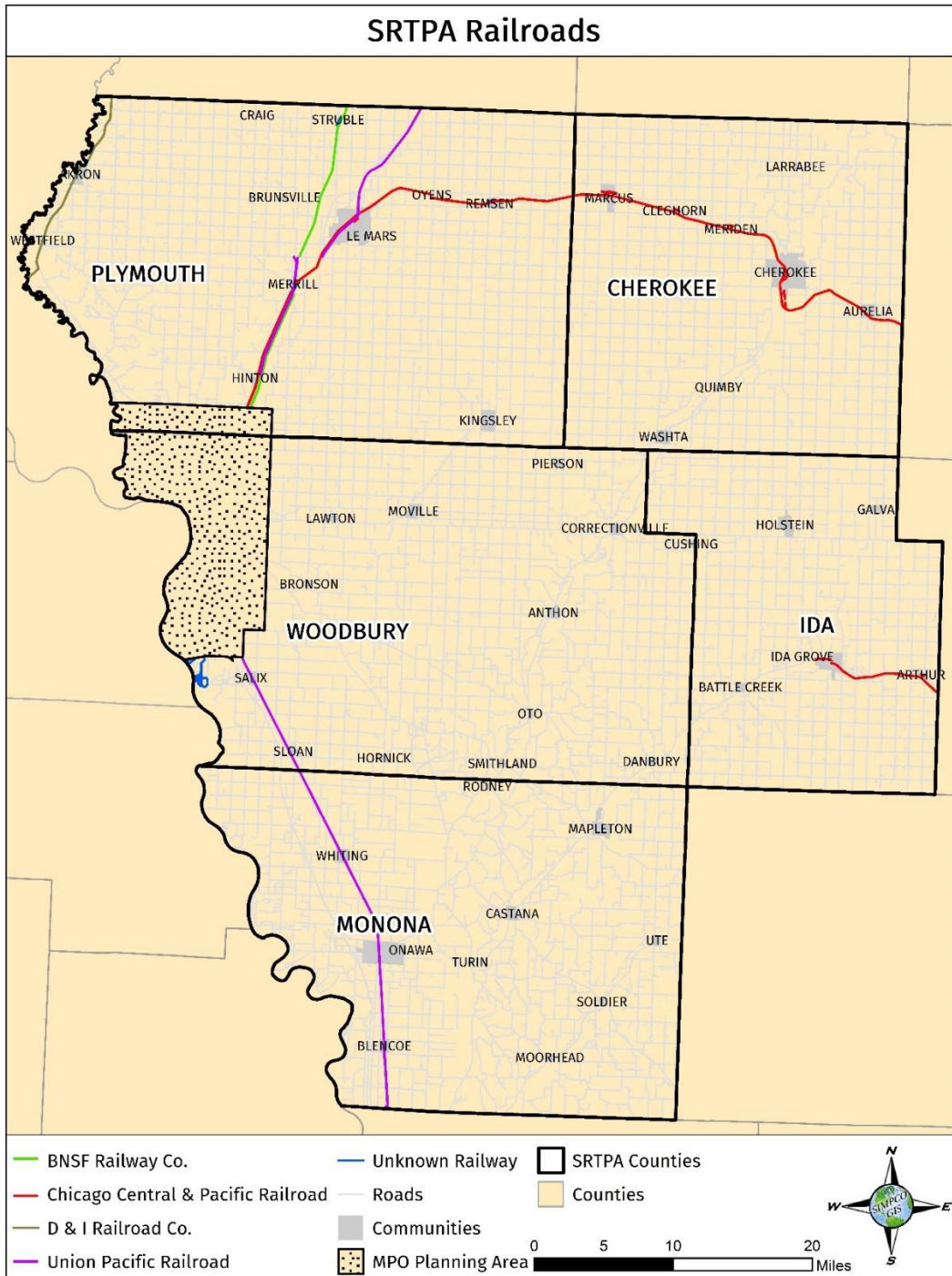
SRTPA is served by a three Class 1 railroads and one Shortline railroad. Class 1 railroads include the largest freight – hauling railroads whereas Shortline railroads are smaller railroads that include local railroads as well as railroads that primarily do car switching. The Class 1 railroads serving the region include BNSF Railway Co., Chicago Central & Pacific (CC&P) Railroad, and the Union Pacific Railroad. The lone Shortline railroad, Dakota & Iowa Railroad Co., serves the northwest corner of SRTPA in Plymouth County. The following table lists the tonnage and the communities that align with each railroad.

Primary Operator	Route Description	Communities	Tonnage
BNSF	From Hinton to Struble	Hinton & Merrill	36
Chicago, Central & Pacific Railroad	From Ida Grove to Arthur	Ida Grove & Arthur	1.41
	From Hinton to Auerlia	Hinton, Merrill, Le Mars, Oyens, Remsen Marcus, Cleghorn, Meriden, Cherokee, Aurelia	3.74
D & I Railroad Co.	Going along the Plymouth County border through Akron and Westfield	Akron & Westfield	2.33
Union Pacific Railroad	Going north from Le Mars	Le Mars	9.9
	Going south from MPO border to west border of Woodbury County		21.7
	From Salix to Blencoe	Salix, Sloan, Whiting, Onawa, Blencoe	19.8

Railroads are often shared between multiple companies. The roles of companies sharing a railroad include a Primary Operator and Trackage Rights Only. For the stretch of railroad aligning from Ida Grove to Arthur, and from Oyens to Aurelia, CC&P is the Primary Operator and Canadian National Railway Co. serves as the Trackage Rights Only company. CC&P is also the Primary Operator for the stretch of railroad aligning from Hinton to Le Mars, whereas Union Pacific Railroad serves as the Trackage Rights Only company. The Dakota and Iowa Railroad Co. controls the railroad servicing Akron, Westfield, Hawarden, and serves primarily as a channel for interchange traffic (grains, ethanol, aggregate) with the BNSF Railway. It should be noted that Sioux City acts as regional railroad hub and a source for interchange for all the railroad companies amongst SRTPA. There is no available passenger rail service available in the area as well. The alignment of railroads serving the SRTPA region is displayed in the following SRTPA Railroads map.

There is a total of 356 rail crossings in SRTPA. The degree of safety amongst SRTPA's rail crossings is high in regards to vehicle crashes. According to IDOT, vehicle crashes occurring at rail crossings have accounted for less than one-percent (77 incidents) of total crashes in SRTPA from 2008 to 2017. Although vehicle crashes occurring at rail crossing accounts for an insignificant amount of the total crashes in SRTPA, these crashes are concentrated in a particular location. At the County-level, approximately 69% of the rail crossing crashes have

occurred within Plymouth County and the City-level, approximately 31% of the crashes have occurred within the City of Le Mars. Roughly half the crashes in Le Mars have occurred at rail crossing adjacent to Hawkeye Avenue. Nearly two-thirds of vehicle crashes occurring at rail crossings throughout SRTPA has involved a collision with vehicle in traffic and collision with railway vehicle or train.



I. Public Transit



Due to the consequent rural nature of development amongst a RPA region, public transit typically does not have a major role. The demand for public transit is not high within the SRTPA region, but still serves as a crucial source for individuals who are dependent on it. SRTS is a demand responsive transit system centered on the region’s main communities such as Le Mars and Cherokee. SRTS’s

inventory includes a fleet of light duty paratransit buses that primarily shuttle patrons to medical appointments, school, and other various needs. Patrons of SRTS typically include the elderly, disabled individuals, low income individuals, and those lacking a source of transportation. In the following tables, the type of service, fare rates, and SRTS operational figures is listed. SRTS is in operation between Monday and Saturday from 5:30 a.m. to 7:00 p.m.. Please note the City of Le Mars has specific rates⁶.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Ridership	143,854	132,531	186,368	162,726	158,770	175,561	181,415	187,982	192,000	172,130
Miles	655,448	648,363	898,193	778,228	806,364	782,127	1,073,148	1,079,782	1,123,456	1,132,483
Hours	42,764	40,958	54,144	54,913	50,989	68,224	70,241	74,039	78,206	78,956
Vehicles	49	49	49	49	49	49	50	50	50	50

	Service	Fare
Within City Limits	Curb-to-Curb	\$4.00 per one way trip
	Door-to-Door	\$7.00 per one way trip
Outside City Limits	Curb-to-Curb	\$4.00 plus \$0.50 per mile
	Door-to-Door	\$7.00 plus \$0.50 per mile

⁶ Fare rates for destinations within the City Limits of Le Mars are as follows:
 Curb-to-Curb = \$3.50
 Door-to-Door = \$6.00

II. Summary

With every transportation system there are positive aspects that at the very least should be maintained and negative aspects that require improvements and change. Using this chapter's information, SRTPA's strengths and weaknesses is summarized in the following.

Strengths

- High mileage amongst SRTPA's major four-lane roads exists, which majority are new and/or in good condition.
- SRTPA has good rail capacity with expansion and upgrade (higher speeds for example) being feasible at a moderate cost.
- General and Local Service airports are adequately distributed throughout the SRTPA region. Several Commercial Service airports are in close vicinity to the region as well.
- Dependent on water levels, SRTPA has moderate access to waterborne transportation to facilitate commerce.

Weaknesses

- A significant proportion of bridges amongst SRTPA are in need of replacement or rehabilitation.
- A significant proportion of low – volume County and State roads are in need of rehabilitation.
- Extensive trail networks are established within numerous communities but at the regional scale, improvement to the connectivity of SRTPA's trail network is needed.
- Although the degree of north – south connectivity amongst SRTPA's four – lane facilities is excellent, the degree of east – west connectivity is far less developed, requiring thorough improvements. The connectivity of east – west transportation is critical as a significant proportion trade is facilitated in this direction in Iowa and the U.S.

Chapter 5: Planning and the Environment

I. Overview

SRTPA's environmental characteristics is the theme of the following chapter. Specifically, the threatened and endangered species, conservation recreation lands, protected streams and rivers, coordination efforts, and environmental mitigation activities is discussed. Each of these characteristics have a direct relationship with the future needs of SRTPA and is essential to the long range planning process.

A. Threatened and Endangered Species

The following threatened and endangered species in SRTPA were found on the U.S. Fish & Wildlife Service website Midwest Region. This list was revised as of October 2013. The information can be found here:

http://www.fws.gov/midwest/endangered/LISTS/iowa_spp.html.

According to the U.S. Fish & Wildlife Service agency, the following species amongst SRTPA are currently designated as either a threatened species or endangered species.

1. Northern Long-eared Bat

The Northern Long-eared Bat is designated as a threatened species in each of the five SRTPA counties. The species can be found throughout much of the eastern and north central U.S, residing amongst 37 states. The Northern Bat's habitat typically features underneath bark, in cavities, and cervices of both live and dead trees during the summer season and caves and mines during the winter season. The most pressing threat to the species is the White-Nose syndrome, a fungal disease commonly known to affect bats.



2. *Prairie Bush-Clover*

The Prairie Bush-Clover is a flowering plant species and is designated as a threatened species in each of the five SRTPA counties. The species is known to exist in Illinois, Iowa, Minnesota, and Wisconsin. The Prairie Bush-Clover is pale pink during blooming season. The flowering plant is typically seen as silvery-green due to its short blooming season however. Common threats looming on the species include conversion of pasture into cropland, overgrazing, and expansion on agricultural operations and urban development.



Photo by USFWS, Phil Dalpke

3. *Western Prairie Fringed Orchid*

The Western Prairie Fringed Orchid is a flowering plant species and is designated as a threatened species in each of the five SRTPA counties. The species is known to exist amongst the Midwestern states, concentrated in Iowa and Nebraska. The Western Prairie can be found on unplowed, calcareous prairies and sedge meadows. Threats the species is vulnerable to include conversion of habitat to cropland and poorly conduct burning, grazing, and mowing.



4. *Pallid Sturgeon*

The Pallid Sturgeon is a fish species and is designated as an endangered species in Monona and Woodbury County. The species can be found throughout the Mississippi and Missouri River and several tributaries from Montana to Louisiana. The Pallid



Sturgeon is most commonly found at the deeper depths of these rivers and tributaries. Reasons contributing to this species being designated as an endangered species include habitat destruction and modification, overutilization, inadequacy of existing regulatory mechanisms, and other natural or manmade factors.

5. **Least Tern**

The Least Tern (bird) is designated as an endangered species in Woodbury County and has been since 1985. Although populations of this species exist in Woodbury County, they typically are more concentrated in the U.S. Fish & Wildlife Service's Southeast Region.



Reasons contributing to the Least Tern remaining on the endangered species list for over three decades include habitat loss or degradation and nest disturbance. Other imposing threats to the species include changes to dams, reservoirs, and river systems, as well as recreational activities taking place on rivers and sandbars, forcing the species to abandon their habitat.

6. **Piping Plover**

The Piping Plover (bird) is designated as a threatened species in Woodbury County. The species is distributed throughout a large portion of the U.S., residing amongst the U.S. Fish & Wildlife Service's Great Lakes-Big Rivers Region



and Northeast Region. It should be noted that the Piping Plover is designated as a threatened species in the Northeast Region and an endangered species in the Great Lakes-Big Region. Similar to the Least Tern species, the Piping Plover has been designated as a threatened species in Woodbury County since 1986. Before receiving the threatened species designation, the species population underwent a significant decline due to hunting. Reasons contributing to the Piping Plover remaining as a threatened species for over three decades includes habitat loss or degradation, nest disturbance, and predation. The species is extremely sensitive to humans, leading to frequent abandonment of their habitat as well.

B. Conservation Recreation Lands

Conservation Recreation Lands are essential to the area's well-being. According to the material that was obtained from the Natural Resources Geographic Resources Library, SRTPA has thirteen different classification categories. Looking at the reference map (page V-10), the Conservation Recreation Lands are represented by the green polygon features. This information was compiled from 2012 data at: <http://www.igsb.uiowa.edu/nrgislibx/gishome.htm>

As mention previously, there are thirteen different classification categories of the Conservation Recreation Lands. The SRTPA Region consists of: 98 Wildlife Management Areas; one Recreation Areas; seven State Preserves; fifty County Parks; one cemetery; two City Parks; two Sovereign Waters; eight State Parks; three State Forests; one NGO Preserve; one State Recreation Area; one Iowa Habitat Access Program (IHAP); and six Access Points.

In Woodbury County there are 33 Wildlife Management Areas, one State Preserve, 12 County Parks, two City Parks, one Access Point; two State Parks, one Sovereign Waters, and one IHAP. Some of these Wildlife Management Areas can be sub-classified as prairies, timbers, conservation areas, a greenbelt, lakes, and wildlife management areas.

In Plymouth County there are nine Wildlife Management Areas, two State Preserves, seven County Parks, one Access Point, one State Park, one NGO Preserve, and one State Recreation Area. Some of the Wildlife Management Areas can also be sub-classified as prairies.

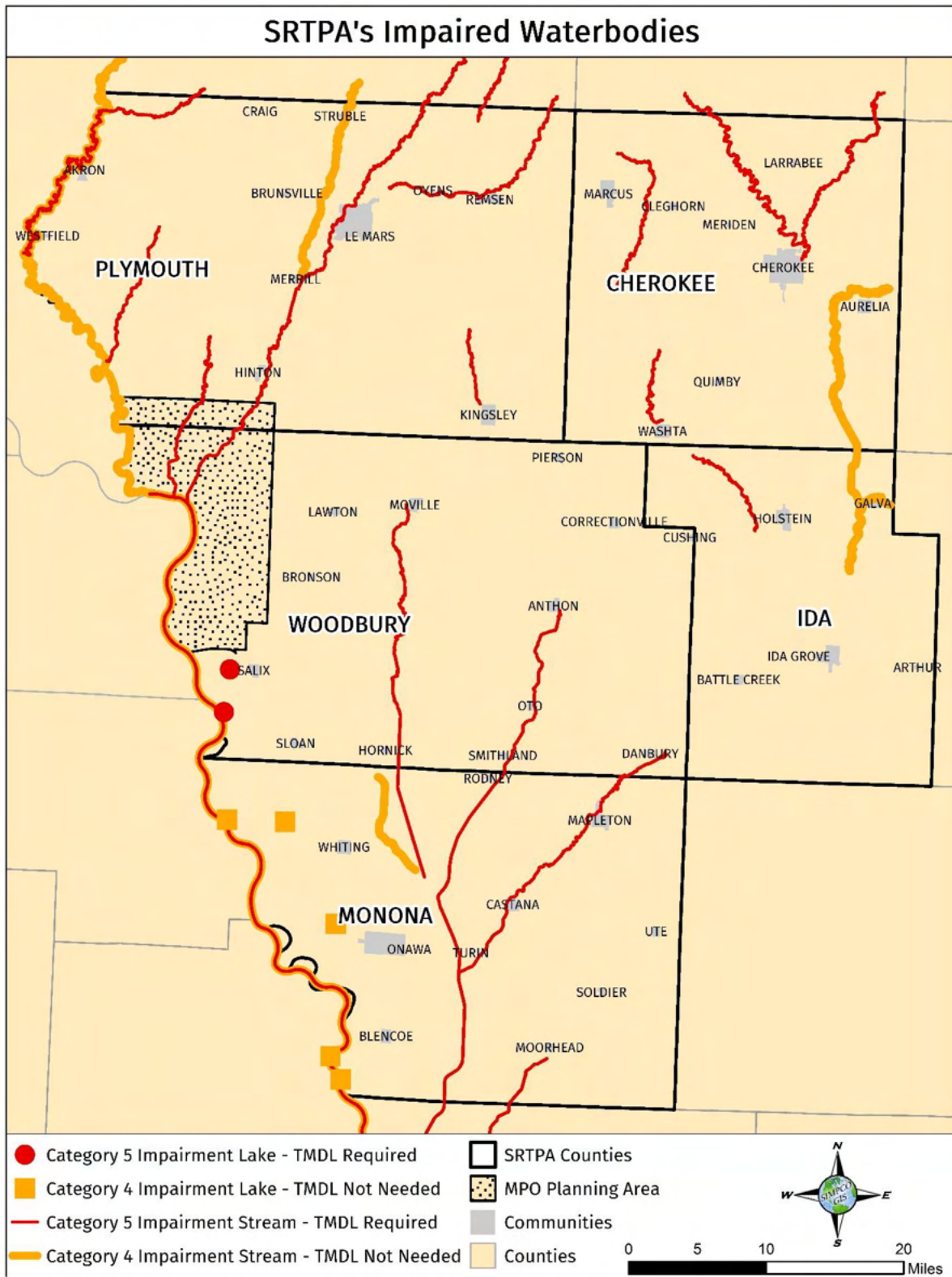
In Cherokee County there are 11 Wildlife Management Areas, three State Preserves, ten County Parks, and two Access points. The Wildlife Management Areas can also be sub-classified a greenbelt and a prairie.

In Monona County there are 36 Wildlife Management Areas, one Recreation Area, two State Preserves, 16 County Parks, three State Forests, five State Parks, and one Sovereign Waters. The Wildlife Management Areas can be sub-classified into woods, landing, recreation areas, lakes, bends, Loess Hills, and wildlife management areas.

In Ida County there are three County Parks, one Cemetery, and two Access Points.

C. *Protected Streams and Rivers*

The Big Sioux, Floyd, Little Sioux, Maple, Missouri, Soldier, and West Fork Little Sioux River were placed on Iowa's 2016 Impaired Waterbodies and designated as Category 5 Impairment, requiring an allocation to their total maximum daily load (TMDL) to combat the existing causes and sources of pollutants contributing to impairment. The TMDL determines the level of water quality needed to meet a water quality standard. Establishing the level of water quality needed results in identifying the maximum pollutant load from point and nonpoint sources, as well the "margin of safety" load, which a waterbody can receive and continue to meet water quality standards. The pollutants representing the margin of safety load accounts for the lack of understanding on the relationship between pollutant loads and water quality. Contributing causes and sources of pollutants leading to these rivers receiving the Category 5 Impairment designation include human and animal waste infiltrating the rivers that originated from wastewater treatment centers, industrial plants, land-apply manure, failing septic systems and rainwater/snowmelt carrying livestock and wildlife waste. To repair this damage, the watersheds need to be cleaned up of the pollution from human and animal waste.



D. Coordination Efforts

As required in MAP-21, SRTPA must consult “as appropriate” with “State and local agencies responsible for land use management, natural resources, environmental protection, and historic preservation” in developing long-range transportation plans. SRTPA staff has currently updated the Public Participation Plan to include the efforts made to notify the public and interested state and local parties. There are routine and ongoing activities that the staff continues to uphold for the benefit of the community. These activities include but are not limited to: minutes and agenda dissemination; news releases; forming an advisory committee if necessary; giving presentations to organizations; holding public input meetings; availability to speak at city meetings; social media outreach; and holding open meetings with SRTPA’s Transportation Technical Committee and Policy Board. Regarding the efforts made by SRTPA’s staff to notify the public and state and local parties on the LRTP, staff develops and reviews the plan on a per-chapter basis. Following an outlined schedule, staff develops chapter(s) and presents the progress made to the Technical Advisory Committee and Policy Board on a monthly or bi-monthly basis. Upon presenting to the TAC and Policy Board, staff forwards the progress made to IDOT staff for review as well. Upon addressing the feedback received by the IDOT on the each of the plan’s chapters and presenting the changes to the TAC and Policy Board, staff will hold a public meeting and comment period for the general public. In addition to giving an opportunity to the general public to provide input staff will forward the plan to all state and local parties that are required to receive the plan in order to comply with standards as well. Staff is also responsible for contacting the following Natural Resources/Cultural Agencies: Iowa Department of Natural Resources, Iowa Department of Transportation – Office of Location and the Environment, Office of the State Archaeologist, U.S. Environmental Protection Agency, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Services, Natural Resources Conservation Services, and the State Historical Society of Iowa regarding the development of plans and programs. The process of consulting with the resource agencies is a goal of the Long-Range Transportation Plan to link NEPA and planning. The goal includes early agency environmental coordination that will allow the public involvement, alternative consideration, and environmental information to help determine how a project may have to be altered or changed to help create a more streamlined environmental review process once it does reach the formal consultation stage.

E. Environmental Mitigation Activities

The MAP-21 policy states that the LRTP shall include a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the LRTP. Discussion may focus on policies, programs, or strategies. The discussion shall be developed in consultation with Federal, State and Tribal land management, wildlife and regulatory agencies. The map on page V-10 which includes conservation recreation lands and wetlands will illustrate many of SRTPA's environmental constraints.

SRTPA's staff has identified four common environmental issues for discussion in this 2045 LRTP. The environmental issues include:

- ◆ Threatened and endangered species
- ◆ Conservation recreation lands
- ◆ Conservation wetlands
- ◆ Protected streams and rivers

The following section provides a brief description of each potential mitigation activities:

1. Threatened and Endangered Species

- ◆ Avoid new construction in and around areas with known threatened and/or endangered species.
- ◆ Take steps to minimize harm and compensate for impacts.
- ◆ Provide proper maintenance of wildlife fencing.
- ◆ Keep the roadway free of trash.
- ◆ Use minimal amounts of deicing agents.
- ◆ Alter drivers to possible presence of wildlife.
- ◆ Provide buffer strips along streams and rivers.
- ◆ Maintain natural lighting to the extent possible along roadways.
- ◆ Monitor wildlife

2. Conservation Recreation Lands and Cultural Areas

- ◆ Avoid new construction around recreation and cultural areas.
- ◆ Take steps to minimize harm and compensate for impacts.

- ◆ Provide enhancements to the properties, including possible enhancements to the pedestrian/bicycle networks around these areas.
- ◆ Clean up refuse
- ◆ Reduce vehicle speeds and volumes near recreation and cultural areas
- ◆ Replace park/open space acreage taken.

3. Conservation Wetlands

- ◆ Avoid transportation improvements that cross or otherwise affect wetlands.
- ◆ Take steps to minimize harm and compensate for impacts.
- ◆ Retain open spaces and vegetated natural buffers that are around wetlands.
- ◆ Reduce and/or prevent highway storm water run-off from entering wetlands.
- ◆ Employ low-impact development and construction activities.
- ◆ Maintain the overall natural habitat of the wetland
- ◆ Provide a buffer strip along wetlands

4. Protected Streams and Rivers

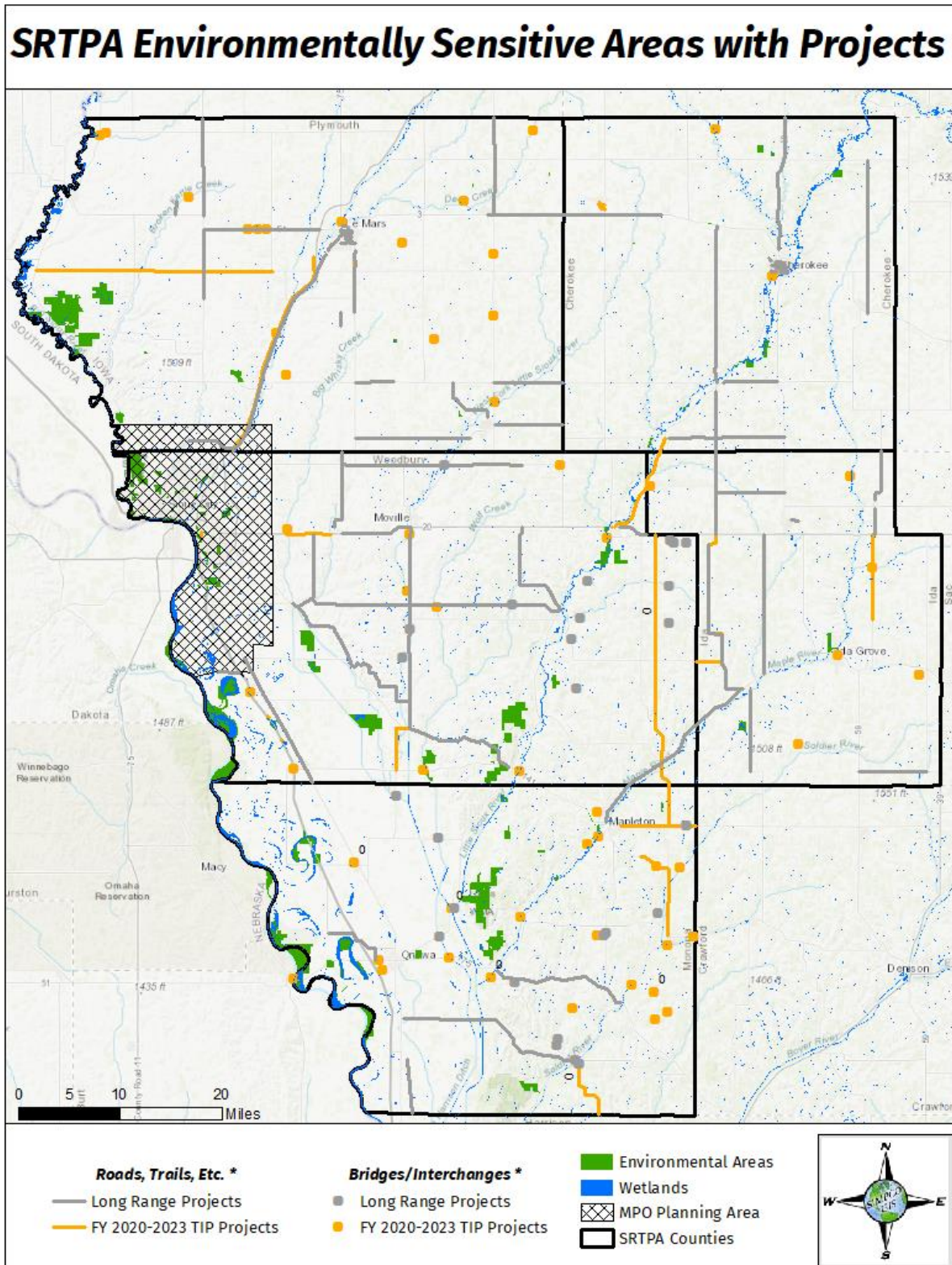
- ◆ Take steps to minimize harm and compensate for impacts
- ◆ Provide buffer strips along streams and rivers.
- ◆ Avoid transportation improvements that cross or otherwise affect protected streams and rivers.
- ◆ Reduce and/or prevent highway storm run-off from entering the protected streams and rivers.
- ◆ Control livestock manure runoff.
- ◆ Limit cattle access to streams and explore other water sources for cattle.
- ◆ Improve manure application activities and reduce soil erosion.
- ◆ Find and replace improperly connected or failing septic systems.

S RTPA will continue to expand on environmental mitigation activities by comparing the 2045 LRTP with available State conservation plans, maps and inventories. In addition, S RTPA will coordinate and consult with the resources agencies listed in the above section. These agencies will be contacted during the development of future plans and TIPs.

II. Summary

It is understood planning is an ongoing and dynamic activity and thus rapid adaptability to change is a requirement. It is therefore expected that S RTPA will promptly comply and participate in the above mentioned environmental mitigation activities and whatever future initiatives may arise during the course of the LRTP's duration. Achieving this goal will require working with the IDOT, the Iowa Department of Natural Resources, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Services, the State Historical Society of Iowa, the SIMPCO MPO and other relevant entities in their transportation planning activities.

Map V.1: Environmental Areas



Chapter 6: Future Regional Transportation Threats, Solutions, and Alternatives

I. Overview

Through analysis of key population, economic, traffic, and current condition trends amongst SRTPA, the transportation threats, solutions, and alternatives confronting the region is discussed. A non-all-inclusive list of the most agreed upon transportation threats, solutions, and alternatives likely to occur is listed in the following table. The list was first compiled during the development of the 2035 LRTP and has been updated periodically.

Transportation Threats
Aging infrastructure
Aging population
Decrease in population
Decrease in funding and buying power
Pavement and bridges were not designed to carry weight loads that they do
Increased rail traffic
Weather
Transportation Solutions (Opportunities)
Regional Airports
Development of Trails
Railroads
Tourism opportunities
Improvements on infrastructure and surrounding infrastructure will bring development
Carpooling
The expansion of expressway bypass outside of Le Mars
State Funding Legislation
Transportation Alternatives
Bridge replacement alternatives
Automated Vehicles
Rumble strips
Enhanced efforts to improve locations of utility lines
Invoice miles to drivers for wear and tear on the roads
4-to-3-Lane Conversions

A. Transportation Threats

The following transportation threats have been identified by the public and stakeholders as negative possibilities and conditions that are believed to likely occur and hinder the efficiency and safety of SRTPA's transportation network. Please note the following is a general consensus of the issues at hand.

1. Aging infrastructure

The aging of SRTPA's transportation network infrastructure has continued to be a growing concern. As the need to maintain and rehabilitate the region's aging infrastructure increases, the transportation funds available remains stagnant and even decreases in some cases. The contradicting trends of aging infrastructure and funding is heightened due to the high proportion of roads amongst SRTPA were built near the same time. The necessity to renovate and repair numerous roads simultaneously or in a short time span is a potential consequence of having a large portion of SRTPA's transportation network being built in the same time period. Transportation trends discussed in SIMPCO's *U.S. Highway 20 Corridor Economic Development Study* plan add additional concerns towards the region's aging infrastructure; there has been a steady increase in the average Vehicle Miles Traveled (VMT) from 2008 to 2016 and there has been an increase on the share of major roads Annual Average Daily Traffic (AADT) that Trucking vehicles account for, accounting for more than 20% in some cases. The rising VMT and Trucking AADT leaves roads that are currently in poor condition vulnerable to further deterioration. Financially, the price of materials has been inconsistent with sharp increases and slight declines per year and with the rise of the inflation rate slightly increasing since January 2000, this is a significant issue. Because many of the roads were built at approximately the same time, renovation and repair will be required simultaneously. This is especially difficult since an increase in the price of materials and a decrease in funding is currently the norm. The price increase of materials and decrease in funding sources is the reason this transportation threat should be a source of concern.

2. Aging population

Revamping SRTPA's transportation safety measures is on a path to being a predominant concern as population of the region continues to age. Previously discussed in Chapter 3, the median age in each of SRTPA's counties increased from 2000 to 2010 and will continue to rise during the foreseeable future due to the sheer size of the "baby-boomer" population and

their influencing population cohort. Safety measures featuring larger signage and signage placement for optimal viewing are examples of measures needed to be taken to adequately address the increasing proportion of aging drivers. An indirect countermeasure to the increase in aging drivers is the reality of mobility decreasing as the population ages, leaving the safety issue acute in rural areas where transit is primarily provided by personal vehicles. Individuals incapable of driving will become more common and the focus of the region's mobility issues as well. Opportunities to improve upon SRTPA's existing services and accommodating the aging population include carpooling, simple neighborliness, SRTS, churches, assisted living facilities, and non-profit agencies. Human service agencies is an additional source of alternative means of transportation for the aging population as well.

3. Decrease in population

As referenced in Chapter 3, SRTPA's population has gradually been decreasing over the decades with the declines more concentrated in the rural counties of Cherokee, Ida, and Monona. The declining trend is foreseen to continue throughout the duration of the LRTP. As time progresses, requirements for new infrastructure and maintenance on roads will change, increase, and be more demanding. A shrinking population poses a threat on SRTPA's transportation network, as it may lead to the region's inability of generating enough revenue required to meet the changing and greater demands on new infrastructure and maintenance.

4. Decrease in funding and buying power

The fundamental issue that SRTPA, Iowa, and majority of the U.S. will confront is shrinking distribution in funds allocated towards infrastructure. An increase in funding is required to keep up with inflation. However, inflation is not the only problem; a decline in the buying power of materials for roads is a major concern. With the price of materials rising due to high fuel costs, the probability of funding decrease is certain. If funding does not increase on level with all the obstacles, support for new projects is precarious. If funding remains flat, only preservation for the existing system can remain in place. According to the U.S. DOT the state of Iowa ranks 13th amongst all states in the total mileage of public roadways¹ as of 2017 and ranks 7th amongst all states in the total number of bridges² as of 2018. According the U.S. Census most recent population estimates (2018) and land mass Iowa ranks 31st and 23rd amongst all states. Iowa has an extraordinary road network given its population size and the

¹ U.S. Department of Transportation, Federal Highway Administration, Highway Statistics 2017, Section 4: Highway Infrastructure, Public Roads Length by functional system, Table HM-20.

² U.S. Department of Transportation, Federal Highway Administration, Highway Statistics 2017, Section 3: Bridges, Count, Area, Length of Bridges by Highway System

landmass. Iowa faces in the approaching 20 years, a shortfall of in system maintenance funding.

During the development of the 2035 LRTP, IDOT was preparing a report (TIME-21) that outlined the shortfalls Iowa could anticipate over the next 20 years and how roads would be affected. The need to maintain and improve aging infrastructure was discussed as the costs were increasing and the funds allocated toward roads remained flat and decreased in some cases. TIME-21 was legislated in 2008 and approved a set amount of revenue that was intended to prevent steep shortfalls in funding and added new revenues through changing vehicle registration fees and schedules and increasing trailer and title fees. The legislation was successful in bridging some of the shortfalls but Iowa and the surrounding region are still in need of additional revenue to maintain their transportation networks.

Shortly after the approval of the previous LRTP, the Senate File 257 was passed in at legislative session in 2015. The newly signed law was another source combating the funding shortfalls as the major component of the bill featured the increase of the state fuel tax. The increase in tax has led to jurisdictions across Iowa having the ability to allocate those additional generated funds into road and bridge construction projects. It is estimated that the passing of Senate File 257 will generate approximately \$215 million in additional transportation revenue annually to meet Iowa's critical roadway needs. Today, state fuel taxes make up 41% of state road revenue and federal fuel taxes make up about 90% of receipts allocated to the federal Highway Trust Fund. As time progresses and vehicles become more efficient, the impact on the fuel tax revenue collections will become more severe. The two biggest threats to the state's fuel tax revenue collections is currently the increasing fuel economy and alternatively fueled vehicles. Since the year 2000, the average fleet fuel economy has increased from 24.8 miles per gallon to 31.5 in 2014. There is an increasing market share for alternative fuel vehicles such as electric vehicles as well.

The table on the following page illustrates the decline in buying power that is expected to continue for six different types of materials used in construction from 1989 to 2018.

	Roadway Excavation	Hot-Mix Asphalt Surfacing	Portland Cement Concrete Surfacing	Reinforcing Steel	Structural Steel	Structural Concrete
1989	10 CY / \$9.90	10 Tons / \$209.5	100 SY / \$1,401	1000 lbs. / \$380	1000 lbs. / \$780	100 CY / \$16,931
2006	4.32 CY / \$9.90	4.93 Tons / \$209.5	53.7 SY / \$1,401	542.86 lbs. / \$380	665.46 lbs. / \$780	52.24 CY / \$16,931
2013	2.5 CY / \$9.90	3.27 Tons / \$209.5	45.35 SY / \$1,401	441.86 lbs. / \$380	395.94 lbs. / \$780	40.63 CY / \$16,931
2018	2.53 CY / \$9.90	3.33 Tons / \$209.5	36.38 SY / \$1,401	361.9 lbs. / \$380	561.15 lbs. / \$780	28.82 CY / \$16,931
Buying Power Decline (%)	74.70%	66.70%	63.62%	63.81%	43.85%	71.18%

CY = Cubic Yards; SY = Square Yards; lbs. = Pounds
Source: IDOT Office of Contracts, Price Trend Index for Iowa Highway Construction

5. Pavement and bridges were not designed to bear current weight loads

The weight load that pavement was designed for when originally constructed amongst SRTPA's county and local roadways is currently being exceeded. The societal changes and norms on the size and amount of modern vehicles and equipment has contributed to safety and structural problems in the region. The increase in transportation of goods has exceeded the limits of what SRTPA's transportation network can accommodate, leading to further deterioration as well. Although the growing output of goods and products has positively impacted the economy, the economic impact has been at the expense of the region's transportation network placing a large burden.

6. Increased rail traffic

SRTPA has benefited from a recent increase in products being exported out of and imported into the region. The rising shipment in products correlates to a greater frequency in rail traffic. The necessity to introduce greater and effective safety measures for drivers is a direct outcome of the shipment in products and frequency rail traffic correlation. Examples of safety measures for consideration include additional motorist safety items such as cross bars, gates, and improved lighting to create more awareness for driver's surroundings.

7. Weather

Weather is often unpredictable and adds to the complexity of determining maintenance and repair costs. Weather during the winter season places great stress on SRTPA's roadways. Freeze and thaw cycles lead to potholes and cracks developing on the surface of roads and is difficult to determine the appropriate amount of funds to allocate for plowing and salting the roads. SRTPA is vulnerable to flooding, flash flooding, and tornadoes in some cases during the spring and early summer season when storms produce above-average precipitation. Significant amounts of flooding along the Missouri River, Big Sioux River, and Little Sioux River have occurred in recent years. In addition to damage to roads and trails, flooding can lead to closure of roads that reside within the river's watershed and bridges to

washout as well. The aftermath of severe flooding and storms can lingering damage to roadway infrastructure, stagnate recovery efforts, and destabilize a transportation network's efficiency. It is important to stress that transportation costs and funding is often subject to change due to the unpredictable nature of weather.

B. Transportation Solutions

The following transportation solutions have been identified by the public and stakeholders as potential opportunities to be considered and further researched on for the betterment of SRTPA. Please note the following is a general consensus of the issues at hand.

1. Regional Airport

The development of additional regional airports would be advantageous for SRTPA. As stated in Chapter Four, there are a total of four airports in the region classified as either General or Local Service. The only regional airport, Sioux Gateway Airport, is located just outside SRTPA and in the Sioux City Metropolitan Area however. In addition to transporting passengers, the installation of an additional regional airport would create another opportunity to transfer cargo and goods at a more an efficient rate. Employment opportunities through the regional airport would be an additional economic benefit to the region as well. A centrally located regional airport amongst SRTPA would cater to all its residents and businesses regarding accessibility and travel time. Majority of the region is located further than a 30 minute drive from the Sioux Gateway Airport.



2. Development of Trails

Adequate space and opportunity to continue developing trails amongst SRTPA exists. IDOT previously commissioned a study identifying routes for the Lewis and Clark Multi-Use Trail³ that would expand the existing trail network located in the southern portion of SIMPCO MPO stretching south through Woodbury and Monona County and beyond. In collaboration with RDG Planning & Design and the Lewis and Clark Trail Steering and Project Committee, a plan for developing IDOT's identified trail routes has been completed. The potential of attracting tourists from outside the region and garnering additional economic traffic exists through the Lewis and Clark Multi-Use Trail. IDOT recently published the *Iowa in Motion 2045 – State*

³ Lewis and Clark Multiuse Trail - <https://iowadot.gov/lewisclarktrail/>

*Transportation Plan*⁴ plan which discusses multimodal transportation over the next several decades. The plan is intended to encourage coordination and serve as the primary guide for statewide decision-making regarding bicycle and pedestrian programs and facilities, including sidewalks, trails, bike lanes, paved shoulders, and other trail elements.

3. Railroads

Railroads have become more prevalent in SRTPA's economy as train's carrying capacity has increased. A larger carrying capacity allows for the transportation of goods through rail to be conducted in a timelier and cost effective manner. Updating the safety features of the railroads to accommodate larger carrying capacity is an additional opportunity that could become a necessity to preserve safety of SRTPA's transportation network.

4. Tourism Opportunities

The opportunity to improve a city or region's tourism always exists. Several marketable opportunities within SRTPA are in place for tourism to potentially be a relevant source of economic gains. Monona and Woodbury Counties align with the Missouri River and SRTPA is located in the Loess Hills which is a unique landscape and can be found only in Iowa and a region of China. The Lewis and Clark Multi-Use Trail that was listed above in the development of trails section could be a significant tourism opportunity. The Iowa Department of Natural Resources (Iowa DNR) along with SIMPCO's assistance conducted a study that involved identifying water trails to be selected as a Statewide Designated Water Trail; the Big Sioux River that stretches through SRTPA was identified as a Statewide Designated Water Trail. This may provide another outlet for prospective tourism opportunities. Other prospects may include regional events and locations that can be found on each counties and cities website. By providing activities, tourism makes life richer for the families in all of the surrounding communities and could potentially help attract young people and families to the area as a place to settle. By creating a tourism outlet, infrastructure must be continually updated to serve not only the community but those visiting as well. TAP funds could be invested in the roads, streetscapes, trails, and cultural or historical facilities to leave a favorable impression upon the tourists journeying to the region, examples of these facilities include the Loess Hills and the Scenic Byway.

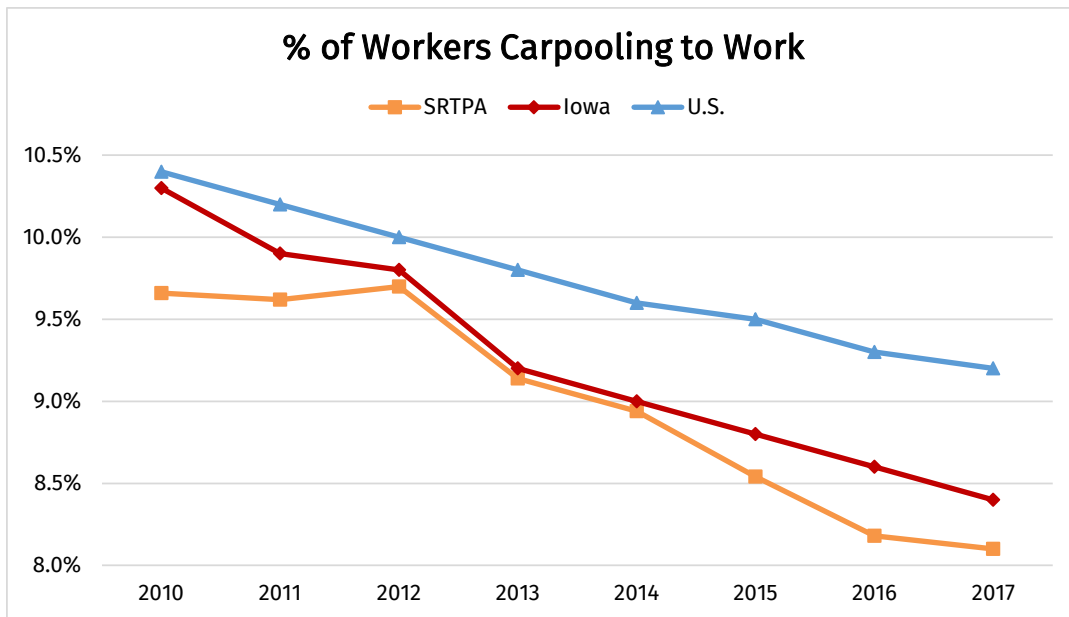
⁴ Iowa in Motion – State Transportation Plan - <https://iowadot.gov/iowainmotion/>

5. Improvements on infrastructure and surrounding infrastructure brings development

The public’s level of comfort in their surroundings and transportation network improve through enhancement infrastructure such as pavement of roads and development of trails and sidewalks. Pedestrian and vehicular traffic can be beneficial to the development of a community. As the degree of accessibility and mobility is increased through additional roads, trails, and sidewalks in a community, new opportunities or expansion of residential and commercial development can be realized.

6. Carpooling

According to the U.S. Census Bureau, the percentage of employees within SRTPA that choose to carpool to work has been less than the state and nation’s average for years, as illustrated in the following graph. Similar to tourism the potential to take measures that lead to a greater share of employees carpooling to work always exists. The rural nature of SRTPA’s counties is an obstacle that will always exist as well. An example of a measure SRTPA could potentially take includes establishing a ride-sharing related program. IDOT has recently established a statewide Park and Ride System that features a series of park and ride facilities allowing individuals to park their vehicles when carpooling, vanpooling, or taking public transit. No park and ride facility is located amongst SRTPA. There are two locations (Monona and Woodbury County) currently under consideration for developing a new park and ride facility within the region. Two additional locations within the SIMPCO MPO are currently under consideration as well.



7. *The expansion of the expressway bypass outside of Le Mars*

In 2007, the Highway 75 bypass outside the city of Le Mars was opened. With the new bypass, the community has an opportunity to benefit economically by adding commercial industries and expanding the existing local transportation network. The bypass was built to redirect the highway traffic outside of the city creating a safer route for both residents and travelers. With commuters on the bypass, the city of Le Mars, may find it attractive to develop businesses around the Highway 75 area. Zoning regulations and strategic planning should be instituted to assist preparing the development but also, the city of Le Mars has an opportunity to improve the infrastructure of the local road network connecting to the bypass. Updating the infrastructure could help draw commuters in from the highway.

8. *State Funding Legislation*

There is an ongoing discussion taking place in the Iowa House of Representatives and the Senate in Des Moines about how and where to obtain additional funding for future infrastructure and maintenance of the existing transportation within the state. It is paramount to pass further legislation to fund the roads. In May of 2008, the TIME-21 (Transportation Investment Moves the Economy in the Twenty-First Century) Fund was created to distribute new funds generated by increasing vehicle fees. Considerations are still in place to scrutinize raising gas taxes to help fund roads, maintain the state's system and accomplish important future projects. The consideration of raising gas taxes contributed to the passage of Senate File 257 legislation. As previously discussed, the raised state fuel tax component of the newly signed law helps combat the funding shortfalls being experienced by the state and communities. TIME-21, Senate File 257, and other legislation have given SRTPA an opportunity to apply for funding to complete essential projects having an impact on local communities. The expansion of Highway 20 to a four-lane road is an example of a project that benefited from the new legislation.

The IDOT recently put out an updated analysis of existing revenue sources and potential revenues sources in their 2016 Road Use Tax Fund (RUTF) Study. The potential revenue sources are not a final recommendation and not part of their legislative proposals but are an effort to receive public feedback on ideas for future funding. The potential revenue sources included in the 2016 RUTF Study include the following: a vehicle registration fee approved and levied at the local level; a one percent sales tax on fuel; a tax collected by the state either based on a percent of value or a volume-based fee on resources extracted from the

earth; a tax based on the vehicle miles traveled within a state; implementing fees to travel on road segments; a fee charged to developers for off-site infrastructure needs that arise as a result of new development; a written promise to repay borrowed money at a fixed rate on a fixed schedule; privatization of infrastructure; fee imposed on containers moving through a designated geographic area; a tax charged on imported oil based on either the volume or value of the imported oil; and a tax on light-duty vehicle tires.

C. *Transportation Alternatives*

Several of the following transportation alternatives have been already been implemented amongst SRTPA are included to highlight the options county engineers are exercising. Please note the following is a general consensus of alternatives considered by stakeholders to address key needs and issues in the region.

1. *Bridge replacement alternatives*

As Iowa ranks 7th amongst all states in the total number of bridges, replacement of infrastructure can be expensive and time consuming. The use of box culverts is a potential bridge replacement measure to consider. Culverts are small pre-fabricated bridges that are safe, simple to install, low cost, and non-time-consuming. An additional alternative for consideration is constructing bridges on the side of the site and moving the structure into the place of the previous bridge. This means of construction is an effective tool in certain situations and non-time-consuming that results in minimal impact for the users.

2. *Automated Vehicles*

Brainstorming innovative ideas that account for unpredictable weather, aging populations, vehicle operator concerns, and other issues in order to protect all drivers should always be considered. The introduction of automated vehicles being a part of SRTPA's transportation network is a potential reality in the future. There is a general consensus that automated vehicles have the ability to judge what is transpiring in the environment and react accordingly, resulting in a safer transportation environment.

3. Rumble strips

In 2004, IDOT designated shoulder strips as a design standard for paved shoulder construction in rural areas. A potential alternative to raise drivers' awareness is placing rumble strips on the dividing line of a two-lane highway along stretches that are currently designated as a No Passing Zone. This use of rumble strips is intended to reduce the frequency of head-on, sideswipe, and crossing-the-centerline crashes on two-lane and rural highways. In 2003, the Insurance Institute for Highway Safety conducted a study and survey on centerline rumble strips and found that head-on and opposing-direction sideswipe crashes were reduced by approximately 21 percent. Although rumble strips are known to be a safe and effective tool for motor vehicle awareness, they are considered to be a hazard for bicyclists however. To address the reasons on rumble strips being hazardous for bicyclists, IDOT introduced additional alternatives allowing gaps in between stretches of rumble strips allowing bicyclists to cross over the centerlines of roads.

4. Enhanced efforts to improve locations of utility lines

Future transportation-related construction or expansion projects may involve the movement of utility lines if none are present on the project site. Due to the expensive nature of relocating utility lines, an alternative to prevent future displacement is developing a long range plan that features a development system for projects. An example of this long range plan could include estimations on where new projects may occur and where utility lines can be relocated without disturbing the utility network during construction. Widespread access to documentation and mapping of the long range plan is an additional consideration to take.

5. Invoice miles to drivers for wear and tear on the roads

With the increasing urgency to make cars fuel efficient and environmentally friendly, the gas tax is losing revenue. Proceeds of the gas tax facilitate improvements to the roads, but with cars attaining as much as 50 miles per gallon, it is hard to determine with the gas tax which vehicles are putting more wear and tear on the roadways. The idea of frequently assessing vehicles using Iowa's roads is currently being tested in eastern Iowa as well as other parts of the country. Simply put the state could "bill miles" to drivers based on how much and where individuals are driving by tracking miles with some form of a GPS device. In order to succeed, the concept must be simple. People do not need the extra complication of tracking their miles while driving their vehicles and many may balk at the notion of "being tracked".

6. 4-to-3-Lane Conversions

With the potential of increased ridership and growing population, SRTPA will have to accommodate the potential changes to their transportation network. An alternative to address the potential changes features the conversion of a 4-lane road into a 3-lane road to increase the utilization and efficiency of the roadway for the traveling public. Reallocating this space in the right locations has been shown to increase the safety and operation of the corridor. In many cases the reallocation of space has provided municipalities an opportunity to grow their network of bike and pedestrian infrastructure and/or align with existing complete streets.

II. Summary

The transportation threats, solutions, and alternatives outlined within SRTPA support coordination among government entities and the public, promote improvements to current and new infrastructure, and encourages legislation creating adequate funding sources allowing the improvements described possible.

Chapter 7: Implementing the Plan

I. Overview

The following chapter identifies projects using a twenty-five-year horizon. The “fiscal constraint” in the first years (2020-2023) of the plan currently programmed in the Transportation Improvement Program is illustrated in Table VII.1. The projects planned for the outer years (2024-2045) of the plan are listed in Tables VII.4 and VII.5. “Fiscal constraint” is not included with the projects planned during the outer years due to unforeseen changes in the future.

On July 6, 2012, the President signed into law the first multi-year transportation authorization enacted since 2005 that later become to be known as the FAST Act. FAST Act funded surface transportation programs valued at more than \$105 billion for fiscal years 2013 and 2014 and transformed the framework for investments to guide the growth and development of the country’s vital transportation infrastructure. The act led to restructuring the core highway formula programs in an effort to streamline the funding process and elimination on multiple discretionary programs.

FAST Act’s funding is distributed amongst several programs that jurisdictions may apply for completing projects. The anticipated funding amounts of each program available to fund SRTPA’s transportation projects are outlined throughout the chapter. Basic financial forecasting methods are included as well. The restructured transportation programs highlighted in the chapter were included with the assumption that funding sources will remain available into the foreseeable future. Please note all projected revenues listed are on based upon FY 2020 dollars.

A. Available Federal Revenue Sources

1. National Highway Performance Program (NHPP)

The purpose of the NHPP is to provide support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a State's asset management plan for the NHS.

2. Surface Transportation Block Grant (STBG) Program

Funds are made available to the state based on a number of factors including vehicle-miles traveled, highway lane miles and the number and size of bridges. The funds can be used for roadway, transit capital projects, pedestrian/bikeway projects, or intermodal planning projects on an (80%) federal, (20%) local basis. A portion of these funds is programmed by local governments acting through metropolitan or regional planning agencies. Nearly all of Iowa RPAs fund a portion of their intermodal transportation planning activities from STBG funds as well.

3. Highway Bridge Program (STBG set-aside)

The Highway Bridge Program provides for the federal replacement or rehabilitation of structurally deficient or functionally obsolete public roadway bridges through using set-aside STBG program funds. Funds are allocated on an (80%) federal, (20%) local basis to qualifying projects; Bridge replacement candidates must have a structure inventory and appraisal (SI&A) sufficiency rating of 60 or less and average daily traffic of at least 25 vehicles whereas bridge rehabilitation candidates must have a SI&A sufficiency rating of 80 or less and average daily traffic of at least 25 vehicles.

4. Congestion Mitigation and Air Quality Improvement (CMAQ)

Nationally, the CMAQ program is intended to fund transportation projects to assist metropolitan areas in non-attainment of Clean Air Act standards. States with existing areas in non-attainment are required to use all funds on projects conforming to their respective state air quality implementation plan. In the event that no existing non-attainment areas are within a state, the state receives a minimum allocation of CMAQ funding that can be used anywhere in the state for any purpose for which STBG funds can be used on the same 80% federal, 20% non-federal basis. City, county, and state projects are eligible for funding.

5. Highway Safety Improvement Program (HSIP)

The HSIP is intended to achieve a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned public roads on tribal lands. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads with a focus on performance.

6. Federal Transit Administration (FTA) Section 5305, 5339, 5329, 5310, and 5311 Programs

The FTA allocates funds to state and local governments for capital assistance and operation of public transit activities through the following programs:

Section 5305(e) Statewide and Nonmetropolitan Transportation Planning

The program's funds are intended to support transit planning in addition to what is conducted by the individual MPOs and are specifically set aside to support RPAs. The RPAs are responsible for local intermodal transportation planning in areas of the state not included in an MPO.

Section 5339 Bus and Bus Facilities

The program's funds provide capital funding to replace, rehabilitate and purchase buses and related equipment and to construct bus-related facilities.

Section 5329 Traffic Safety and Oversight

The program features the FTA having the authority to establish and enforce a new comprehensive framework to oversee the safety of public transportation throughout the United States.

Section 5310 Enhance Mobility of Seniors and Individuals with Disabilities Program

The program provides formula funding to increase the mobility of seniors and persons with disabilities. Funds are apportioned based on each State's share of the transportation populations and are not apportioned to both States and large urban areas. Within Iowa, the funds are allocated on the basis of the number of older adults and individuals with disabilities and allocated by area: Large Urbanized Area (60%), Small Urbanized Area (20%), and Rural (20%). Projects selected for funding must be included in a locally developed, coordinated public transit-human services transportation plan.

Section 5311 Formula Grants for Rural Areas

The programs provide capital, planning and operating assistance to support public transportation in rural areas and communities with populations less than 50,000. Funds are distributed on the basis of land area and population in rural areas (83.15%) and land area, revenue vehicle miles, and low-income individuals in rural areas (16.85%).

7. *Transportation Alternatives Program (TAP)*

TAP provides funding for programs and projects defined as transportation alternatives, including on-and-off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trails program projects; safe routes to school projects; and projects for planning, designing, or constructing boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

B. *Available State Revenue Sources*

1. *Road Use Tax*

This source of funding is utilized by Iowa to support transportation improvements throughout the entire state. Part of the money maintained by Iowa is used for ongoing maintenance and operations of the transportation system and to support intra-city bus system improvements and new highway construction.

2. *Transit Funding*

IDOT provides funds for capital and operating assistance to local public transit operations. IDOT also participates by providing matching funds for programs partially funded by FTA. IDOT will typically provide up to 50 percent of the non-federal share of capital grants. This funding comes from the Road Use Tax.

3. *Other State Funding*

Other state funding programs which may be utilized during the development of the projects listed in the 2045 LRTP include Intelligent Transportation System (ITS Program); Aviation programs, Revitalize Iowa's Sound Economy (RISE); Rail Programs; Recreational Trails Programs; and safety programs.

C. Available Local Revenue Sources

1. General Fund

The general fund of the local city or county is the primary source of operation and maintenance funds when the option of a transit levy isn't available. Money for capital investments on streets and highways may also come from the sale of bonds.

2. Other Local Resources

Other Local funding resources which may be utilized during the development of the projects listed in the 2045 LRTP include property taxes, fares or user fees, and special taxes and assessments.

D. Proposed Transportation Projects FY 2020 – FY 2023

Table VII.1 is a listing of the proposed transportation projects out to FY 2019. This includes proposed STBG, NHPP, Highway Bridge Program-STBG, State of Iowa Primary Road Fund, and TAP projects. Table VII.2 illustrates the estimated transportation expenses for Transit during FY 2020 to FY 2023.

1. STBG/TAP Selection Process

Every year, SRTPA staff sends out applications for the STBG and TAP programs, collects the applications, and puts together a summary for discussion at the SRTPA Transportation Advisory Committee (TAC). The projects are then discussed and selected as recommended projects to the SRTPA Policy Board who ultimately make the decision as to which projects are funded. The projects listed in Table VII.1 can be found in the current SRTPA TIP. It is also important to note that the numbers are in the 1,000's.

It has been estimated the total cost of all listed roadway/highway/interstate/bridge projects out to FY 2023 will total \$72,462,000 while TAP will total \$542,520 out to FY 2023.

Table VII.1: Project Prioritization and Implementation Schedule FY 2020-2023

Time-Frame	Jurisdiction	Project	TPMS #	YOE Cost	Federal Share	Federal Source	State Funding	Local Share
2020-2023	RPA-04	SIMPCO - RPA 4: RPA 4 FHWA PLANNING	218	235	187	STBG	187	48
2020-2023	Monona CRD	L-37: From JCT L37/E16 north to Woodbury Co. Line	12065	1750	0	SWAP-STBG	1400	1750
2020-2023	Woodbury CRD	K-67: From 185th St. to 210th St.	12828	800	640	STBG-HBP	0	160
2020-2023	Cherokee CRD	L AVE: Over Mill Creek	18028	1000	0	SWAP-HBP	0	1000
2020-2023	Monona CRD	WEST ST: Over McCandles Ditch	18084	500	400	STBG-HBP	0	100
2020-2023	Monona CRD	L16: Over Beaver Creek	19096	562	0	SWAP-HBP	0	562
2020-2023	Monona CRD	L16: Over Elk Creek	19117	430	0	SWAP-HBP	0	430
2020-2023	Ida CRD	D-15: Hwy 31 E 0.3 MI	19352	400	0	SWAP-HBP	0	400
2020-2023	Monona CRD	E46: Over Solider River	20644	1080	0	SWAP-HBP	0	1080
2020-2023	Ida CRD	310TH ST: Hwy 59 E 0.75 MI	21228	260	0	SWAP-HBP	0	260
2020-2023	Ida CRD	KEYSTONE AVE: 120th St N 0.25 MI	21230	325	0	SWAP-HBP	0	325
2020-2023	Ida CRD	L51: From Hwy 175 to Hwy 20	21231	371	0	SWAP-STBG	0	371
2020-2023	Plymouth CRD	On K-42, S2/3 T90 R46	29291	500	0	SWAP-HBP	0	500
2020-2023	Cherokee CRD	On L51, Over Rock Creek, from Meridan South 0.67 Miles	32231	400	0	SWAP-HBP	0	400
2020-2023	Woodbury CRD	On K67, Over WOLF CREEK, from 210th Street south 0.2 Miles to 220th Street, on WLINE S36 T88 R45	32651	700	0	SWAP-HBP	0	700
2020-2023	Monona CRD	On SUMAC AVE, Over STREAM, in S22 T84 R42	32856	400	0	SWAP-HBP	0	400
2020-2023	Monona CRD	On LARPENTEUR MEMORIAL RD, Over LITTLE SIOUX RIVER,	32859	1600	0	SWAP-HBP	0	1600
2020-2023	Monona CRD	On L37, Over SOLDIER CREEK, S35 T84 R42	33857	1200	0	SWAP-HBP	0	1200
2020-2023	Le Mars	200th Street to C38	33911	450	360	STBG	360	90
2020-2023	Ida CRD	On M25, from 220th St North to Hwy 20	33929	1800	0	SWAP-STBG	691	1800
2020-2023	Woodbury CRD	Grundy Avenue East to Movable Blacktop, in NE S28 T88 R45	35105	750	0	SWAP-HBP	0	750
2020-2023	Plymouth CRD	On C38, from NW32-92N-48W to NW35-92N-47W	35185	4500	0	SWAP-STBG	1062	4500
2020-2023	Cherokee	6th St	35393	444	0	SWAP-STBG	317	444
2020-2023	Le Mars	In the city of Le Mars, On Central Ave, from 12th St SE to	35396	750	0	SWAP-STBG	600	750
2020-2023	Woodbury CRD	On K64, from Intersection of IA 141 North and East 3.6 Miles to County Route D25	36085	1800	0	SWAP-STBG	1200	1800
2020-2023	Plymouth CRD	On On K49, from from C38 N 1mile, S27/28 T92 R45	36249	1125	0	FM	0	1125
2020-2023	Plymouth CRD	On On K49, from from C38 N 1mile, S27/28 T92 R45	36249	1125	0	FM	0	1125
2020-2023	Monona CRD	On L12, Over Haltz Ditch, from Hwy 175 NE 3.5 Miles to H25-2, in SW S25 T84 R45	36268	700	0	SWAP-HBP	0	700
2020-2023	Ida CRD	On A Ave, Over Outter Creek/ Crawford County	36634	220	0	SWAP-HBP	0	220
2020-2023	Le Mars	In the city of Le Mars, On 12th Street SW, from Central Avenue to 6th Avenue SW	36642	700	0	SWAP-STBG	465	700
2020-2023	Cherokee	Spruce Street to E Bluff Street	36643	377	0	SWAP-STBG	269	377
2020-2023	Monona CRD	On L16, from E54 S 4.5 Miles to Harrison County	37152	53	0	SWAP-HSIP	0	53
2020-2023	Monona CRD	On E16, from Mapleton East 5.5 Miles to Woodbury County Line	37319	1450	0	SWAP-STBG	1160	1450
2020-2023	Monona CRD	On 235th Street, Over McCandles / Cleghorn Ditch	37323	325	0	SWAP-HBP	0	325
2020-2023	Moville	In the city of Moville, Sidewalks along Fair Street, Meridith Lane and Jackson Street	37783	275	195	STBG	195	80
2020-2023	RPA-04	One (1) Light Duty Bus, ADA compliant	37804	102	81	STBG	81	21
2020-2023	Cherokee	In the city of Cherokee, On N. Roosevelt Street, from E.Main Street to Fountain Street	37810	1050	0	SWAP-STBG	840	1050
2020-2023	Lawton	edge of town	37813	300	218	STBG	218	82
2020-2023	Correctionville	In the city of Correctionville, On Highway 20 Correctionville Archaeological Discovery Interpretive Display	37814	44	35	STBG	35	9
2020-2023	DOT-D03-RPA04	US 59: SOLDIER RIVER 1.2 MI N OF CO RD D54	37853	1397	1118	NHPP	0	279
2020-2023	DOT-D03-RPA04	IA 141: SKUNK CREEK 3.8 MI E OF CO RD L32	37980	1127	0	PRF	0	1127
2020-2023	DOT-D03-RPA04	IA 141: MIDDLE SOLDIER RIVER 1.6 MI E OF IA 183	37981	440	0	PRF	0	440
2020-2023	DOT-D03-RPA04	IA 175: MISSOURI RIVER E OF DECATUR NEBRASKA (STATE SHARE)	37982	148	0	PRF	0	148
2020-2023	DOT-D03-RPA04	IA 175: MUCKY CREEK 0.8 MI W OF W JCT IA 141	37983	336	0	PRF	0	336
2020-2023	DOT-D03-RPA04	IA 175: MISSOURI RIVER E OF DECATUR NEBRASKA (STATE SHARE)	37984	148	0	PRF	0	148

*numbers are in the 1,000's

Table VII.1: Project Prioritization and Implementation Schedule FY 2020 – 2023 (Continued)

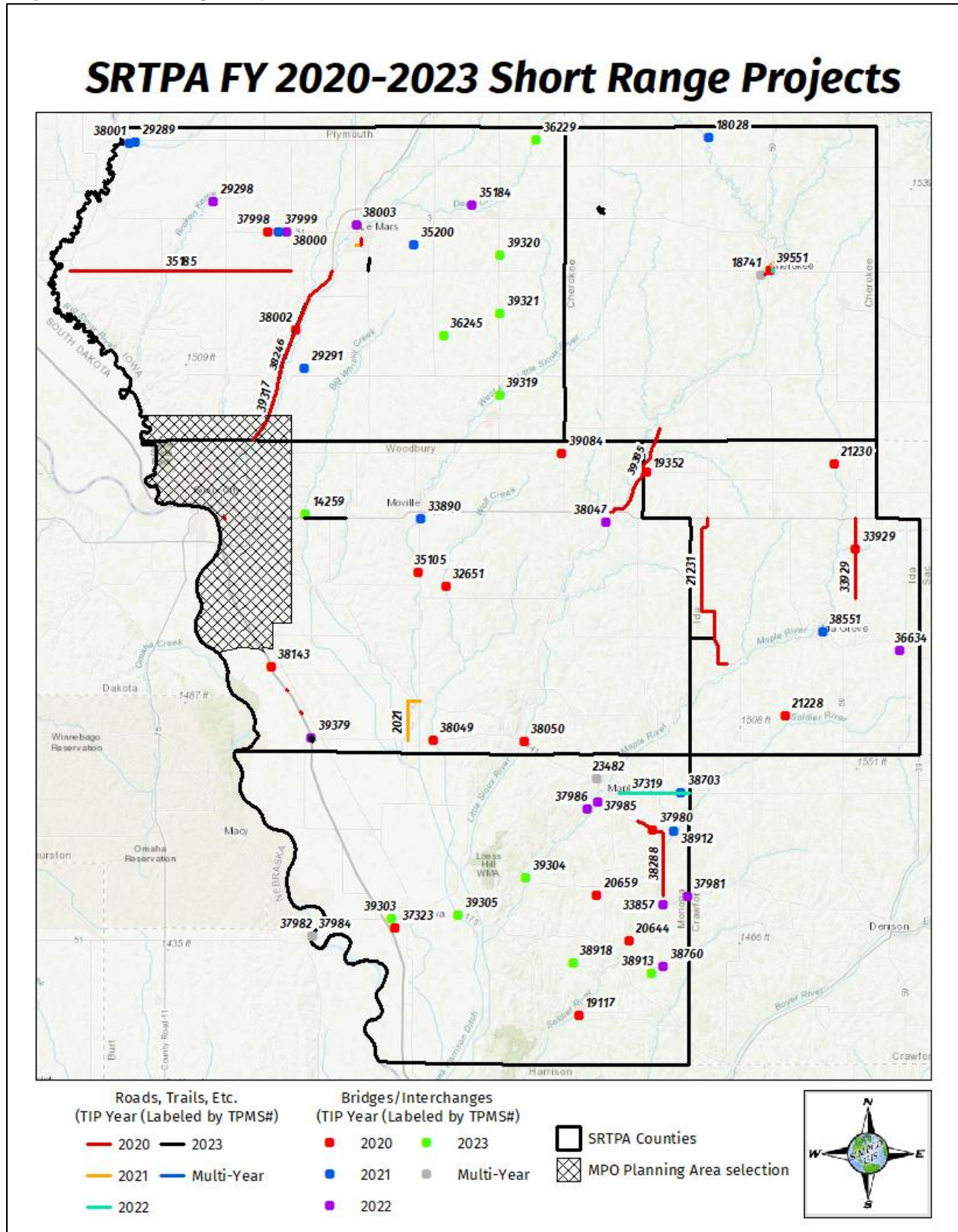
Time-Frame	Jurisdiction	Project	TPMS #	YOE Cost	Federal Share	Federal Source	State Funding	Local Share
2020-2023	DOT-D03-RPA04	IA 175: MAPLE RIVER 1.0 MI W OF E JCT IA 141	37985	2000	0	PRF	0	2000
2020-2023	DOT-D03-RPA04	IA 175: DITCH 1.9 MI W OF E JCT IA 141	37986	220	0	PRF	0	220
2020-2023	DOT-D03-RPA04	IA 3: BROKEN KETTLE CREEK 2.3 MI W OF CO RD K22	37996	376	0	PRF	0	376
2020-2023	DOT-D03-RPA04	IA 3: WESTFIELD CREEK 0.2 MI E OF W JCT IA 12	37997	453	0	PRF	0	453
2020-2023	DOT-D03-RPA04	IA 3: DITCH 1.6 MI W OF CO RD K42	37998	687	0	PRF	0	687
2020-2023	DOT-D03-RPA04	IA 3: STREAM 1.0 MI W OF CO RD K42	37999	103	0	PRF	0	103
2020-2023	DOT-D03-RPA04	IA 3: MINK CREEK 0.4 MI W OF CO RD K42	38000	275	0	PRF	0	275
2020-2023	DOT-D03-RPA04	IA 12: INDIAN CREEK 4.0 MI N OF CO RD C16	38001	2170	0	PRF	0	2170
2020-2023	DOT-D03-RPA04	US 75: DITCH 2.6 MI S OF CO RD C44 (NB & SB)	38002	175	0	PRF	0	175
2020-2023	DOT-D03-RPA04	IA 404: FLOYD RIVER 0.4 MI N OF IA 3 (SB)	38003	330	0	PRF	0	330
2020-2023	DOT-D03-RPA04	IA 31: LITTLE SIOUX RIVER 0.8 MI S OF US 20	38047	660	0	PRF	0	660
2020-2023	DOT-D03-RPA04	IA 141: WOLF CREEK DITCH 1.8 MI E OF CO RD K64	38049	980	0	PRF	0	980
2020-2023	DOT-D03-RPA04	IA 141: LITTLE SIOUX RIVER 0.7 MI E OF IA 31	38050	1200	0	PRF	0	1200
2020-2023	DOT-D03-RPA04	I-29: CO RD E60 TO CO RD E24 (VAR RAMP LOC)	38110	703	0	PRF	0	703
2020-2023	DOT-D03-RPA04	I-29: CO RD K25 (SALIX) INTERCHANGE 6.4 MI N OF IA 14	38143	200	0	PRF	0	200
2020-2023	DOT-D03-RPA04	I-29: CO RD D65 2.2 MI N OF IA 141	38145	908	0	PRF	0	908
2020-2023	DOT-D03-RPA04	I-29: CO RD K35 4.2 MI N OF IA 141	38146	887	0	PRF	0	887
2020-2023	DOT-D03-RPA04	US 20: CORRECTIONVILLE TO W JCT US 59	38191	209	0	PRF	0	209
2020-2023	DOT-D03-RPA04	US 20: CORRECTIONVILLE TO W JCT US 59	38191	209	0	PRF	0	209
2020-2023	DOT-D03-RPA04	US 20: E JCT US 59 TO W OF ADAMS AVE	38192	209	0	PRF	0	209
2020-2023	DOT-D03-RPA04	US 20: E JCT US 59 TO W OF ADAMS AVE	38192	209	0	PRF	0	209
2020-2023	DOT-D03-RPA04	US 59: US 20 IN HOLSTEIN TO CHEROKEE CO	38193	510	0	PRF	0	510
2020-2023	DOT-D03-RPA04	US 59: US 20 IN HOLSTEIN TO CHEROKEE CO	38193	510	0	PRF	0	510
2020-2023	DOT-D03-RPA04	US 75: JACKSON ST IN MERRILL TO CO RD C38	38203	100	0	PRF	0	100
2020-2023	DOT-D03-RPA04	US 75: JACKSON ST IN MERRILL TO CO RD C38	38203	100	0	PRF	0	100
2020-2023	DOT-D03-RPA04	US 20: E OF MOVILLE TO W OF CORRECTIONVILLE	38215	261	0	PRF	0	261
2020-2023	DOT-D03-RPA04	US 20: E OF MOVILLE TO W OF CORRECTIONVILLE	38215	261	0	PRF	0	261
2020-2023	DOT-D03-RPA04	US 75: N OF MAPLE ST IN HINTON TO S OF 2ND ST IN MERRILL (NB)	38246	15328	12263	NHPP	0	3065
2020-2023	DOT-D03-RPA04	IA 141: 0.2 MI W OF N JCT IA 175 IN MAPLETON TO CO RD	38287	789	0	PRF	0	789
2020-2023	DOT-D03-RPA04	IA 141: 0.2 MI W OF N JCT IA 175 IN MAPLETON TO CO RD	38287	789	0	PRF	0	789
2020-2023	DOT-D03-RPA04	IA 141: 2.5 MI E OF CO RD L32 TO 0.4 MI W OF CO RD L37	38288	3767	0	PRF	0	3767
2020-2023	DOT-D03-RPA04	IA 141: 2.5 MI E OF CO RD L32 TO 0.4 MI W OF CO RD L37	38288	3767	0	PRF	0	3767
2020-2023	DOT-D03-RPA04	IA 31: IA 141 IN SMITHLAND TO N JCT CO RD D54	38297	363	0	PRF	0	363
2020-2023	DOT-D03-RPA04	IA 31: IA 141 IN SMITHLAND TO N JCT CO RD D54	38297	363	0	PRF	0	363
2020-2023	Ida Grove	Odebolt Creek	38551	2785	0	SWAP-HBP	0	2785
2020-2023	Marcus	In the city of Marcus, Recreational Trail extending from	38952	147	147	STBG-TAP	147	0

*numbers are in the 1,000's

Table VII.2: Transit Project Prioritization and Implementation Schedule FY 2020-2023

Sponsor	Fund(s)	Expense	Project Type	Object Type	Unit #	Description	Replace eligible year	TPMS/TIP year	Replacement cost	85% FTA	15% Local
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7529	Light Duty Bus (176" wb)	2015	2020	94500	80325	14175
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7121	Light Duty Bus (176" wb)	2016	2020	94500	80325	14175
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7201	Light Duty Bus (176" wb)	2016	2020	94500	80325	14175
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7342	Light Duty Bus (176" wb)	2016	2020	94500	80325	14175
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7426	Light Duty Bus (176" wb)	2016	2020	94500	80325	14175
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7532	Light Duty Bus (176" wb)	2016	2020	94500	80325	14175
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7534	Light Duty Bus (176" wb)	2016	2020	94500	80325	14175
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7131	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7141	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7211	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7351	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7431	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7432	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7441	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7541	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7542	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7543	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7544	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7546	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7547	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7551	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7552	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7553	Light Duty Bus (176" wb)	2018	2020	90500	76925	13575
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7550	Light Duty Bus (176" wb)	2020	2020	93200	79220	13980
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7555	Light Duty Bus (176" wb)	2021	2021	96000	81600	14400
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7556	Light Duty Bus (176" wb)	2021	2021	96000	81600	14400
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7557	Light Duty Bus (176" wb)	2021	2021	96000	81600	14400
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7558	Light Duty Bus (176" wb)	2021	2021	96000	81600	14400
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7559	Light Duty Bus (176" wb)	2021	2021	96000	81600	14400
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7560	Light Duty Bus (176" wb)	2022	2022	98900	84065	14835
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7561	Light Duty Bus (176" wb)	2022	2022	98900	84065	14835
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7562	Light Duty Bus (176" wb)	2022	2022	98900	84065	14835
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7563	Light Duty Bus (176" wb)	2023	2023	101900	86615	15285
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7564	Light Duty Bus (176" wb)	2023	2023	101900	86615	15285
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7565	Light Duty Bus (176" wb)	2023	2023	101900	86615	15285
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7566	Light Duty Bus (176" wb)	2023	2023	101900	86615	15285

Map VII.1 Short Range Projects FY 2020-2023



2.2023 Financial Summary

SRTPA's FY 2020 to FY 2023 transportation finances and estimated expenses are listed in Table VII.3. The projections in the following table were made under the assumption that the STBG and TAP funds will remain close to the targets estimated and disseminated by the IDOT. For the remaining revenue sources an average was determined over the ten year period FY 2009 through FY 2019, and then the average number, remaining constant, projected out to 2023 as seen in Table VII.3. It is important to note that these numbers do not include economic stimulus money that was received in 2009, or extraneous projects, such as the Le Mars Bypass. These numbers are to instead show the typical revenues that RPA IV could expect to receive over the FY 2020 – FY 2023.

Table VII.3: FY 2020 – FY 2023 Financial Summary

Transportation Resources	
Forecasted Roadway Revenues - All Federal Sources	\$66,432,727
Forecasted TAP Revenues	\$356,200
Forecasted TAP Flex Revenues	\$271,900
Forecasted Transit Revenues- All Sources	\$3,946,403
Transportation Resources	\$71,007,230
Roadway Expenses	\$52,058,000
TAP Expenses	\$356,200
Transit Expenses	\$3,336,320
Transportation Expenses Subtotal	\$55,750,520
Financial Difference	\$15,256,710

E. Proposed Transportation Projects FY 2024 – FY 2045

A listing on the proposed projects from FY 2024 to FY 2045 is displayed in Table VII.4 and VII.5. The projects listed derive from STBG, NHPP, HBP, CMAQ, ICAAP, ITS, Federal Air Highway/Rail Fund, HSIP, and TAP. In table VII.6 and VII. 7, the estimated transportation expenses from FY 2024 to FY 2034 and FY 2035 to FY 2045 is illustrated. Members of the SRTPA TAC committee based their project selections on priorities that were established by their City Council and County Board of Supervisors. Selected projects were submitted to the SRTPA Policy Board as part of the draft LRTP. Projects for future TIPs will derive from this list of projects.

It has been estimated the total cost of all listed roadway, highway, interstate, bridge, trail, and enhancement projects from FY 2024 to FY 2045 will total \$.

Table VII.4: Project Prioritization and Implementation Schedule FY 2024-2034

Time-Frame	Jurisdiction	Project	TPMS #	YOE Cost	Federal Share	Federal Source	State Funding	Local Share
2024-2034	Cherokee County	Grade and PCC pave from north Quimby City limits to C-38	20407	5000	4000	STP		1000
2024-2034	Cherokee County	L-51 from C-38 to Hwy 3, 3.3 miles of grade and PCC pave	20408	2600	2080	STP		520
2024-2034	Cherokee County	M-21 from south city limits of Aurelia to Hwy 3, 4 miles with 1 mile paid by city, Mill, CIP and HMA overlay	20409	1800	1440	STP		360
2024-2034	Cherokee County	C-66 from Washta city limits to L-51, grade and PCC pave	20410	2900	2320	STP		580
2024-2034	Cherokee County	L-51 from south Quimby city limits to S. County Line, 5 miles, grade and PCC pave	20411	3500	2800	STP		700
2024-2034	City of Cherokee	East Main Street: Sioux - Water; Remove and Replace	20402	1122	898	STP		224
2024-2034	City of Cherokee	Euclid from Main Bluff with Bridge replacement	20403		329	STP		82
2024-2034	City of Cherokee	N. Roosevelt Street (fountain to spruce) 31' wide, 2606'	20404	582	466	STP		116
2024-2034	City of Cherokee	West Main Street: 6th - 11th; Remove and Replace	20405	1100	880	STP		220
2024-2034	City of Cherokee	West Bluff Street: 2th - 11th; HMA Overlay with Bridge replacement	20406	825	660	STP		165
2024-2034	City of Le Mars	Bus 75: Plymouth St. to 8th St. South, AC Overlay	204041					
2024-2034	City of Le Mars	Bus 75: 8th St. South to 18th St South, AC Overlay	204042					
2024-2034	City of Le Mars	3rd St. South: 2nd Ave West to Central Ave, Whitetop	204043					
2024-2034	City of Le Mars	6th St South: Central Ave to 2nd Ave West, Whitetop	204044					
2024-2034	City of Le Mars	1st Ave West: 4th St. South to 8th St. South, Whitetop	204045					
2024-2034	City of Le Mars	3rd St. South: Central Ave to 4th Ave East, Whitetop	204046					
2024-2034	City of Le Mars	6th Ave. West: Plymouth St. to 2nd St. South, AC Overlay	204048					
2024-2034	City of Le Mars	7th St. South: Central Ave to 2nd Ave West, Whitetop	204049					
2024-2034	City of Le Mars	5th St. South: Central Ave to 1st Ave West, Whitetop	204050					
2024-2034	City of Le Mars	10th St. South: Central Ave to 4th Ave East, Whitetop	204051					
2024-2034	City of Le Mars	7th St. South: Central Ave to 4th Ave East, Whitetop	204052					
2024-2034	City of Le Mars	K49: 18th St. to 24th St. E, Whitetop		850		SWAP-STBG	680	170
2024-2034	City of Le Mars	12th St. South: 2nd Ave East to 7th Ave East, Whitetop		525		SWAP-STBG	420	105
2024-2034	Ida County	L-51: L51 Cherokee County Line South to US 20 PCC Resurfacing	204014	1406.25	1125	STP		281.25
2024-2034	Ida County	M-25: Hwy20 North to Galva city limits	204016	887.5	710	STP		177.5
2024-2034	Ida County	D-15: L-51 East to Hwy 59 Reconstruction	204017	3125	2500	STP		625
2024-2034	Ida County	L-51: D-54 North to Battle Creek City limits HMA resurfacing	204021	762.5	610	STP		152.5
2024-2034	Ida County	D54 from US 59 East to M31						
2024-2034	Iowa DOT	US 75 Woodbury County Line to LeMars Inlay/Overlay	204071	70000	56000	NHPP		
2024-2034	Iowa DOT	US 20 Correctionville to Sac County Line 4-lane	204072	280000	224000	NHPP		
2024-2034	Iowa DOT	US 20 Lawton to East of Merville rehab	204073	15000	8000	NHPP		
2024-2034	Iowa DOT	IA 3 K22 to US 75 rehab	204074	5100			5100	
2024-2034	Iowa DOT	IA 3 Cleghorn to Remsen rehab	204075	6200			6200	
2024-2034	Iowa DOT	IA 31 to US 59 rehab	204076	9500			9500	
2024-2034	Iowa DOT	US 59 from IA 3 to O'Brien Co Line rehab	204077	12000	6160	NHPP		
2024-2034	Iowa DOT	IA 175 Battle Creek to Mapleton rehab	204078	8800			8800	
2024-2034	Iowa DOT	IA 37 from IA 175 to IA 183	204079	4700			4700	
2024-2034	Monona County	110th St.: Over unnamed Trib.; Bridge Replacement	204024	265	212	SWAP-HBP		53
2024-2034	Monona County	285th St.: Over Jordan Creek; Bridge Replacement	204025	630	504	SWAP-HBP		126
2024-2034	Monona County	Sumac Ave: Over Rush Trib.; Bridge Replacement	204026	250	200	SWAP-HBP		50
2024-2034	Monona County	210th St.: Over Jordan Creek; Bridge Replacement	204027	400	320	SWAP-HBP		80
2024-2034	Monona County	Co. Hwy. L-12: Over Monona-Harrison Ditch; Deck Repace	204028	250	200	SWAP-HBP		50
2024-2034	Monona County	Co. Hwy. L-14: Over Little Sioux Ditch; Bridge Replacement	204029	950	760	SWAP-HBP		190
2024-2034	Monona County	Co. Hwy. E-16: Over Rush Creek; Bridge Replacement	204030	560	448	SWAP-HBP		112
2024-2034	Monona County	Co. Hwy. L-32: Over Jordan Creek; Bridge Replacement	204031	250	200	SWAP-HBP		50
2024-2034	Monona County	Co. Hwy. E-54: Over Soldier River; Bridge Replacement	204032	1400	1120	SWAP-HBP		280
2024-2034	Plymouth County	K-22: C-44 to Hwy 3, Pavement Rehabilitation	204034	3750		FM		
2024-2034	Plymouth County	C-60: From K-49 east 3.75 miles, Reconstruction	204035	4500	3600	STP		900
2024-2034	Plymouth County	C-80: K-22 to Hwy 75, Pavement Rehabilitation	204038	2600	2080	STP		520
2024-2034	Plymouth County	L-14: on L-14 from Hwy 3 N. to Plymouth/Sioux Co. Line, HMA Resurfacing	204040	4000	3200	STP		800
2024-2034	Plymouth County	Various Bridge Projects	204041	10000	8000	STP		2000
2024-2034	Plymouth County	On Lynx Ave, Sec 4 - T91N - R45W		500		SWAP-HBP		500
2024-2034	Plymouth County	On Fir Ave, Sec 4 - T92N - R47W		450		SWAP-HBP		450
2024-2034	Woodbury County	County Route D38 from Bronson Bridge to Intersection of D38 and K64, Merville Blacktop	204053	1400	0			1400
2024-2034	Woodbury County	County Route D38 from Intersection of K64 to Iowa Hwy 31	204054	2400	1400	STP		1000
2024-2034	Woodbury County	County Route K45 from Intersection of D50 to Intersection of K45 and K25 at Salix	204055	400	320	STP		80
2024-2034	Woodbury County	County Route K45 from Intersection of K45 and K25 at Salix to Monona County Line	204056	2000	1600	STP		400
2024-2034	Woodbury County	County Route K25 from Intersection of D50 to the I29 interchange at exit 134	204057	2000	1600	STP		400
2024-2034	Woodbury County	County Route D25 from Intersection of D38 to County road D51	204058	1200	960	STP		400
2024-2034	Woodbury County	County Route D25 from Intersection of D51 to County route K64	204059	1750	1250	STP		500
2024-2034	Woodbury County	County Route D25 from Intersection of K64 to IA Hwy 414	204060	2000	1600	STP		400
2024-2034	Woodbury County	County Route K42 from Intersection of D25 to US Hwy 20	204061	1500	1200	STP		300
2024-2034	Woodbury County	K64: Over West Fork Little Sioux River; Bridge Replacement, P280	204062	600	480	STP-HBP		120
2024-2034	Woodbury County	D12: Over West Fork Little Sioux River; Bridge Replacement, C27	204063	800	640	STP-HBP		160
2024-2034	Woodbury County	Local Road, Taylor Ave : Over Unnamed Creek; Bridge Replacement, X237	204067	400	320	STP-HBP		80
2024-2034	Woodbury County	Local Road, Michigan Ave : Over Unnamed Creek; Bridge Replacement, K19	38732	300	240	STP-HBP		60
2024-2034	Woodbury County	D22, 160th Street : Over Unnamed Creek; Bridge Replacement, K14-10	38732	400	320	STP-HBP		80
2024-2034	Woodbury County	D22: Over Unnamed tributary ; Bridge Replacement, A24	18344	600	480	STP-HBP		120
2024-2034	Woodbury County	D54: Over West Fork Little Sioux River, Bridge Replacement, P276	2040114	750	600	STP-HBP		150
2024-2034	Woodbury County	Local Road, Mason Ave Over Unnamed Creek; Bridge Replacement, N191	37716	400	320	STP-HBP		80

*numbers are in the 1,000's

Table VII.5: Project Prioritization and Implementation Schedule FY 2035-2045

Time-Frame	Jurisdiction	Project	TPMS #	YOE Cost	Federal Share	Federal Source	State Funding	Local Share
2035-2045	Cherokee County	C-66 from L-51 to Hwy 59, 5 miles of grade and PCC pave	204082	4200	3360	STP		840
2035-2045	Cherokee County	M-21 from Hwy 3 to C-16, 8 miles, Mill, CIP, HMA pave	204083	6400	5120	STP		1280
2035-2045	City of Cherokee	11th Street Main to Willow	204080	271	217	STP		54
2035-2045	City of Cherokee	North 11th past the golf course. PCC paving	204081	345	276	STP		69
2035-2045	City of Le Mars	2nd St. South: 2nd Ave East to 4th Ave East, Whitetop	204094					
2035-2045	City of Le Mars	1st St. South: 5th Ave West to 1st Ave West, AC Overlay	204095					
2035-2045	City of Le Mars	2nd St. North: 5th Ave West to 3rd Ave West, AC Overlay	204096					
2035-2045	City of Le Mars	6th St. South: Central Ave to 3rd Ave East, Whitetop	204097					
2035-2045	City of Le Mars	5th St. South: Central Ave to 3rd Ae East, Whitetop	204098					
2035-2045	City of Le Mars	2nd Ave West: 3rd St. South to 4th St. South, Whitetop	204099					
2035-2045	City of Le Mars	1st St. South: Lincoln St. to 4th Ave East, AC Overlay	204100					
2035-2045	City of Le Mars	3rd St. North: 5th Ave West to 2nd Ave West, AC Overlay	204101					
2035-2045	City of Le Mars	9th St. South: Central Ave to 2nd Ave. West, Whitetop	204102					
2035-2045	City of Le Mars	1st Ave. East: 8th Street South to 1/2 North, Remove and Replace	204103					
2035-2045	City of Le Mars	12th St. South: Central Ave. to 6th Ave West, AC Overlay	204104					
2035-2045	Ida County	L-67: Hwy 175 North to Hwy 20 New PCC	204084	5950	4760	STP		1190
2035-2045	Ida County	M-25: Galva City limits North to Cherokee County Line HMA resurfacing	204085	490	392	STP		98
2035-2045	Ida County	L-51: Hwy 175 North to D-22	204087	3870	3096	STP		774
2035-2045	Ida County	German Ave N 150th St from E15 South and West to Holstein						
2035-2045	Monona County	Co. Hwy. E54 Overlay			3250			
2035-2045	Monona County	Co. Hwy. E-16: Over Haitz; Bridge Replacement			850			
2035-2045	Monona County	Co. Hwy. L-16: Over Tributary to Jordan Creek; Bridge Replacement			925			
2035-2045	Monona County	Co. Hwy. K-64: Woodbury-Monona Ditch; Bridge Replacement			850			
2035-2045	Monona County	Co. Hwy. K-45: Blencoe to Harrison County Repave			5500			
2035-2045	Monona County	Co. Hwy. K-42: Onawa to Woodbury County Overlay			7500			
2035-2045	Plymouth County	K-22: Hwy 3 to Sioux County Line, Reconstruction	204088	11000	8800	STP		2200
2035-2045	Plymouth County	C-66: Hwy 140 East to Cherokee Co. Line, Pavement Rehabilitation	204089	3200	2560	STP		640
2035-2045	Plymouth County	C-60: Hwy 140 to Cherokee Co. Line, HMA Resurfacing	204090	2400	1920	STP		480
2035-2045	Plymouth County	C-66: From NCL Kingsley to C-60, HMA Resurfacing	204091	2200	1760	STP		440
2035-2045	Plymouth County	C-70: From K-49 East to Hwy 140	204092	4600	3680	STP		920
2035-2045	Plymouth County	Various Bridge Projects	204093	12000	9600	STP		2400
2035-2045	Woodbury County	County Route D30 from Intersection of County Route L21 to Iowa Hwy 31	2040105	900	720	STP		180
2035-2045	Woodbury County	County Route L21 from Intersection of County Route D30 to US Hwy 20	2040106	800	640	STP		160
2035-2045	Woodbury County	County Route K49 from NCL Lawton to Plymouth Co. Line	2040107	1000	800	STP		200
2035-2045	Woodbury County	County Route D12 from Hwy 140 to Co. Route K49	2040108	1800	1440	STP		360
2035-2045	Woodbury County	County Route D12 from Hwy 140 to Co. Route L21	2040109	1200	960	STP		240
2035-2045	Woodbury County	County Route K64 from Hwy 20 to Co. Route D25	2040110	3000	2400	STP		600
2035-2045	Woodbury County	County Route K64 from Hwy 20 to Co. Route D25	2040111	1400	1120	STP		280
2035-2045	Woodbury County	Local Road, Michigan Ave Over Unnamed Creek; Bridge Replacement, K182	2040115	400	320	STP-HBP		80
2035-2045	Woodbury County	Local Road, 210th St. Over Unnamed Creek; Bridge Replacement, K103	2040119	600	480	STP-HBP		120
2035-2045	Woodbury County	Local Road, Taylor Ave Over Unnamed Creek; Bridge Replacement, L238	2040120	400	320	STP-HBP		80
2035-2045	Woodbury County	Local Road, Michigan Ave Over Unnamed Creek; Bridge Replacement, A208	2040121	600	480	STP-HBP		80
2035-2045	Woodbury County	Local Road, Taylor Ave Over Unnamed Creek; Bridge Replacement, M299	2040123	500	400	STP-HBP		80

*numbers are in the 1,000's

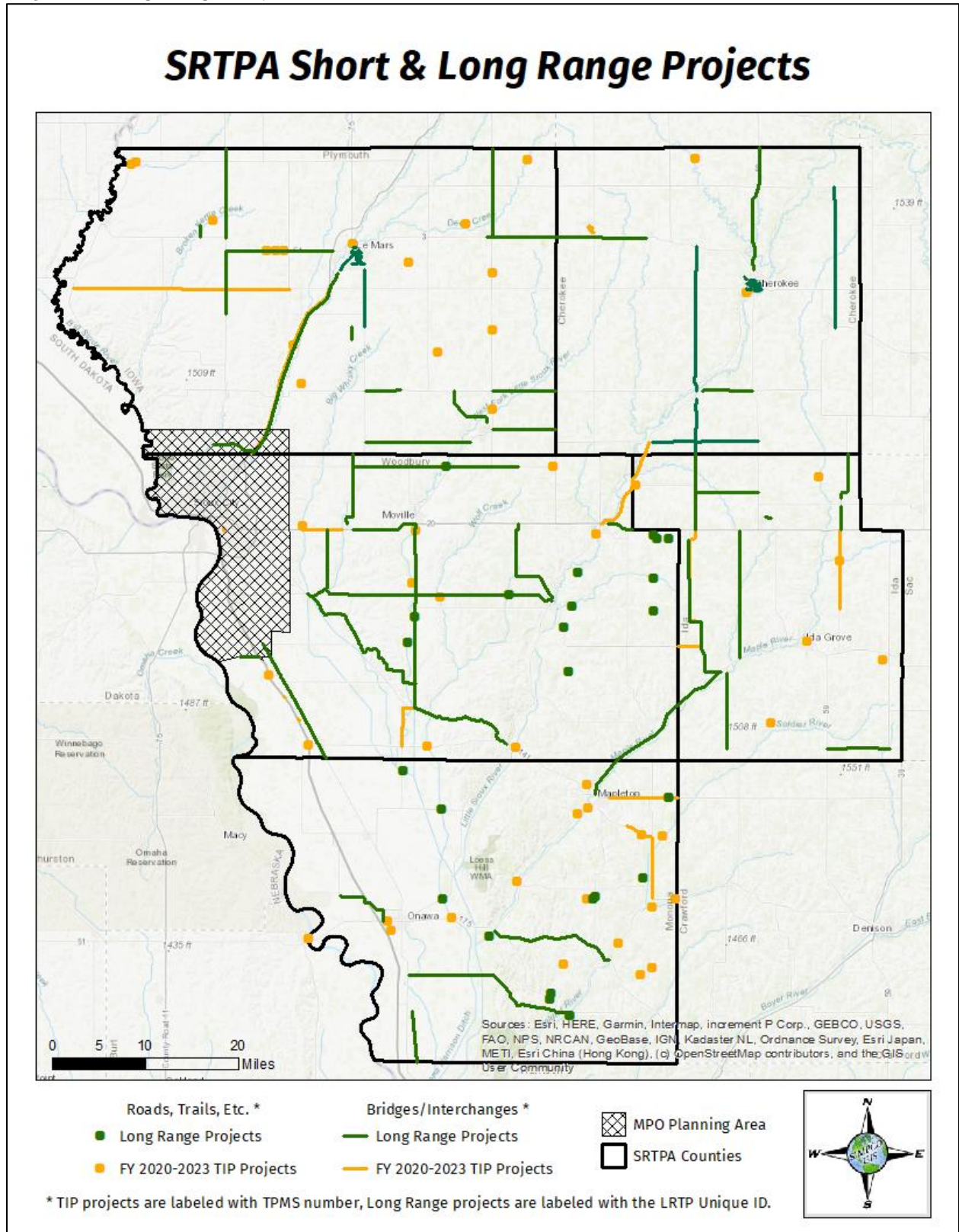
Table VII.7: Transit Project Prioritization and Implementation Schedule FY 2035-2045

Sponsor	Fund(s)	Expense	Project Type	Object Type	Unit #	Description	Replace eligible year	TPMS/TIP year	Replacement cost	85% FTA	15% Local
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7529	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7121	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7201	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7342	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7426	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7532	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7534	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7131	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7141	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7211	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7351	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7431	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7432	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7441	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7541	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7542	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7543	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7544	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7546	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7547	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7551	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7552	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7553	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7550	Light Duty Bus (176" wb)	2035	2035	\$ 124,320	\$ 105,672	\$ 18,648
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7555	Light Duty Bus (176" wb)	2036	2036	\$ 128,050	\$ 108,841	\$ 19,209
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7556	Light Duty Bus (176" wb)	2036	2036	\$ 128,050	\$ 108,841	\$ 19,209
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7557	Light Duty Bus (176" wb)	2036	2036	\$ 128,050	\$ 108,841	\$ 19,209
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7558	Light Duty Bus (176" wb)	2036	2036	\$ 128,050	\$ 108,841	\$ 19,209
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7559	Light Duty Bus (176" wb)	2036	2036	\$ 128,050	\$ 108,841	\$ 19,209
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7560	Light Duty Bus (176" wb)	2037	2037	\$ 131,891	\$ 112,108	\$ 19,783
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7561	Light Duty Bus (176" wb)	2037	2037	\$ 131,891	\$ 112,108	\$ 19,783
Region 4 / SRTS	5339	Capital	Replacement	Vehicle	7562	Light Duty Bus (176" wb)	2037	2037	\$ 131,891	\$ 112,108	\$ 19,783
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7563	Light Duty Bus (176" wb)	2038	2038	\$ 135,848	\$ 115,470	\$ 20,378
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7564	Light Duty Bus (176" wb)	2038	2038	\$ 135,848	\$ 115,470	\$ 20,378
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7565	Light Duty Bus (176" wb)	2038	2038	\$ 135,848	\$ 115,470	\$ 20,378
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7566	Light Duty Bus (176" wb)	2038	2038	\$ 135,848	\$ 115,470	\$ 20,378
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7567	Light Duty Bus (176" wb)	2039	2039	\$ 159,626	\$ 135,862	\$ 23,944
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7568	Light Duty Bus (176" wb)	2039	2039	\$ 159,626	\$ 135,862	\$ 23,944
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7569	Light Duty Bus (176" wb)	2039	2039	\$ 159,626	\$ 135,862	\$ 23,944
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7570	Light Duty Bus (176" wb)	2039	2039	\$ 159,626	\$ 135,862	\$ 23,944
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7571	Light Duty Bus (176" wb)	2039	2039	\$ 159,626	\$ 135,862	\$ 23,944
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7572	Light Duty Bus (176" wb)	2039	2039	\$ 159,626	\$ 135,862	\$ 23,944
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7573	Light Duty Bus (176" wb)	2039	2039	\$ 159,626	\$ 135,862	\$ 23,944
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7574	Light Duty Bus (176" wb)	2039	2039	\$ 159,626	\$ 135,862	\$ 23,944
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7575	Light Duty Bus (176" wb)	2039	2039	\$ 159,626	\$ 135,862	\$ 23,944
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7576	Light Duty Bus (176" wb)	2039	2039	\$ 159,626	\$ 135,862	\$ 23,944
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7577	Light Duty Bus (176" wb)	2039	2039	\$ 159,626	\$ 135,862	\$ 23,944
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7578	Light Duty Bus (176" wb)	2039	2039	\$ 159,626	\$ 135,862	\$ 23,944
Region 4 / SRTS	STP	Capital	Replacement	Vehicle	7579	Light Duty Bus (176" wb)	2039	2039	\$ 159,626	\$ 135,862	\$ 23,944

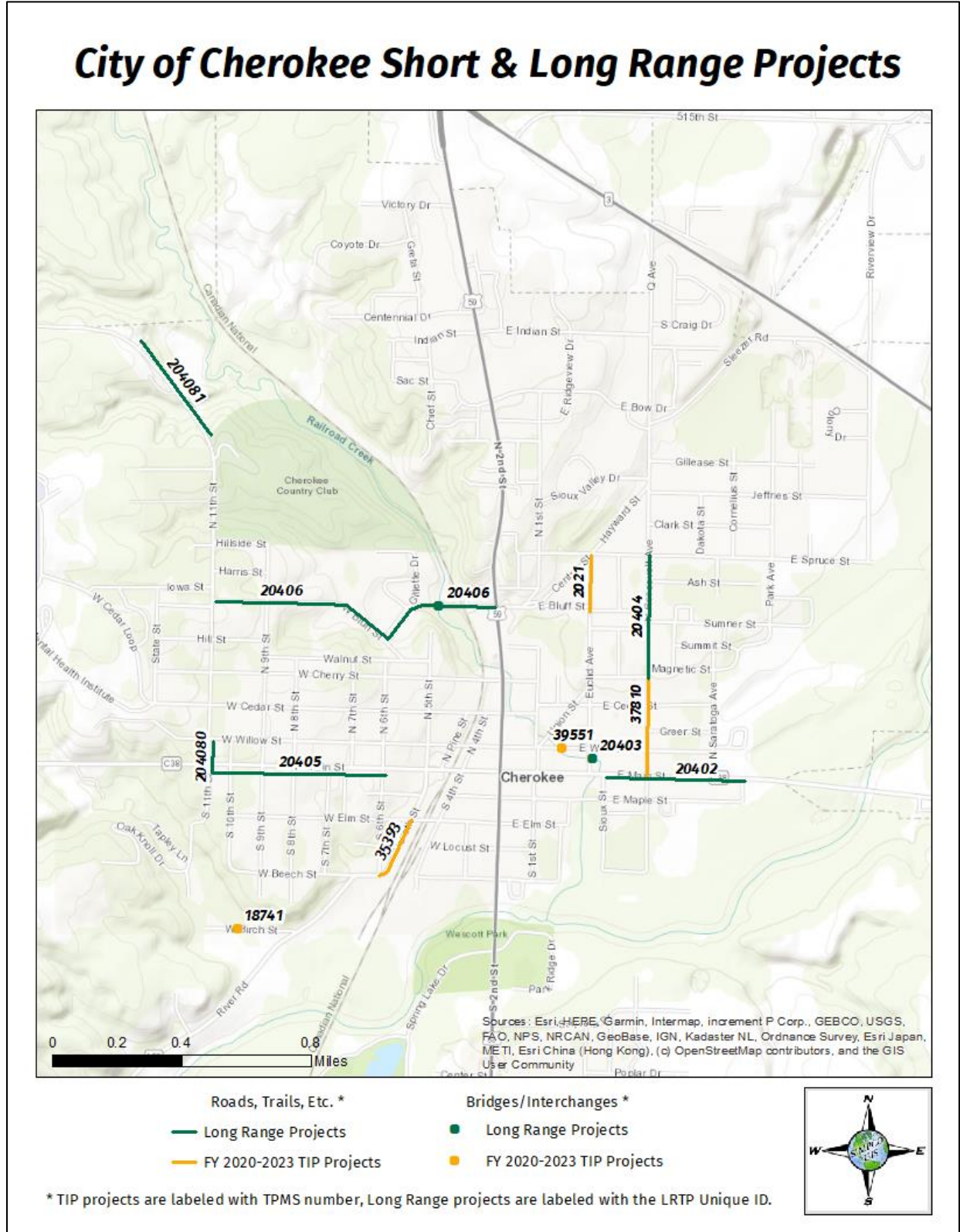
1. Fiscal Years 2024-2045 Financial Summary

Tables VII.4 and VII.5 FY 2024 through FY 2045 Financial Summary shows SRTPA'S transportation finances for the years 5-25 of the 2045 LRTP. Projections were not made for the funding sources in these tables due to unforeseen changes in the future. With the passage of FAST Act, funding sources were streamlined and future updates to the LRTP should evaluate any additional changes in programming and funding sources. Maps showing FY 2024 to FY 2045 projects by county can be found in the appendix.

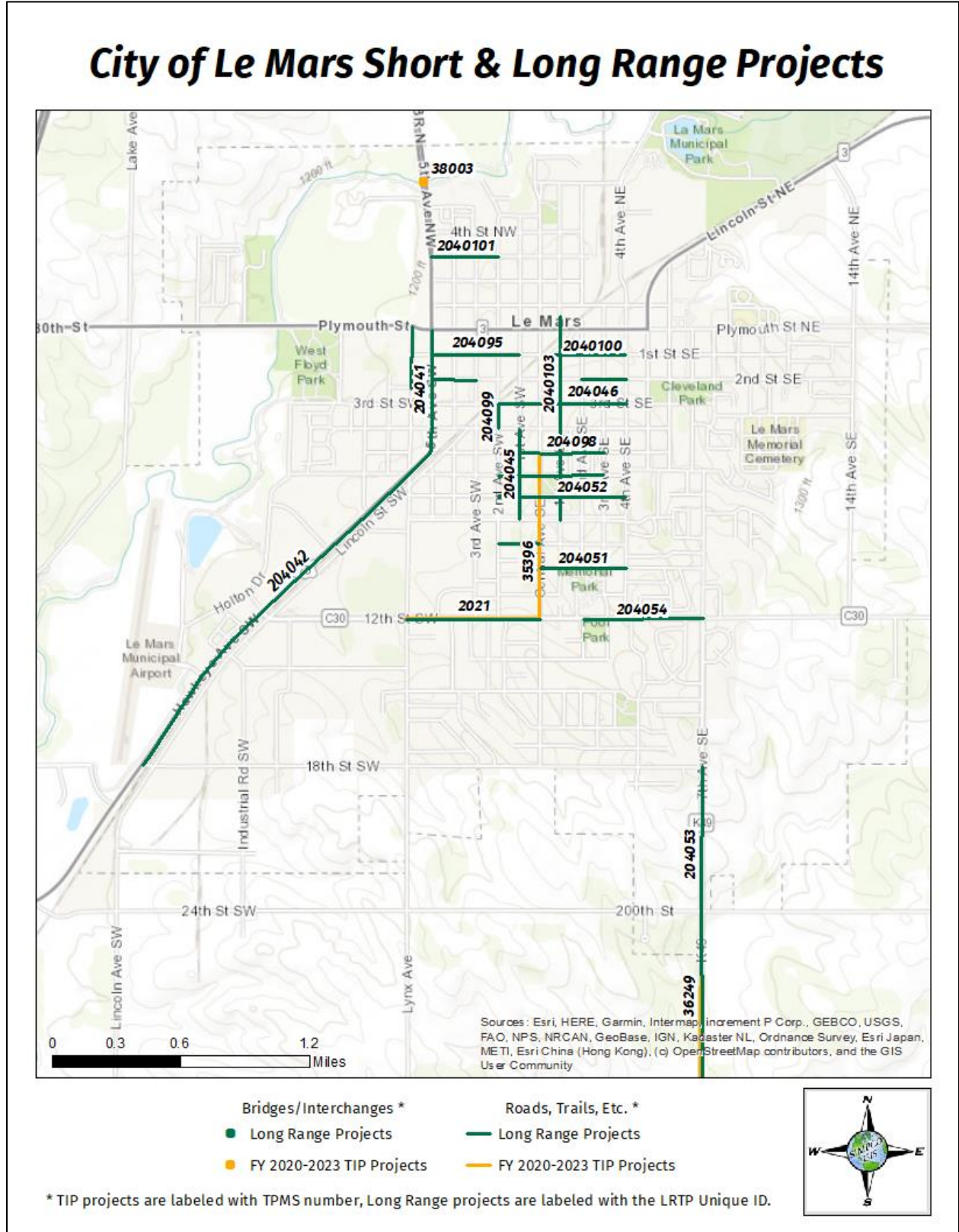
Map VIII.2 Long Range Projects FY 2024-2045



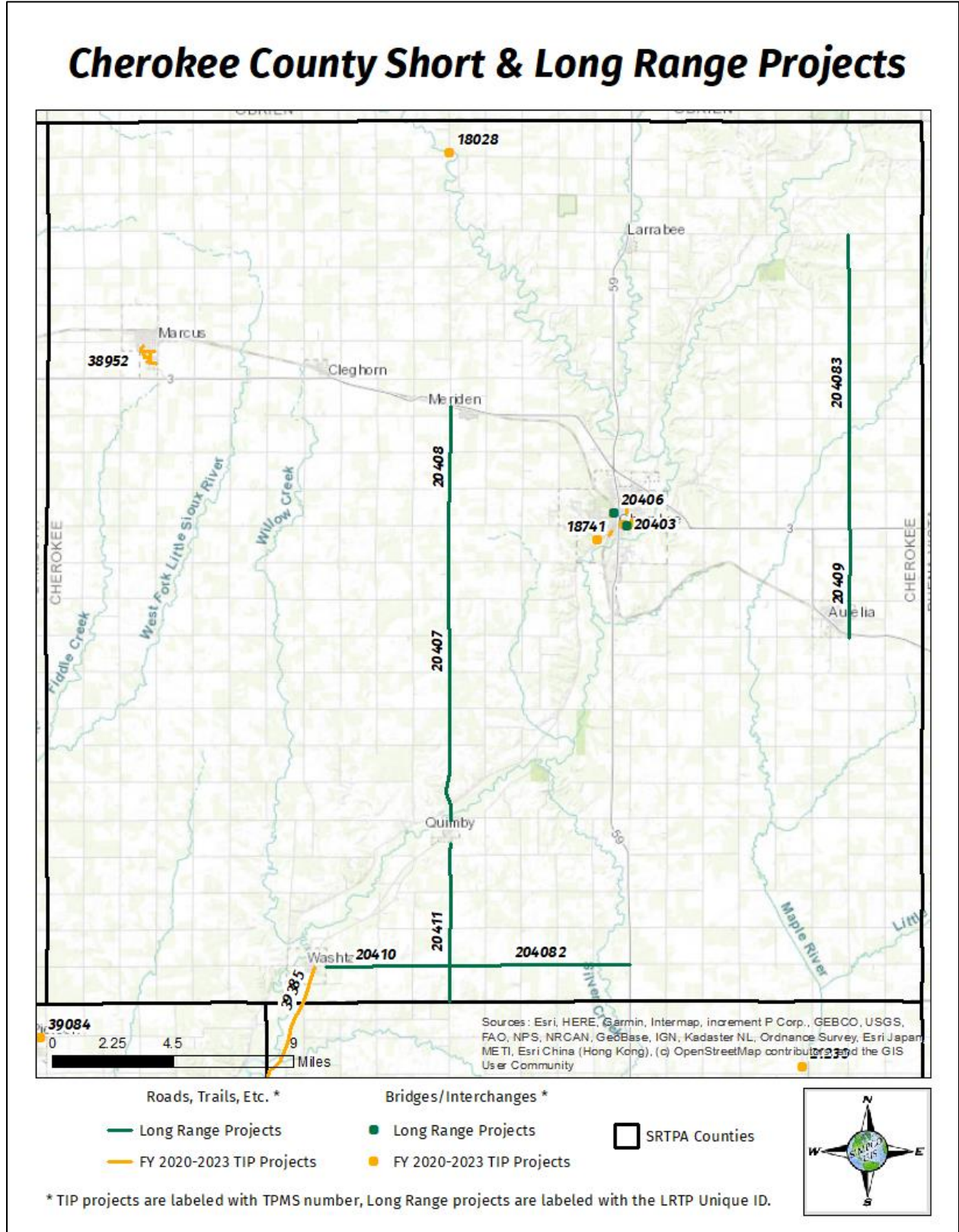
Map VIII.3 Long Range Projects for City of Cherokee FY 2024-2045 and TIP projects for FY 2020-2023



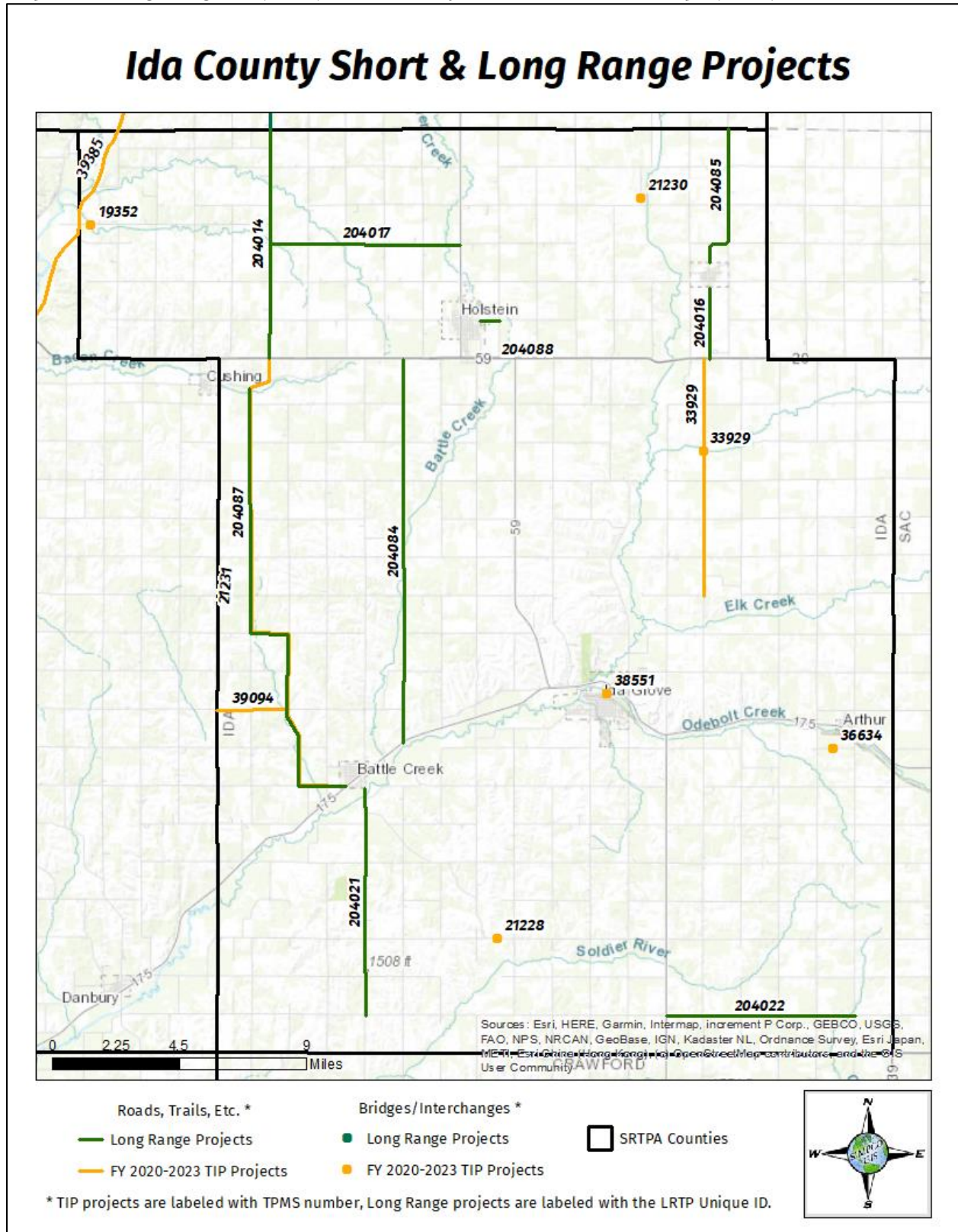
Map VIII.4 Long Range Projects for City of Le Mars FY 2024-2045 and TIP projects for FY 2020-2023



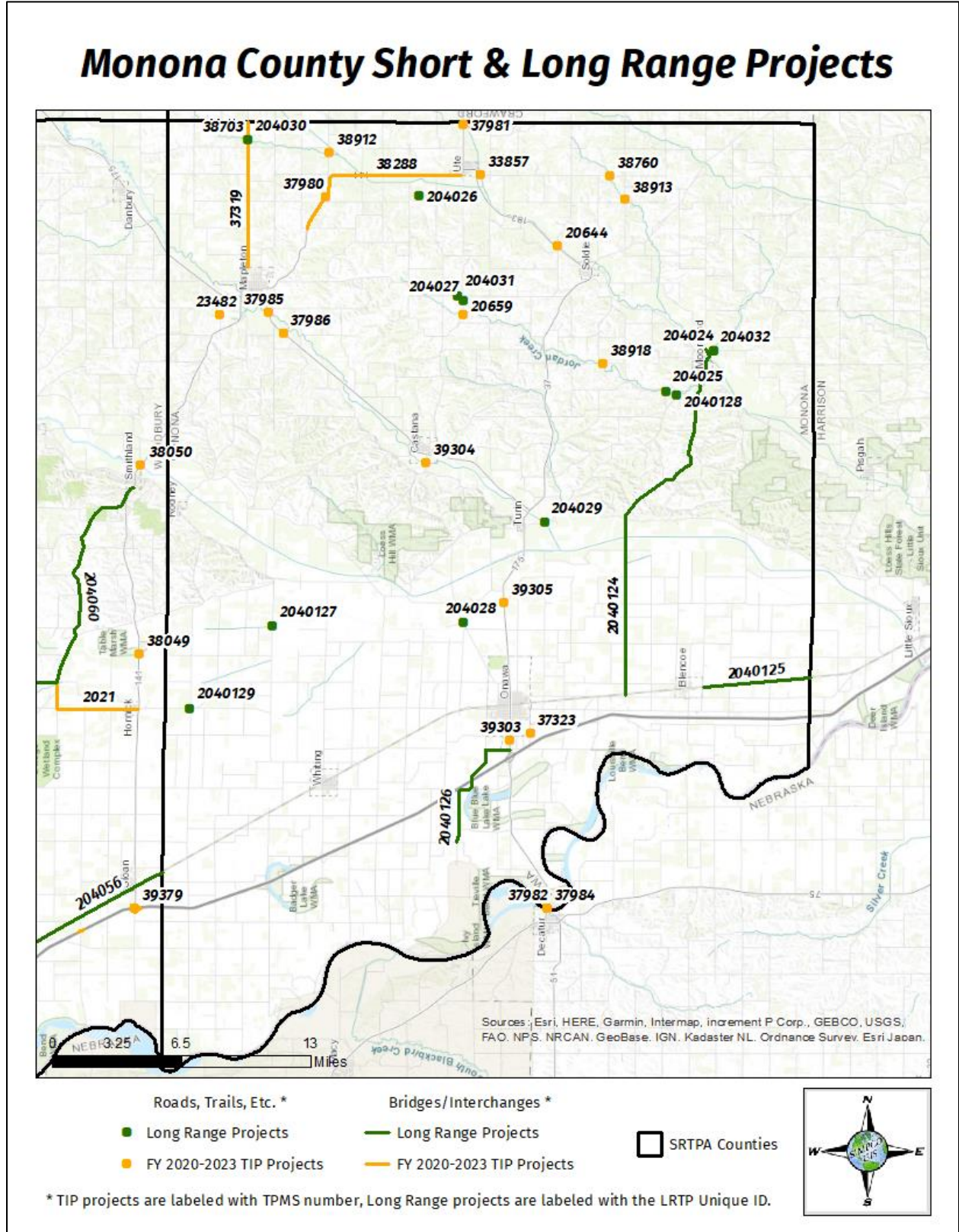
Map VIII.5 Long Range Projects for Cherokee County FY 2024-2045 and TIP projects for FY 2020-2023



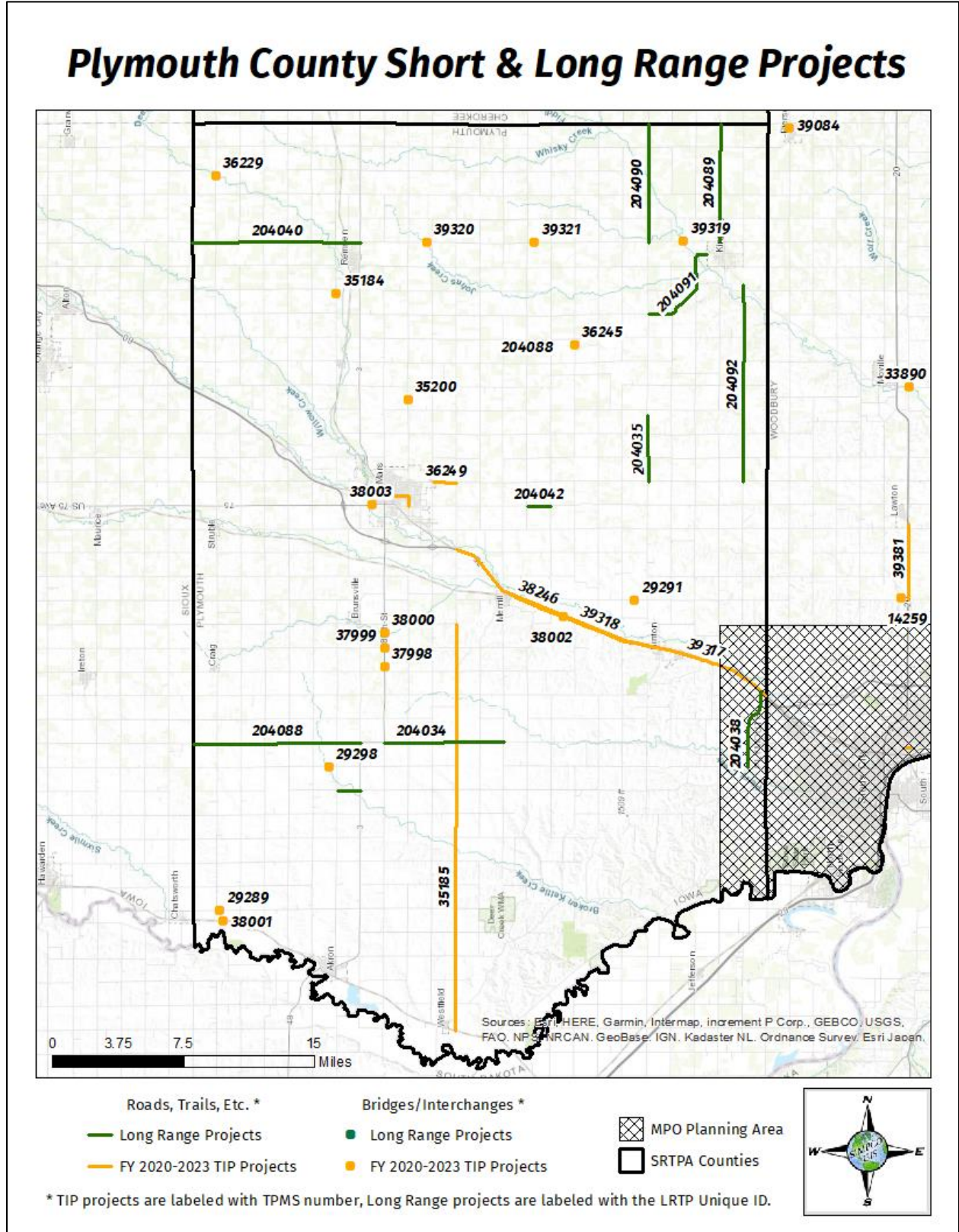
Map VIII.6 Long Range Projects for Ida County FY 2024-2045 and TIP projects for FY 2020-2023



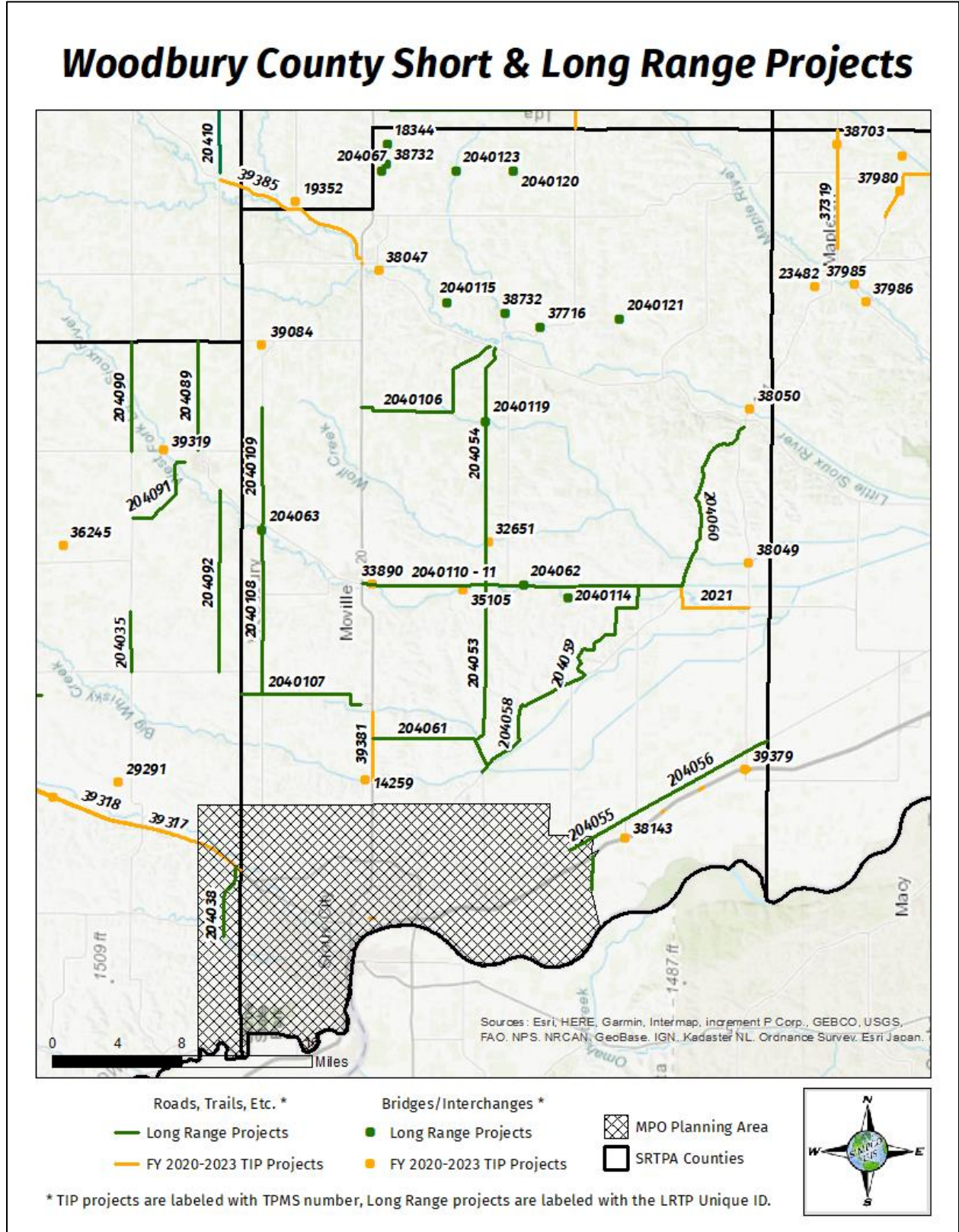
Map VIII.7 Long Range Projects for Monona County FY 2024-2045 and TIP projects for FY 2020-2023



Map VIII.8 Long Range Projects for Plymouth County FY 2024-2045 and TIP projects for FY 2020-2023



Map VIII.9 Long Range Projects for Woodbury County FY 2024-2045 and TIP projects for FY 2020-2023



F. Long Term Transportation Policies and Major Plans

1. Preservation

The main goal for SRTPA is to preserve the existing transportation network. Funding is the most significant influence regarding transportation projects in the area. A shortfall of funding over the years makes it extremely difficult to plan for projects six to 25 years out. The tables above illustrate the needs of the area mainly to preserve the transportation network that is already in place. Rehabilitation, replacement, resurfacing, and overlay projects are overwhelmingly apparent throughout this chapter.

2. Ida Grove West Access

In 1965, the City of Ida Grove identified through their comprehensive planning process, the need for a West Access to alleviate traffic from their downtown streets. In 1965 and again in 1978, the concept was discussed but the project was never started. Ida Grove then updated their Comprehensive Plan again in 2004 and listed the West Access as a project that would provide new access, improve traffic flow, and improve safety in Ida Grove. Currently, the City of Ida Grove is seeking funding to complete this project.

G. Regional Update

The LRTP will undergo some major and minor changes when it will be updated in five years. Some factors to account for in the FY 2045 update is new transportation legislation and updated ACS estimates. These could have an impact on demographics, funding, opportunities, threats, solutions, and projects. Feedback and changes to the LRTP will be obtained from the public, natural resource agencies, historic/cultural agencies, IDOT, Federal Highway Administration, FTA, and through the SRTPA TAC and Policy Board for the FY 2045 LRTP update.

H. Modal Plans and Special Studies

SRTPA staff will assist with any modal plans and/or special studies that will be undertaken within the region in the future.

1. Lewis and Clark Multi-Use Trail Planning Study

SIMPCO/SRTPA was a member of both the Project Committee and the Steering Committee Organization for the Lewis and Clark Multi-Use Trail Planning Study. The project in Iowa would run from the Sioux City Metropolitan Planning Area south to the Iowa/Missouri border. The study was completed and can be found at <https://iowadot.gov/lewisclarktrail/>

1. PlyWood Trail Study

SRTPA staff drafted a feasibility study evaluating a transportation link for bicycle and pedestrian travel between the communities of Sioux City and Le Mars, Iowa. The development of the feasibility study came from interest and a desire for a regional connection for bicycle and pedestrian users. The feasibility study outlined three possible routes. The Today Route focuses on routes that are currently being used by cyclists in the region and could be implemented by placing up signage. The Main Line Route identifies a possible route that is a separated trail that generally sits within the US 75 right-of-way and utilizes a portion of IDOT owned abandoned rail line. The Scenic Trail Route identifies the desire of the general public to have a more scenic option. Any Scenic Trail route options would have to work with individuals, the Army Corps, or various other groups that may allow access to scenic areas or to develop trail loops. The PlyWood Trail Committee continues to meet regularly and is currently researching the development of a Trail Association to fundraise, construct, and maintain a future trail system.

I. Public Participation Goals and Objectives

As stated in the Public Participation Plan, during the draft development phase, the SRTPA staff develops a document with input from interested state and local parties. Some of these organizations include but are not restricted to: concerned citizens, natural resource agencies, cultural/historic agencies, the media, and numerous others. These goals and objectives were formed using the guidelines of the Public Participation Plan for the LRTP.

1. Goal 1: Early and Continuing Opportunities for Public Involvement

Goal Objectives:

- Send out mailings to notify individuals and groups that the plan is being developed and they can contact SRTPA staff to learn more about the Long Range Transportation planning process
- Send out press releases describing recent project developments and public involvement opportunities to the various regional media
- Maintain a web home page (www.simpco.org) with planning recommendations and documents with a comment form and e-mail access

2. Goal 2: Adequate time for public review and comment at important decision points of the LRTP Update.

Goal Objectives:

- Allow a 30 day comment period before final approval of the LRTP
- Provide SRTPA staff contact information including phone number, fax number, address, and email on all public notices, mailings and web page

3. Goal 3: Develop public support for planning recommendations and documents.

Goal Objectives:

- Demonstrate results of public involvement influences of past projects
- Publish public comments in adopted planning recommendations and documents

J. Public Involvement and Results

Chapter Six was largely based on the information received from county engineers and surveys gathered from the public, natural resources agencies, cultural/historic agencies, and other interested parties during the last LRTP update. The results were used as a starting point in reevaluating the chapter.

II. Summary

It is understood planning is an ongoing and dynamic activity and thus rapid adaptability to change is a requirement. SRTPA 2045 LRTP is a working document and will be updated and revised as various local, regional, state, and national characteristics, factors, and requirements change, which ultimately affect the transportation network in and around SRTPA. It is therefore expected SRTPA will promptly comply and participate in modal plans and special studies that may arise throughout the region and to update the LRTP in five years.

SRTPA has developed the 2045 LRTP utilizing cooperative involvement of various local, regional, state, and federal transportation organizations. The plan expresses SRTPA's objectives for achieving efficient transportation systems in the region. The document will enable the transportation interests in the region to utilize it as a guide for future transportation planning and programming.

This LRTP will be used as a means of identifying areas of need and developing a means of addressing such. It is also the intent of the document to allow for citizen participation and the needs of the various transportation interest of SRTPA.

It is not expected that every project in this chapter will be completed due to funding shortfalls or the occurrence of other project importance. This chapter is to serve as a guide for the type of needs within SRTPA.

Appendix A:

I. Public Participation in the Long Range Transportation Plan

The purpose of this section is to document the involvement of the Siouxland residents, the Siouxland Regional Transportation Planning Association (SRTPA) committee members, and public and private transportation providers. SRTPA has made the 2045 Long Range Transportation Plan available online on the SIMPCO website at <https://simpco.org/divisions/transportation-planning/long-range-transportation-plans-lrtp/>.

A. Long Range Transportation Plan Meetings

- January 16, 2019: Presented Draft Chapters 1 – 3 to the SRTPA Technical Advisory Committee
- February 7, 2019: Presented Draft Chapters 1 – 3 to the SRTPA Policy Board
- March 12, 2019: Presented Draft Chapter 4 to the SRTPA Technical Advisory Committee
- March 21, 2019: Presented Draft Chapter 4 to the SRTPA Policy Board
- May 15, 2019: Presented Draft Chapters 5 – 7 to the SRTPA Technical Advisory Committee
- May 23, 2019: Presented Draft Chapters 5 – 7 to the SRTPA Policy Board
- September 11, 2019: Presented Final Draft of LRTP to SRTPA Technical Advisory Committee
- September 26, 2019: Presented Final Draft of LRTP to SRTPA Policy Board
- October 24, 2019: Public Input meeting in Correctionville, Iowa
- October 30, 2019: Public Input meeting in Holstein, Iowa

B. Long Range Transportation Plan Information Recipients

SRTPA sent a memo/letter inviting interested organizations, entities, and members of the public to the LRTP Open Houses. The following tables show the two different groups that were on either SRTPA's mailing or email list.

Table A.1: LRTP Email List

Contact Person	Organization	Email
Sarah Tracy	Cherokee County	stracy@co.cherokee.ia.us
Wane Miller	Cherokee County	wmiller@co.cherokee.ia.us
Rick Mongan	Cherokee County	rick@monganpainting.net
Amy Loughlin	City of Cheorkee	loughlin700@gmail.com
John Meis	City of Cherokee	meis@frontiernet.net
Jason Vacura	City of Le Mars	jvacura@lemarsiowa.com
John Rexwinkel	City of Le Mars	johnny@premieronline.net
Andrea White	DOT	ANDREA.WHITE@iowadot.us
Cindy Shearer	DOT	Cindy.Shearer@iowadot.us
Dakin Schultz	Iowa DOT	Dakin.Schultz@iowadot.us
Darla Hugaboom	FHWA	Darla.Hugaboom@dot.gov
Sean Litteral	FHWA	Sean.Litteral@dot.gov
Daniel Nguyen	FTA	daniel.nguyen@dot.gov
Jeff Williams	Ida County	jwilliams@idacountyia.us
Rhett Leonard	Ida County	rhett.alan.leonard@gmail.com
Dustin Wallis	Monona County	mocoeng@longlines.com
Tammy Bramley	Monona County	bramley_tammy@hotmail.com
Tom Rohe	Plymouth County	TRohe@co.plymouth.ia.us
Gary Horton	Plymouth County	garymhorton@yahoo.com
Curt Miller	SRTS	curt@simpco.org
Mark Nahra	Woodbury County	mnahra@woodburycountyiowa.gov
Ben Kusler	Woodbury County	bkusler@woodburycountyiowa.gov
Keith Radig	Woodbury County Board of Supervisors	kradig@woodburycountyiowa.gov

C. Media Outlets

S RTPA has sent periodic updates on the plan to area newspapers, radio stations, and television stations. Table A.2 is a list of the media outlets receiving updates and public meeting times concerning the LRTP.

Table A.2: SRTPA Media Contacts

Newspaper	Address
The Journal	515 Pavonia St., Sioux City, IA 51101
Daily Sentinel	41 1st Ave. NE, Le Mars, IA 51031
Cherokee Chronicle Times	111 South 2nd St., Cherokee, IA 51012
Onawa Democrat	720 Iowa Ave., Onawa, IA 51040
Onawa Sentinel	1014 9th St., Onawa, IA 51040
Ida County Courier	214 Main St. PO Box 249, Ida Grove, Iowa 51445
Mapleton Press	502 Main St. PO Box 187, Mapleton, Iowa 51034
Ryan Publishing Company (Whiting)	621 Whittier St., Whiting, Iowa 51063
Marcus News	401 N. Main St., Marcus, Iowa 51035
The Record (Kingsley)	
Remsen Bell-Enterprise	246 S Washington St., Oyens, Iowa 51045
Akron Hometownner	110 Reed St. PO Box 797, Akron, Iowa, 51001
Aureila Star-Dispatch	PO Box 249, Ida Grove, Iowa 51445
Danbury Review	209 Thomas St., Danbury, Iowa 51019
Hinton Times	33599 Jade Ave., Iowa, 51024-8967
Moville Record	238 Main St. PO Box 546, Moville, Iowa 51039
Radio Station	Address
KCHE Radio	201 S 5th St. PO Box 141, Cherokee, Iowa 51012
KLEM Radio	37 2nd AvE. NW, Le Mars, Iowa 51031-3529
KWIT Radio	4647 Stone Ave., Sioux City, Iowa 51106
Television Station	Address
KTIV	2929 Signal Hill Dr., Sioux City, Iowa, 51108
KCAU TV	5993 Gordon Drive, Sioux City, Iowa 51106
KPTH	100 Gold Circle, Dakota Dunes, South Dakota, 57049
KSCJ	2000 Indian Hills Dr., Sioux City, Iowa 51104
KMEG	100 Gold Circle, Dakota Dunes, South Dakota, 57049

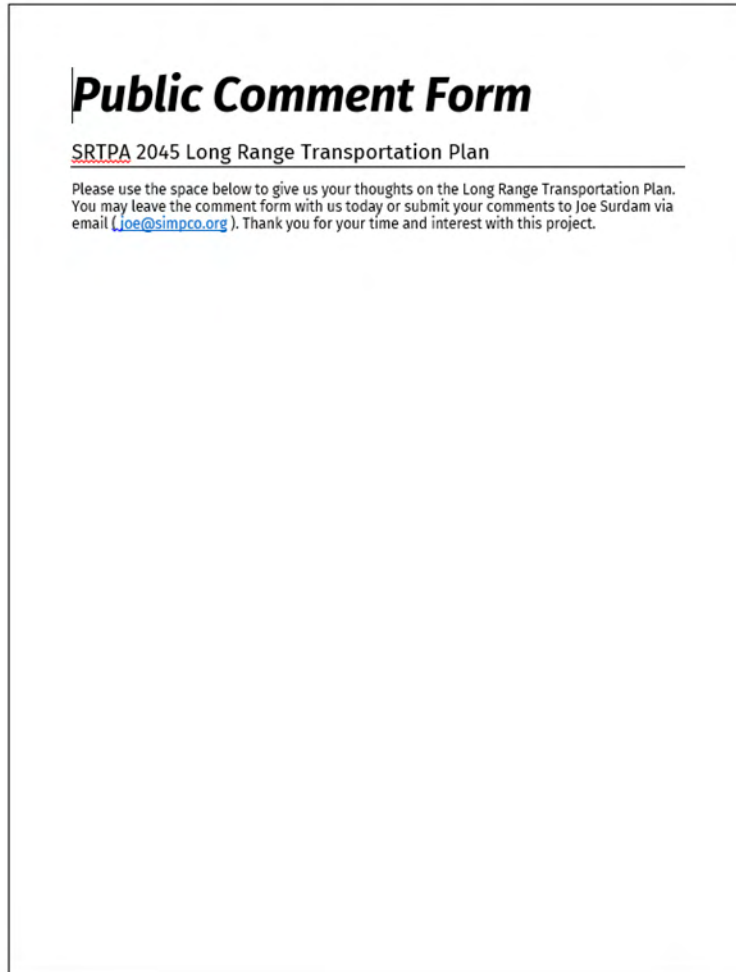
A press release concerning the LRTP Public Open House can be found in the following paragraph. The press release was sent to the regional media outlets a month and one week prior to the event and the week of the open house.

The Siouxland Regional Transportation Planning Associations (SRTPA) is culminating the 2045 Long Range Transportation Plan process with open houses; October 24th from 4:30-5:30 p.m. at the Correctionville Community Center: 312 Driftwood St, Correctionville, IA 51016 and on October 30th from 4:30-5:30 p.m. at the Holstein Community Center- Lohff-Schumann Memorial: 301 Lohff-Schumann Dr, Holstein, IA 51025. SRTPA is soliciting residents of the Regional Planning Area for input on the plan. The 2045 Long Range Transportation Plan updates the 2040 Long Range Transportation Plan adopted by the SRTPA Policy Board in 2014. The 2045 plan serves as an update on the issues covered in the previous plan by encompassing all modes of transportation. Plan updates will occur at least every five years, maintaining a consistency with forecasted transportation and land use conditions. Adoption of the SRTPA Long Range Transportation Plan is slated for November of 2019. The Siouxland Regional Transportation Planning Association includes the cities of Le Mars and Cherokee and the counties of Cherokee, Ida, Monona, Plymouth, and Woodbury, excluding the Metropolitan Planning Organization area. For more information on the open house, contact the office at 712-279-6286.

D. Input at the Long Range Transportation Plan Public Open House

S RTPA actively invited those attending the open house to make comment and query the staff. Individuals, not only during the open house but also during the 45 day public input period, were encouraged to comment and question the plan. The two open houses notifications were not mailed out to S RTPA's mail, email, and media list, but were posted on the SIMPCO Facebook and Twitter pages. Figure A.1 is the form used to elicit opinion from interested parties.

Figure A.1: S RTPA LRTP Public Comment Form



Public Comment Form

S RTPA 2045 Long Range Transportation Plan

Please use the space below to give us your thoughts on the Long Range Transportation Plan. You may leave the comment form with us today or submit your comments to Joe Surdam via email (joe@simpco.org). Thank you for your time and interest with this project.

E. Comments from the Long Range Transportation Plan Public Open House and Public Comment Period

Comments of the Long Range Transportation Plan consisted of the following:

- Increase safety and raise awareness on the issues at the Highway 20 and Highway 59 intersection.
- Add deceleration lane going into assisted living facility in Holstein.
- Speed through City of Holstein and Highway 20 intersection is a concern.
- A comment was made about a road project located just north of Correctionville and the impact it may have on residents who live alongside the road.

IDOT also provided chapter by chapter comments to SRTPA staff during the process of writing this plan. Many of these comments asked to provide more detail, to clarify things, or edits to maps concerning the marking of roads and projects.

F. Attendees of the Long Range Transportation Plan Open House

First Open House Meeting:

Sign-In Form

SRTPA 2045 Long Range Transportation Plan

NAME	ORGANIZATION	EMAIL
Bill Forbes	CEDCORP INC	bforbes@longlines.com
Phil Swearing	CORNER HARDWARE	ASWING@hotmail.com
Jon Cunningham	CITIZEN CIVILLE	
Andy Dase	Anthony	AndyJoDase@gmail.com

Second Open House Meeting:

Sign-In Form

SRTPA 2045 Long Range Transportation Plan

NAME	ORGANIZATION	EMAIL
Theresa Pcienz	City of Holstein	
Conneke	City of Holstein	N/A

Appendix C: Iowa 5% Most Severe Safety Needs Report

IDOT created a new Highway Safety Improvement Program (HSIP), whose job it is to reduce traffic fatalities and serious injuries on public roads. The whole idea of this plan is to raise public awareness of highway safety needs and challenges. The plan gives out a ranking of the top 5% fatal and major injury crashes, and gives the corridor that is the problem, potential solutions, estimated costs, and a description. More information and maps of where Region IV's safety concerns are can be found at:

http://www.iowadot.gov/crashanalysis/fivepercent/2010/iowa_5percent_consolidatedreport_2010_final.pdf

Appendix D: Acronyms

Acronyms Commonly Used By SRTPA

AADT	Annual Average Daily Traffic (number of vehicles per day)
ACS	American Community Survey
AMHP	America's Marine Highway Program
BNSF	Burlington Northern Santa Fe Corporation
CMAQ	Congestion Mitigation and Air Quality Improvement Program
CC&P	Chicago Central & Pacific Railroad
D&I	Dakota & Iowa Railroad Company
DNR	Department of Natural Resources (Iowa)
DOT	Department of Transportation
FAST	Fixing America's Surface Transportation Act
FFC	Federal Functional Classification
FHWA	Federal Highway Administration (part of U.S. DOT)
FTA	Federal Transit Administration (part of U.S. DOT)
GIS	Geographic Information System- computerized mapping and planning tool
GPS	Global Positioning System
HBP	Highway Bridge Program
HSIP	Highway Safety Improvement Program
ICAAP	Iowa Clean Air Attainment Program
IDOT	Iowa Department of Transportation
IHAP	Iowa Habitat Access Program
ITS	Intelligent Transportation System
L RTP	Long Range Transportation Plan
MAP-21	Moving Ahead for Progress in the 21 st Century
MPO	Metropolitan Planning Organization
NAFTA	North American Free Trade Agreement
NEPA	National Environmental Policy Act
NGO	Non-Governmental Organization
NHS	National Highway System – network identified by Congress
NHPP	National Highway Performance Program
OPA	Other Principal Arterial

PCI	Pavement Condition Index
PDO	Property Damage Only
RISE	Revitalize Iowa's Sound Economy (Iowa)
RPA	Regional Planning Affiliation
RUTF	Road Use Tax Fund (Iowa)
SAFETEA – LU	Safe, Accountable, Flexible, Efficient, Transportation Equity Act – A Legacy for Users
SI&A	Structure Inventory and Appraisal
SIMPCO	Siouxland Interstate Metropolitan Planning Council
SRTPA	Siouxland Regional Transportation Planning Association
SRTS	Siouxland Regional Transit System
STBG	Surface Transportation Block Grant
STP	Surface Transportation Program
TAC	Technical/Transportation Advisory Committee
TAP	Transportation Alternatives Program
TIME-21	Transportation Investment Moves the Economy in the 21 st Century
TIP	Transportation Improvement Program
TMDL	Total Maximum Daily Load
VMT	Vehicle Miles of Travel – number of miles traveled over a given highway.

Appendix E: Glossary

Glossary of Definitions:

Sources: FHWA, IA DOT

Arterial: A class of roads serving major traffic movements (high-speed, high volume) for travel between major points.

Arterial Highway: A major highway used primarily for through traffic

Arterial Street: A class of street serving major traffic movements (high speed, high volume) for travel between major points

Average Annual Daily Traffic (AADT): The total volume of traffic on a highway segment for one year, divided by the number of days in the year.

Collector Streets: The principal purpose of this category of roadways is to connect the local street network to the arterial and primary system. They may also include land access (stores, buildings, etc.), particularly to larger more intense land uses, but 'through' trips and total capacity starts to become important. Speeds are higher than on local streets.

Congestion Mitigation & Air Quality Improvement Program (CMAQ): A categorical Federal-aid funding program created with the ISTEA. Directs funding to projects that contribute to meeting National air quality standards. CMAQ funds generally may not be used for projects that result in the construction of new capacity available to SOVs (single-occupant vehicles).

Department of Transportation (DOT): Establishes the nation's overall transportation policy. Under its umbrella there are ten administrations whose jurisdictions include highway planning, development and construction; urban mass transit; railroads; aviation; and the safety of waterways, ports, highways, and oil and gas pipelines. The Department of Transportation (DOT) was established by act of October 15, 1966, as amended (49 U.S.C. 102 and 102 note), "to assure the coordinated, effective administration of the transportation programs of the Federal Government" and to develop "national transportation policies and programs conducive to the provision of fast, safe, efficient, and convenient transportation at the lowest cost consistent therewith."

Federal Highway Administration (FHWA): A branch of the US Department of Transportation that administers the federal-aid Highway Program, providing financial assistance to states to construct and improve highways, urban and rural roads, and bridges. The FHWA also administers the Federal Lands Highway Program, including survey, design, and construction of forest highway system roads, parkways and park roads, Indian reservation roads, defense access roads, and other Federal lands roads. The Federal agency within the U.S. Department of Transportation responsible for administering the Federal-Aid Highway Program. Became a component of the Department of Transportation in 1967 pursuant to the Department of Transportation Act (49 U.S.C. app. 1651 note). It administers the highway transportation programs of the Department of Transportation under pertinent legislation

Federal Transit Administration (FTA): A branch of the US Department of Transportation that is the principal source of federal financial assistance to America's communities for planning, development, and improvement of public or mass transportation systems. FTA provides leadership, technical assistance, and financial resources for safe, technologically advanced public transportation to enhance mobility and accessibility, to improve the Nation's communities and natural environment, and to strengthen the national economy. (Formerly the Urban Mass Transportation Administration) operates under the authority of the Federal Transit Act, as amended (49 U.S.C. app. 1601 et seq.). The Federal Transit Act was repealed on July 5, 1994, and the Federal transit laws were codified and re-enacted as chapter 53 of Title 49, United States Code. The Federal Transit Administration was established as a component of the Department of Transportation by section 3 of Reorganization Plan No. 2 of 1968 (5 U.S.C. app.), effective July 1, 1968. The missions of the Administration are 1) to assist in the development of improved mass transportation facilities, equipment, techniques, and methods, with the cooperation of mass transportation companies both public and private. 2) to encourage the planning and establishment of areawide urban mass transportation systems needed for economical and desirable urban development, with the cooperation of mass transportation companies both public and private. and 3) to provide assistance to State and local governments and their instrumentalities in financing such systems, to be operated by public or private mass transportation companies as determined by local needs; and 4) to provide financial assistance to State and local governments to help implement national goals relating to mobility for elderly persons, persons with disabilities, and economically disadvantaged persons.

Geographic Information Systems (GIS): 1) Computerized data management system designed to capture, store, retrieve, analyze, and display geographically referenced information. 2) A system of hardware, software, and data for collecting, storing, analyzing, and disseminating information about areas of the Earth. For Highway Performance Monitoring System (HPMS) purposes, Geographical Information System (GIS) is defined as a highway network (spatial data which graphically represents the geometry of the highways, an electronic map) and its geographically referenced component attributes (HPMS section data, bridge data, and other data including socioeconomic data) that are integrated through GIS technology to perform analyses. From this, GIS can display attributes and analyze results electronically in map form.

Global Positioning System (GPS): A navigation system that uses satellites to provide a receiver on earth with extremely accurate measurements of its three-dimensional position, velocity and time.

Intelligent Transportation Systems (ITS): The application of advanced technologies to improve the efficiency and safety of transportation systems.

Intermodal: The ability to connect, and the connections between, modes of transportation

Iowa Clean Air Attainment Program (ICAAP): To fund highway/street, transit, or trail projects or programs which help maintain Iowa's clean air quality by reducing transportation-related emissions.

Local Streets: The principal purpose of these facilities is to provide transportation access to local land uses. Consequently, 'through' movement on local streets is not a priority and in many cases is actively discouraged. Speeds are nominal and capacities are usually low.

Long Range Transportation Plan (LRTP): A document resulting from regional or statewide collaboration and consensus on a region or state's transportation system, and serving as the defining vision for the region's or state's transportation systems and services. In metropolitan areas, the plan indicates all of the transportation improvements scheduled for funding over the next 20 years.

Metropolitan Planning Organization (MPO): Regional policy body, required in urbanized areas with populations over 50,000, and designated by local officials and the governor of the state. Responsible in cooperation with the state and other transportation providers for carrying out the metropolitan transportation planning requirements of federal highway and transit legislation. 2) Formed in cooperation with the state, develops transportation plans and programs for the metropolitan area. For each urbanized area, a Metropolitan Planning Organization (MPO) must be designated by agreement between the Governor and local units of government representing 75 percent of the affected population (in the metropolitan area), including the central cities or cities as defined by the Bureau of the Census, or in accordance with procedures established by applicable State or local law (23 U.S.C. 134(b)(1)/Federal Transit Act of 1991 Sec. 8(b)(1)). (FHWA2) * source FHWA website <http://www.fhwa.dot.gov/planning/glossary>

Moving Ahead for Progress in the 21st Century (Map-21): Passed on June 29, 2012; signed on July 6, 2012 (Pub. L. 112-141).

North American Free Trade Agreement (NAFTA): A formal agreement, or treaty, between Canada, Mexico and the United States of America to promote means for improved and increased free trade between the three countries; the effect of NAFTA on transportation was to increase the need to upgrade existing, and build new, transportation facilities between and within the countries.

National Environmental Policy Act (NEPA): Federal law providing for environmental assessments of impacts and public input into all federally funded projects; an environmental study could be either an environmental impact statement or environmental assessment.

National Highway System (NHS): This system of highways designated and approved in accordance with the provisions of 23 U.S.C. 103b). (23CFR500)

Other Principal Arterial (OPA): Major streets or highways, many of multi-lane or freeway design, serving high-volume traffic corridor movements that connect major generators of travel.

Pavement Conditional Index (PCI): A 0-100 rating representing the condition of state highway pavements (0 worst – 100 best); PCI is a measure of pavement condition only and does not consider geometrics, safety or congestion; the index is used as a network-level performance measure and as one of many tools to identify pavement improvement needs.

Pavement Management System (PMS): A system relays data on the physical characteristics of the roadway system such as depth of subsurface, cracking, heaving, thickness, etc. This system is operated in cooperation with several statewide MPO's and the Iowa DOT with some contributing financially.

Regional Planning Affiliation (RPA): Regional transportation planning became the focal point in Iowa when the Intermodal Surface Transportation Efficiency Act (ISTEA) became law in 1991. As a starting point for forming a new state/regional transportation planning partnership, the Iowa Transportation Commission designated 16 regional transit-planning regions as the initial basis for organization. Local officials representing the cities and counties were provided the opportunity to indicate their preference to remain in their current transit-planning region, join with another region, or partner with other counties to form a new regional planning affiliation (RPA). Currently, there are 18 regional planning affiliations covering the state from border to border. The metropolitan planning organizations (MPOs) were not included in the regions, but all planning agencies are encouraged to cooperate in planning efforts and coordinate planning.

Safe, Accountable, Flexible, Efficient, Transportation Equity Act (SAFETEA-LU): Serves as an update to ISTEA and TEA-21 and authorizes the Federal surface transportation programs for highways, highway safety, and transit for the 5-year period 2005-2009

Safe Routes to School: Federal initiative to enable and encourage children, including those with disabilities, to walk and bicycle to school; to make walking and bicycling to school safe and more appealing; and to facilitate the planning, development, and implementation of projects that will improve safety, and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.

Siouxland Interstate Metropolitan Planning Council (SIMPCO): a council of governments serving the tri-state area of Iowa, Nebraska and South Dakota.

Siouxland Regional Transportation Planning Association (SRTPA): a regional planning affiliation (RPA) providing transportation planning services for Cherokee, Ida, Monona, Plymouth & Woodbury Counties excluding the metropolitan planning organization (MPO) area.

Siouxland Regional Transit System (SRTS): The mission of Siouxland Regional Transit System is to provide safe, dependable, and efficient public transit services for all citizens within our service area in a manner that will help them maintain and improve their quality of life. Siouxland Regional Transit services are open to the general public, including persons with disabilities.

Surface Transportation Program (STP): Federal-aid highway funding program that funds a broad range of surface transportation capital needs, including many roads, transit, sea and airport access, vanpool, bike, and pedestrian facilities.

Transportation Improvement Program (TIP): A document prepared by a metropolitan planning organization that lists projects to be funded with FHWA/FTA funds for the next one- to three-year period.

Vehicle-Miles Traveled (VMT): The total distance traveled in miles in a given time period.

Appendix F: Resolution



Siouxland Interstate Metropolitan Planning Council

1122 PIERCE STREET • SIOUX CITY IOWA • 51105 • PHONE 712.279.6286 • FAX 712.279.6920 • EMAIL SIMPCO@SIMPCO.ORG

Siouxland Regional Transportation Planning Association (SRTPA)

Resolution 2020-3

FINAL APPROVAL OF SRTP LONG RANGE TRANSPORTATION PLAN

WHEREAS, the development of the SRTPA Long Range Transportation Plan is developed under the guidance of the Fixing America's Surface Transportation Act of 2016 is continuing, cooperative and comprehensive in accordance with 23 C.F.R 450 and 49 C.F.R. 613, subject to the concurrence of the Iowa Department of Transportation; and

WHEREAS, the 2045 SRTPA Long Range Transportation Plan is consistent with the goals and objectives of all members and cooperating agencies;

NOT, THEREFORE, BE IT RESOLVED, that the SRTPA Policy Board approves the 2045 SRTPA Long Range Transportation Plan as the long-range transportation Plan for the RPA Region IV.

Approved by the SRTPA Policy Board and signed this 21st day of November, 2019.



John Rexwinkel
SRTPA Policy Board Chairperson



Michelle Bostinelos
Executive Director

