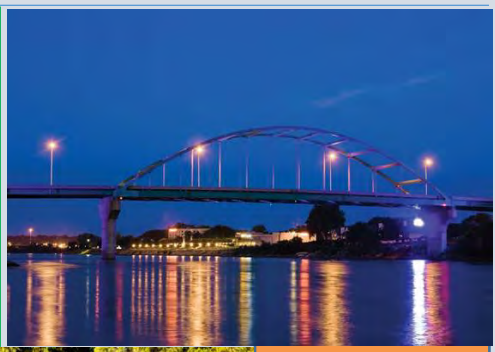
Adopted on January 7, 2021

Siouxland Interstate Metropolitan Planning Council
Metropolitan Planning Organization's

2045 LONG RANGE TRANSPORTATION PLAN





simpco IS ACTION!

ACKNOWLEDGEMENTS

Policy Board Members

Ken Beaulieu, Chairperson	CID Supervisor	Dakota Dunes CID, SD
Richard Owens, Vice Chairperson	Board Member	Sioux City Transit System, Sioux City, IA
Bill Gaukel	Council Member	City of Sergeant Bluff, IA
Pete Groetken	Council Member	City of Sioux City, IA
Keith Radig	County Supervisor	Woodbury County, IA
Craig Anderson	Supervisor	Plymouth County, IA
Larry Albenesius	County Commissioner	Dakota County, NE
Mike Dailey	County Commissioner	Union County, SD
Kodi Bensen	Council Member	City of North Sioux City, SD
Julie Schoenherr	Council Member	City of Sioux City, IA
Carol Schuldt	Council Member	City of South Sioux City, NE

Transportation Technical Committee Members

David Carney, Chairperson	Public Works Director	City of Sioux City, IA
Tom Rohe, Vice Chairperson	Engineer	Plymouth County, IA
Jill Wanderscheid	Neighborhood Services Supervisor	City of Sioux City, IA
Aaron Lincoln	City Administrator	City of Sergeant Bluff, IA
Mark Nahra	Engineer	Woodbury County, IA
Curt Miller	Facilities & Transit Director	Sioux City, IA
Lance Hedquist	City Administrator	City of South Sioux City, NE
Mike Collett	Assistant City Manager	City of Sioux City, IA
Jeff Dooley	Community Improvement District (CID) Manager	Dakota Dunes CID, SD
Fred Kellogg	Highway Superintendent	Dakota County, NE
Jeff Harcum	Transit Operations Supervisor	City of Sioux City, IA
Eric Christensen	City Administrator	City of North Sioux City, SD
Jason Allen	City Administrator	City of Dakota City, NE
Jerry Buum	Highway Superintendent	Union County, SD

Policy Board & Transportation Technical Committee Non-Voting Members

Dakin Schultz	Iowa Department of Transportation
Sarah Gilkerson	South Dakota Department of Transportation
Gerri Doyle	Federal Transit Administration - Region VII
Justin Luther	Federal Highway Administration - Nebraska
Darla Hugaboom	Federal Highway Administration - Iowa
Mark D. Hoines	Federal Highway Administration - South Dakota
Craig Wacker	Nebraska Department of Transportation

Siouxland Interstate Metropolitan Planning Council Staff

Michelle Bostinelos	Executive Director
Erin Berzina	Regional Planning Director
Alejandra Quintana	Regional Planner I
Dawn Kimmel	Regional Planner I
Hannah Neel	Regional Planner I
Sharon Burton	Executive Assistant
Emily Coppock	Administrative Assistant

ACRONYMS COMMONLY USED BY THE SIMPCO MPO

- **AADT** Annual Average Daily Traffic (number of vehicles per day)
- **ADA** Americans with Disabilities Act (federal law)
- **AVL** Automatic Vehicle Location
- **BUILD** Better Utilizing Investments to Leverage Development
- **CDBG** Community Development Block Grant Program
- **CFR** Code of Federal Regulations
- **CMAQ** Congestion Mitigation and Air Quality Improvement Program
- **CNG** Compressed Natural Gas
- **COG** Council of Governments
- **DEMO** Demonstration Funding
- **DOR** Department of Roads (Nebraska)
- **DOT** Department of Transportation (Iowa, South Dakota, and federal agencies)
- **DMU** Diesel Multiple Units
- **EA** Environmental Assessment
- **EPA** Environmental Protection Agency
- **FAST** Fixing America's Surface Transportation
- **FEMA** Federal Emergency Management Agency
- **FFY** Federal Fiscal Year – October 1 to September 30
- **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 –local identification tool using satellites
- **HBP** Highway Bridge Program
- **HSIP** Highway Safety Improvement Program
- **ISTEA** Intermodal Surface Transportation Efficiency Act of 1991
- **ITS** Intelligent Transportation Systems
- **JARC** Job Access Reverse Commute
- **LOS** Level of Service
- **LOST** Local Option Sales Tax
- **LRTP** Long Range Transportation Plan
- **MAP-21** Moving Ahead for Progress in the 21st Century Act
- **MLK, Jr** Martin Luther King, Jr. Transportation Center
- **MPO** Metropolitan Planning Organization
- **MSA** Metropolitan Statistical Area
- **MUTCD** Manual on Uniform Traffic Control Devices
- **NAFTA** North American Free Trade Agreement
- **NENE** Nebraska Northeastern
- **NEPA** National Environmental Policy Act
- **NHPP** National Highway Performance Program
- **NHS** National Highway System – network identified by Congress
- **PMS** Pavement Management System
- **PPP** Public Participation Plan
- **PRF** Primary Road Fund
- **ROUTES** Ridership Operations Utilization/Transit Efficiencies Study
- **ROW** Right-of-Way
- **RPA** Regional Planning Affiliation

- **RTP** Regional Transportation Plan
- **RUTF** Road Use Tax Fund (Iowa)
- **SAFETEA – LU** Safe, Accountable, Flexible, and Efficient, Transportation Equity Act – A Legacy for Users
- **SCTS** Sioux City Transit System
- **SIMPCO** Siouxland Interstate Metropolitan Planning Council
- **SMS** Safety Management System
- **SRTS** Siouxland Regional Transit System
- **STA** State Transit Assistance (Iowa)
- **STB** Surface Transportation Board
- **STBG** Surface Transportation Block Grant
- **STIP** Statewide Transportation Improvement Program
- **STP** Surface Transportation Program
- **TAP** Transportation Alternatives Program
- **TIGER** Transportation Investment Generating Economic Recovery
- **TIP** Transportation Improvement Program
- **TJ** Transfer oriented directional sign (special signing program)
- **ULSD** Ultra-Low-Sulfur Diesel
- **USC** United States Code
- **V/C** Volume/Capacity
- **VMT** Vehicle Miles of Travel – number of miles traveled over a given highway
- **YOE** Year of Expenditure

CHAPTER 1: INTRODUCTION

CHAPTER CONTENTS

The 2045 Siouxland Interstate Metropolitan Planning Council (SIMPCO) Metropolitan Planning Organization's (MPO) Long Range Transportation Plan (LRTP) is an update to the 2040 LRTP. This plan continues the 3C process (Co-operative, 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 SIMPCO MPO region through the year 2045. These improvements encompass all modes of transportation, including public transit, bicycle and pedestrian travel, and street and highway travel. In accordance with the 2016 Fixing America's Surface Transportation Act (FAST Act), this plan addresses the deficiencies of the existing transportation system in the SIMPCO MPO planning area, analyzes the projected demand on that system, and identifies projects and policies to both preserve and enhance mobility.

Image of downtown Sioux City, along 4th Street. Photo taken by Randy Williams

The 2045 SIMPCO MPO LRTP is organized into the following chapters:

1. ***Introduction*** **-** outlines the SIMPCO metropolitan area, the MPO, purpose of the plan, the goals and objectives of the plan, performance based planning & programming, and the public participation process used for developing and reviewing transportation documents.

2. ***Community Overview*** **–** describes the socio-economic characteristics within the MPO planning area.

3. ***Alternative Transportation*** **–** presents recent work, discusses future infrastructure and initiatives, examines existing facilities and gives future recommendations for the bicycle and pedestrian networks.

4. ***Transit–*** identifies issues, existing operating characteristics, safety, security, and future needs and projects for Sioux City Transit, Sioux City Paratransit, and Siouxland Regional Transit System. Includes the use of Intelligent Transportation Systems and examines environmental justice.

5. ***Street and Highway–*** summarizes existing conditions of the MPO planning area's road network, safety of that network, travel demand, system deficiencies, and 2045 recommendations. Incorporates the expansion of Intelligent Transportation Systems, as well as the environmental justice of the network.

6. ***Intermodal Facilities*** **–**examines current intermodal facilities including truck, rail, air, and barge and gives recommendations for future intermodal facilities.

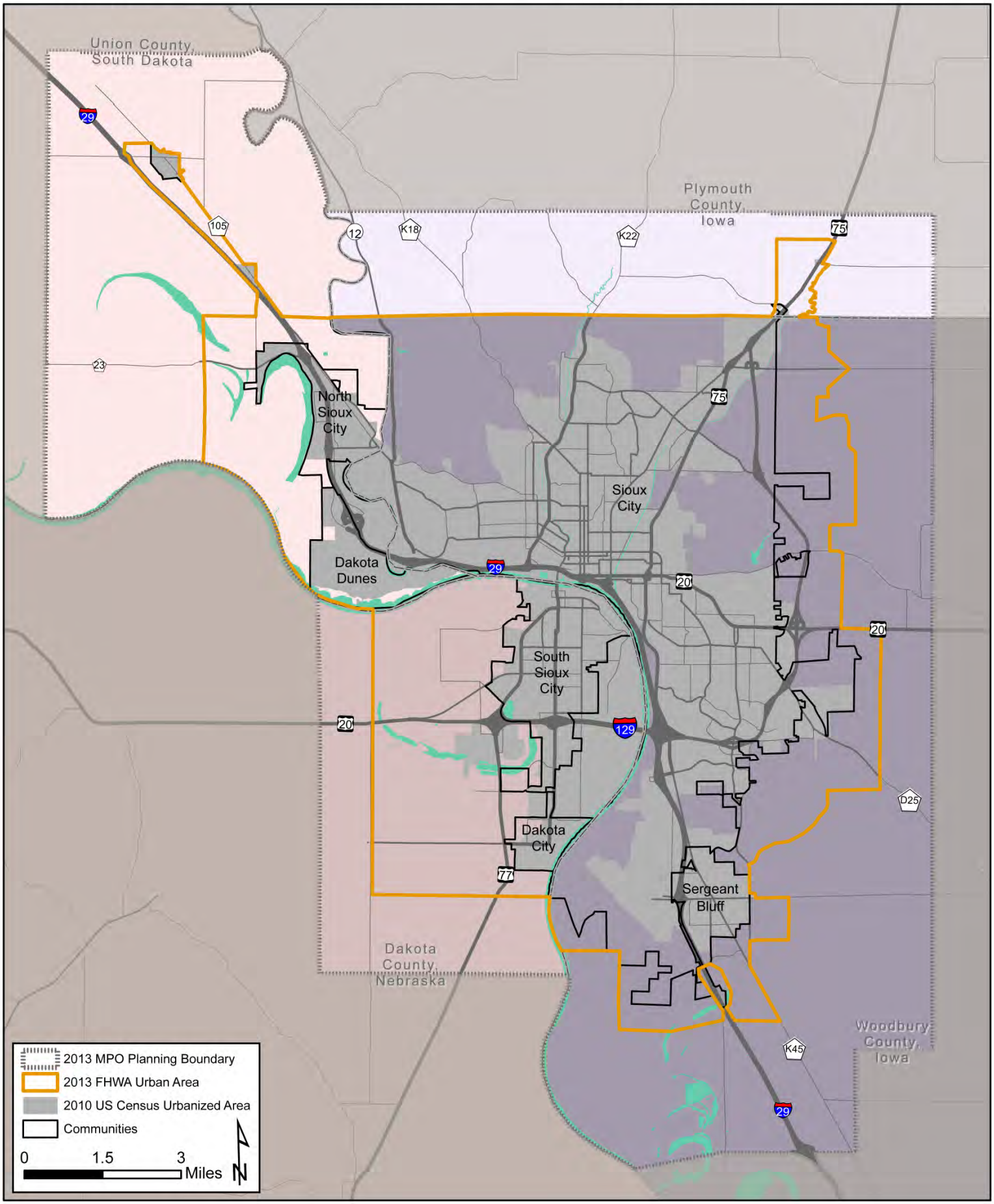
7. ***Environmental Impacts*** –details impacts on and effects of the environmental features of the MPO planning area. Accounts for environmentally sensitive areas, as well as habitats and ecosystems affected by transportation. Sets a series of recommendations for the area, aimed at limiting environmental degradation.

8. ***Financial Summary and Conclusion*** –examines available funding sources for the projects in the plan, the revenue forecasting methodology, 2045 revenue forecasts, proposed transportation projects, and the 2045 financial summary.

Map 1.1

SIMPCO MPO Location Map

The MPO Planning Boundary represents the projected metropolitan area out 20 years from designation. The FHWA urban boundary is that which determines eligibility for federal funding programs. The Census Urbanized Area is used for the purpose of tabulating and presenting Census Bureau statistical data.



THE SIMPCO METROPOLITAN PLANNING ORGANIZATION

The SIMPCO council of governments houses the SIMPCO MPO, and is responsible for the submission of transportation planning documents to the Federal Highway Administration (FHWA), Federal Transit Administration (FTA), Iowa Department of Transportation (Iowa DOT), Nebraska Department of Transportation (NDOT), South Dakota Department of Transportation (SDDOT), and public distribution.

The SIMPCO MPO is responsible for developing transportation plans and programming projects for the metropolitan planning area. It is unique as it is 1 of the 5 tri-state MPOs in the nation, out of 384 MPOs total. The following units of government comprise the SIMPCO MPO and can be seen on Map 1.1:

- City of Sioux City, IA
- City of Sergeant Bluff, IA
- City of South Sioux City, NE
- City of Dakota City, NE
- City of Jefferson, SD
- City of North Sioux City, SD
- Dakota Dunes CID, SD
- Woodbury County, IA
- Plymouth County, IA
- Union County, SD
- Dakota County, NE

The SIMPCO MPO has a 14-member Transportation Technical Committee that advises an 11-member Policy Board, listed in the Acknowledgements page at the beginning of this document.

The SIMPCO MPO professional staff is available to aid member agencies' staff, local officials, and citizens, in implementing community improvement programs. Staff encourages and assists with various programs that emphasize regional cooperation and coordination.

THE 2045 LONG RANGE TRANSPORTATION PLAN

The SIMPCO MPO 2045 LRTP serves as a revision of the issues covered in the previous 2040 LRTP, which was adopted by the MPO Policy Board in January, 2016. The intent of the plan is to identify projects of all transportation modes that will develop the safest and most efficient transportation system for the MPO area. Plan updates occur at least every five years, as federally required, to maintain consistency with planned and forecasted transportation and land use conditions, changes, and trends.

There are 10 factors outlined in the FAST Act that are considered as part of the metropolitan LRTP planning process, and kept in mind when developing and working on transportation projects in the area:

1. Support the economic vitality of the metropolitan area, 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, improve the 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, 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 stormwater impacts of surface transportation; and
10. Enhance travel and tourism.

GOALS

The SIMPCO MPO's overall transportation goals and objectives for the 2045 LRTP were approved as part of the adoption of the 2045 LRTP and continue to reflect the MPO's focus for local transportation planning for the current plan. More specific goals and objectives have been developed for each of the modes addressed in the plan and may be found in the transit, alternative transportation, and streets and highways chapters. The 9 goals that this plan upholds are:

1. Economic Development
2. Safety
3. Security
4. Mobility and Efficiency
5. Accessibility
6. Environment
7. Connectivity & Compatibility
8. Livability
9. Fiscal Responsibility

These goals are compared against the 10 FAST Act planning factors in the Table 1.2 on page 1-7. From this table, it is evident that the 2045 LRTP's goals align with the planning factors from the FAST Act. Preservation and maintenance is often a key goal or priority to many areas, while the SIMPCO MPO's 2045 LRTP does not have a specific goal that outlines this characteristic, it is believed that many of the above goals meet it through their objectives or exemplifies criteria. Throughout this document, each chapter will further discuss preservation and maintenance in regards to each mode.

The current goals remain the same from the previous 2040 LRTP. The MPO Transportation Technical Committee (TTC) and Policy Board reviewed each goal and agreed that they remain relevant and valid for the 2045 LRTP. Furthermore, each goal has been given objectives, evaluation criteria, and guidelines for evaluating and scoring projects according to how well they align with said goal. The objectives were tied to a tangible measurement, such as a quantitative performance measure or qualitative definition.

These objectives provide the basis for the weighting process for each project's relevance to each goal. Each project was given a score between 0-3 (with 0 not meeting the goal and 3 best meeting the goal), based on how well the project met the goals' objectives. Once a project was ranked and weighted, the scores were multiplied by the goal's weight and then summed to obtain the project's final result. Once all the projects were calculated in this fashion, they were sorted from highest result to lowest result, thus giving the projects' level of prioritization.

Table 1.1: SIMPCO MPO's 9 goals, with their respective point total

Goal 1: Economic Development	
Project creates system improvements that facilitate local job creation and retention	10
Project promotes efficient land-use patterns	1
Project gives consideration of true costs and benefits of providing transportation facilities necessary to move goods	1
Goal 2: Safety	
Project incorporates pedestrian safety features at intersections (crosswalks, pedestrian signals, median refuge)	5
Project focuses on a high crash area	10
Project minimizes motor vehicle, truck, bus, train, bike, and pedestrian conflicts	3
Goal 3: Security	
Project minimizes risks at transportation facilities (airport, roadways, trails, transit)	1
Project improves disaster and emergency response preparedness and recovery	2
Project utilizes ITS technology	2
Goal 4: Mobility and Efficiency	
Project is on corridor that exceeds reliability threshold	10
Project alleviates traffic congestion	10
Project promotes coordination of transportation services to improve mobility of elderly, low income, and disabled populations	5
Goal 5: Accessibility	
Project has multimodal impacts (road, transit, bike facility)	5
Project improves accessibility problems	5
Goal 6: Environment	
Project overlaps an environmentally sensitive area or is in the floodway	-10
Project contributes to improved water quality/quantity by implementing strategies from the IDNR's Stormwater Manual	3
Goal 7: Connectivity	
Project minimizes conflicts between and within roadways, transit, rail, bike, and pedestrian facilities	3
Project encourages efficient intermodal freight facilities and access	5
Goal 8: Livability	
Project includes a bike facility	3
Project includes sidewalks	3
Project includes transit amenities	3
Goal 8: Fiscal Responsibility	
Project is on an existing paved facility	10
Project has existing funding	10

Table 1.2: SIMPCO MPO's 9 2045 LRTP Goals versus the FAST Act's

SIMPCO MPO's 2040 LRTP Goals versus FAST Act Planning Factors		SIMPCO MPO's 2045 LRTP Goals								
		Economic Development	Safety	Security	Mobility and Efficiency	Accessibility	Environment	Connectivity & Compatibility	Livability	Fiscal Responsibility
FAST Act Planning Factors	Support Economic Vitality	●			●	●	●	●	●	●
	Increase safety of the transportation system		●	●					●	
	Increase the security of the transportation system		●	●					●	
	Increase the accessibility and mobility of people and freight	●			●	●		●	●	
	Protect and enhance the environment and promote conservation						●		●	
	Enhance the integration and connectivity of the system across and between modes				●	●		●	●	
	Promote efficient system management and operations	●			●	●		●	●	●
	Emphasize the preservation of the existing transportation system	●					●	●		●
	Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation	●		●	●		●		●	
	Enhance travel and tourism	●	●		●	●		●		

GOAL 1: ECONOMIC DEVELOPMENT

OBJECTIVES

Promote the balanced and sustained economic growth of the SIMPCO MPO planning area through the efficient movement of goods and people in a safe, energy efficient, and environmentally sound manner. The following objectives capture these favorable conditions for promoting economic development:

- Give priority consideration to transportation projects and system improvements that facilitate local job creation and retention.
- Promote efficient land-use patterns appropriate for commercial and industrial development locations and redevelopment opportunities in the metropolitan planning area.
- Give consideration of the true costs and benefits of providing the transportation facilities necessary to move goods in the SIMPCO MPO planning area.

Evaluation Criteria

10 points: Project creates system improvements that facilitate local job creation and retention

1 point: Project promotes efficient land use patterns

1 point: Project gives consideration of true cost and benefits of providing transportation facilities necessary to move goods

Projects that Exemplify Economic Development

- Use transportation programming to encourage desired development patterns by encouraging economic development in areas that are compatible and accessible to the existing network.
- Consider regional travel patterns and community in the development of the transportation network to allow access to jobs in and around the planning area.
- Improve air freight, barge, rail, and truck terminals including access and connectivity improvements to enable competitiveness and address reliability and capacity needs for productivity and efficiency.
- Seek grants through all funding sources for infrastructure improvements and economic development projects.
- Continue to improve the transportation network to accommodate projected increases in traffic due to economic development.

GOAL 2: SAFETY

OBJECTIVES

Promote and implement transportation system improvements for all modes that minimize the occurrence and potential of crashes that might result in the loss of health, life, and/or property. The following objectives capture these favorable conditions for promoting a safer transportation system:

- Develop a transportation plan giving priority consideration to transportation system improvements preventing crashes, injuries, and losses.
- Promote the standardization of geometric design criteria across transportation agencies.

Evaluation Criteria

5 points: Project incorporates pedestrian safety features at intersections (crosswalk, pedestrian signals, and median refuge)

10 points: Project focuses on a high crash area

3 points: Project minimizes motor vehicle, truck, bus, train, bike, and pedestrian conflicts

Projects that exemplify Safety

- Maintain the various types of transportation facilities properly, including streets, buses, sidewalks, trails, and other modes.
- Upgrade the street system to minimum width standards based on overall system plan.
- Focus on high crash areas for transportation improvements.
- Minimize motor vehicle, truck, bus, train, bicycle, and pedestrian conflicts.
- Develop and extend the pedestrian and bicycle network by tying the street system with greenway systems and major activity centers.
- Create a centralized safe driver campaign and educational program.

GOAL 3: SECURITY

OBJECTIVES

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

- Develop a transportation plan giving priority consideration to security improvements.
- Support programs that ensure the safe and secure operation of the transportation system for motorized and non-motorized users.
- Minimize security risks at transportation facilities such as the airport, roadways, trails, and public transit.
- Improve disaster, emergency, and incident response preparedness and recovery.

Evaluation Criteria

1 Point: Project minimizes risks at transportation facilities (airport, roadways, trails, transit)

2 Points: Project improves disaster and emergency response preparedness and recovery

2 Points: Project utilizes ITS technology

Projects that exemplify Security

- Utilize Intelligent Transportation Systems (ITS) technology for surveillance of the transportation network and facilities.
- Encourage optimal lighting and other security measures on all transportation facilities.
- Support activities that enhance the communication of emergency personal within the SIMPCO MPO planning area.
- Promote activities that educate the public on security issues.

GOAL 4: MOBILITY AND EFFICIENCY

OBJECTIVES

Develop, maintain, and promote the most efficient and effective transportation system for the movement of people and goods.

- Develop transportation investment decisions by maximizing the useful life of existing elements of the transportation system.
- Alleviate traffic congestion and reduce travel time between locations within the SIMPCO MPO planning area.
- Promote coordination of transportation services to improve the mobility of the elderly, lower income populations, and individuals with disabilities.

Evaluation Criteria

10 Points: Project is on corridor that exceeds reliability threshold

10 Points: Project alleviates traffic congestion

5 points: Project promotes coordination of transportation services to improve mobility of elderly, low income, and disabled populations

Projects that exemplify Mobility and Efficiency

- Utilize appropriate management systems to identify and implement optimal maintenance strategies.
- Limit number of roadways operating at a level of service (LOS) lower than the Base Level of Service Standard "D" during peak hour/peak season/peak direction conditions. For all roads in unincorporated areas, "C" peak hour/peak season is the Base Level of Service Standard.
- Systematically maintain public transit equipment and rolling stock to achieve an efficient, cost effective, and customer attractive system.
- Utilize ITS technology applications to meet transportation system demands.
- Continue to support efforts to coordinate transportation through meetings and committees that bring together both public transit and health/human service providers.

GOAL 5: ACCESSIBILITY

OBJECTIVES

Develop a transportation system that is reliable and accessible to all potential users. In efforts to capture an accessible and reliable transportation system the following objectives are used:

- Encourage multimodal accessibility to employment, shopping and other commerce, medical care, housing and leisure.
- Establish an integrated transportation system supportive of the land use goals of the cities' and counties' master plans.
- Give appropriate consideration to the needs and requirements of disabled and underserved populations.
- Facilitate increased communication between government agencies and officials, the system users, the public, and other interested parties.

Evaluation Criteria

5 points: Project has multimodal impacts (road, transit, bike facility)

5 points: Project improves accessibility problems

Projects that exemplify Accessibility

- Design driveways and medians to meet appropriate access management standards. Coordinate driveways and medians with on-site standards, on-site traffic operations, and parallel access roads. They shall be designed to maximize roadway capacity and safety and minimize median and curb cuts.
- Require safe and convenient on-site traffic flow and parking for all development. The facilities shall be designed with efficient internal circulation and curb cuts shall be limited in order to reduce points of congestion or conflict with traffic flow on adjacent streets. Encourage adequate neighborhood circulation and multiple access points from neighborhoods to the arterial/collector system. Curvilinear design and low speeds will be utilized to minimize the attractiveness to through traffic.
- Provide reliable public transit vehicles that accommodate all patrons.

GOAL 6: ENVIRONMENT

OBJECTIVES

Preserve and enhance the SIMPCO MPO Planning area's unique and natural environmental features by protecting the integrity of air, land, water, energy, cultural, and aesthetic resources. In order to do this, the following objectives are laid out:

- Avoid, minimize, and mitigate adverse impacts of transportation systems on the environment, such as noise and water runoff.
- Initiate, promote, and support projects, programs, and services that are designed to improve the SIMPCO MPO Planning area's air quality and energy conservation in the transportation system.

Evaluation Criteria

-10 Points: Project overlaps an environmentally sensitive area or is in the floodway

3 points: Project contributes to improved water quality/quantity by implementing strategies from the IDNR's Stormwater Manual

Projects that exemplify Environment

- Plan and develop a transportation system that preserves environmentally sensitive areas, conserves energy and natural resources, and minimizes adverse environmental impacts, particularly related to storm water management.
- New or reconstructed roadways or rail routes 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 (e.g. Express buses, high occupancy vehicles, public transit alternatives, and bikeways) that reduce air quality degradation, help conserve energy and provide the community with travel alternatives.

GOAL 7: CONNECTIVITY/COMPATIBILITY

OBJECTIVES

Encourage and implement system improvements which promote the efficient and effective movement of people and goods by integrating and linking various modes of transportation. The following objectives lay out how this can be achieved:

- Identify a multimodal network of facilities to meet the requirements for moving people, goods, and services in an efficient manner throughout the SIMPCO MPO.
- Minimize conflicts between and within roadways, public transit, rail, bicycle, and pedestrian facilities.
- Encourage the development of efficient intermodal freight facilities, with access to all, to encourage effective shifts among modes.

Evaluation Criteria:

3 points: Project minimizes conflicts between and within roadways, transit, rail, bike, and pedestrian facilities.

5 points: Project encourages efficient intermodal freight facilities and access

Projects that exemplify Connectivity/Compatibility

- Address, encourage, and enhance intermodal facility connections.
- Incorporate public transit, bicycle, and pedestrian accessibility in the review of all development.
- Consider off-roadway travel corridors, such as drainage canal, railroad, and utility right-of-way properties, as potential corridors.
- Include the construction of bicycle/pedestrian infrastructure in conjunction with the construction, reconstruction, or changes in any State facilities, and assure that all transportation improvements address the needs of bicyclists and pedestrians where bikeways and sidewalks are needed.

GOAL 8: LIVABILITY

OBJECTIVES

Promote a transportation system that encourages the use of environmentally sustainable modes as a vital means of transport, including transit, walking and bicycling to support the creation of livable communities.

- Give priority consideration to transportation projects that consider all modes of transportation.
- Promote land use patterns and development that allow for the use of sustainable transportation.
- Promote consideration of actions that make better use of the existing system such as carpooling, van pools, walking, and bicycling.

Evaluation Criteria

3 points: Project includes bike facility

3 points: Project includes sidewalks

3 points: Project includes transit amenities

Projects that exemplify Livability

- Encourage Complete Street projects throughout the metropolitan area by considering comprehensive street design.
- Encourage development that is accessible by all modes of transportation.
- Promote and market alternative modes of transportation and their benefits.
- Coordinate transportation amongst various modes, jurisdictions, and organizations.
- Educate the community on bicycle and pedestrian safety practices.
- Obtain funding to expand non-motorized transportation opportunities.

GOAL 9: FISCAL RESPONSIBILITY

OBJECTIVES

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

- Provide a balanced and viable funding mechanism for transportation systems and services within the metropolitan area.
- Develop a positive working relationship with the system users, the public, and political officials who can provide funding increases when necessary.
- Develop transportation investment decisions that consider the full costs and benefits.
- Give priority to funding the transportation needs identified in state, regional, and local transportation system plans.

Evaluation Criteria:

10 points: Project is on an existing paved facility

10 points: Project has existing funding

Projects that exemplify Fiscal Responsibility

- 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.
- Identify private-public partnerships for funding large-scale transportation projects.
- Accept maintenance responsibility for any state roads only with a concurrent shift in adequate maintenance revenues from state sources.
- Apply to grants annually for projects that benefit air quality.
- Continue to support the optional management systems originally established under ISTEA to generate information to establish priorities for allocation of transportation funds.

PERFORMANCE BASED PLANNING AND PROGRAMMING (PBPP)

The Fixing America's Surface Transportation (FAST) Act, signed in 2015, reiterates MAP-21 requirements of placing increased emphasis on performance management within the Federal-aid highway program, including the development of national performance measures to be used by State DOTs and MPOs in setting targets[1]. The law requires MPOs to apply performance-based decision making in their transportation planning efforts (see the text box below).

Requirements for Performance-Based Planning and Programming
Metropolitan transportation planning: "[MPOs]…, in cooperation with the State and public transportation operators, shall develop long-range transportation plans and transportation improvement programs through a performance-driven, outcome-based approach to planning." 23 USC Section 134(c)(1); 49 USC Section 5303(c)(1). "The metropolitan transportation planning process shall provide for the establishment and use of a performance-based approach to transportation decision making to support the national goals…." 23 USC Section 134(h)(2); 49 USC Section 5303(h)(2).

Performance-based planning and programming (PBPP) is the application of performance management principles within the existing federally-required transportation planning and programming processes to achieve desired performance outcomes from transportation investment[1]. PBPP involves using data to support long-range and short-range investment decision-making. The benefits of adopting PBPP include improving investment decision making and return on investments and resource allocations, enhance system performance, increase accountability and transparency, and demonstrates links between funding and performance[1].

The PBPP process or framework comprises three main components – planning, programming, and implementation and evaluation[1].

- Planning has two stages:
    1. Strategic Direction: where do we want to go? This stage includes the development of goals, and objectives, and performance measures.

    2. Analysis: how are we going to get there? This stage includes identifying trends, targets, and strategies, and analyzing alternatives and development investment priorities.

- Programming: What will it take? This stage focus on investment plans, resource allocation, and project programming.

- Implementation and Evaluation: How did we do? This stage involves monitoring, evaluation, and reporting.

[1] U.S. DOT & FHWA (2013). Performance-Based Planning and Programming Guidebook, https://www.fhwa.dot.gov/planning/performance_based_planning/pbpp_guidebook/

Integrating PBPP in SIMPCO's 2045 LRTP

As mentioned earlier, the law requires State DOTs, Transit agencies, MPOs, and other transportation agencies to integrate PBPP in the existing transportation planning process. For transportation agencies to meet this mandate, they are required to establish and report on performance targets that align with the specific areas of performance, which serves as the focus area of the FAST Act (check this website for more information: https://www.fhwa.dot.gov/tpm/about/regulations.cfm).

SIMPCO MPO adopted to support the safety, pavement, bridge, system performance, and freight targets set by Iowa DOT, Nebraska DOT, and South Dakota DOT and transit asset management targets set by Sioux City Transit System (SCTS). See the official websites of IA DOT, NE DOT, and SD DOT for the methodology used in setting safety, pavements, and bridges, and system performance, and freight targets. By agreeing to support the performance targets by the DOTs and SCTS, SIMPCO MPO agrees to:

1. Coordinate with State DOTs in the development of targets

2. Plan and program projects to contribute towards the accomplishment of the performance targets

3. Include a description of the performance measures and targets in the MPO's transportation plan per 23 CFR 450.324

4. Include in the TIP how a description of the anticipated effect of the TIP toward achieving performance targets per 23 CFR 450.326

5. Work with DOTs on data collection

6. Reporting on system performance in the MPO related to specific targets.

7. Tables 1 .3 and 1. 4 below show the IA DOT, NE DOT, SD DOT, and SCTS performance targets based on the national goal and areas of performance outlined by the FAST Act. The safety targets are set as five-year rolling averages while pavement and bridge targets are set as four-year targets. System and freight reliability targets, on the other hand, are set as four-year targets while the SCTS targets are set at least once every fiscal year as five-year targets.

Table 1.3: Iowa, Nebraska and South Dakota DOT Performance Targets

National Goal	Performance Measure	Iowa		Nebraska		South Dakota		MPO Support of State DOT's Target
		Baseline	Targets	Baseline	Targets	Baseline	Targets	
Safety	Number of Fatalities	337.40	345.80	229.40	239.00	-	< 126.4	11/1/2018
	Fatality rate per 100 million Vehicle Miles Traveled	1.046	1.011	1.119	1.140	-	< 1.280	
	Number of serious injuries	1499.1	1396.2	1520.0	1442.0	-	< 667.4	
	Serious injury rate per 100 million Vehicle Miles Traveled	4.50	4.08	7.42	6.80	-	< 6.740	
	Non-motorized fatalities and serious injuries	134.2	138.1	135.8	133.0	-	< 43.0	
Pavement and Bridges	Percentage of pavements of the Interstate System in good condition	57.68%	49.4%*	-	At least 50%	-	62.60%	1/9/2020
	Percentage of pavements of the Interstate System in poor condition	1.75%	2.7%*	-	No more than 5%	-	2.40%	
	Percentage of pavements of the non-Interstate National Highway System in good condition	49.06	46.9%*	-	At least 40%	-	41.50%	
	Percentage of pavements of the non-Interstate National Highway System in poor condition	14.22%	14.5%*	-	No more than 10%	-	1.50%	
	Percentage of National Highway system bridges classified as in good condition	46.40%	44.6% *	-	At least 95%	25.80%	> 20%	
	Percentage of National Highway system bridges classified as in poor condition	3.80%	3.2% *	-	No more than 10%	1.50%	< 5%	
System and Freight Reliability	Percent of the person-miles traveled on the Interstate that are reliable	100.0%	99.5%	-	98.90%	99.8%	90%	
	Percent of the person-miles traveled on the non-Interstate National Highway System that are reliable	95.6%	95.0%	-	92.60%	94.8%	85%	
	Truck Travel Time Reliability (TTR) Index	1.12	1.14	-	1.1	1.11	<1.5	

* 4 year targets for Iowa DOT
Source: IA DOT, NE DOT & SD DOT

Table 1.3: Sioux City Transit System Performance Targets

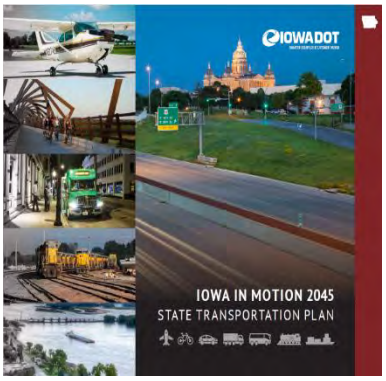
National Goal	Peformance Measure	Targets	MPO Support of SCTS' Target
Transit Asset Management	Percentage of SCTS' non-revenue vehicles met or exceeded Useful Life Benchmark (ULB)	100% of fleet exceeds default ULB of 8	6/13/2017
	Percentage of SCTS' revenue vehicles (buses) met or exceeded Useful Life Benchmark (ULB)	47.67% of fleet exceeds default ULB of 14	
	Percentage of SCTS' revenue vehicles (Vans) met or exceeded Useful Life Benchmark (ULB)	60% of fleet exceeds default ULB of 8	
	Percentage of SCTS' revenue vehicles (Cutaway Buses) met or exceeded Useful Life Benchmark (ULB)	0% of fleet exceeds default ULB of 10	
	Percentage of SCTS' assets (Martin Luther King Jr. Transportation Center) with condition rating below 3.0 on FTA TERM Scale	Facility rated over 3.0 on TERM scale	
	Percentage of SCTS' assets (Transit Maintenance Garage) with condition rating below 3.0 on FTA TERM Scale	Facility rated 3.0 on TERM scale	
Source: Sioux City Transity System			

Integrating State and SCTS Transportation Plans into SIMPCO 2045 LRTP

According to the FAST-ACT '*an MPO shall integrate into the metropolitan transportation planning process, directly or by reference, the goals, objectives, performance measures, and targets described in other State transportation plans and transportation processes, as well as any plans developed under 49 U.S.C. chapter 53 by providers of public transportation, required as part of a performance-based program'.* The section below highlights existing Iowa, Nebraska, and South Dakota DOT transportation plans and Sioux City Transit System Asset Management Plan.

Iowa in Motion 2045 State Transportation Plan

The State LRTP is updated every five years to reflect trends, forecasts, legislation, funding, technological changes, and state priorities. Iowa in Motion 2045 State Transportation Plan is an update to the 2012 State LRTP. Iowa's dynamic economy and the need to meet future challenges will continue to place pressure on the transportation system. With this in mind, the plan provides direction for each transportation mode and supports a continued emphasis on stewardship. The plan comprises seven components: trends, System condition, vision, investment areas, strategies and improvement needs, costs and revenues, and implementation.



https://iowadot.gov/iowainmotion/

The vision of Iowa DOT and Commission as stated in the plan is: *'A safe and efficient multimodal transportation system that enables the social and economic wellbeing of all Iowans, provides enhanced access and mobility for people and freight, and accommodates the unique needs of urban and rural areas in an environmentally conscious manner'.* To achieve this vision Iowa's 2045 LRTP outlines 80 strategies across the following categories: asset management, aviation, bicycle/pedestrian, bridge, energy, freight, highway, public transit, rail, safety, technology, and transportation system management and operation.

Iowa Transportation Asset Management Plan

Faced with budgetary constraints in 2011, Iowa DOT's executive leadership decided to switch from preventive maintenance and "worst-first" approaches to transportation asset management in managing transportation infrastructure. The DOT reached this conclusion as TAMP embodies the philosophy that is comprehensive, proactive, and long term. Below is a list of Iowa DOT's asset management goals, these goals are consistent with best practices nationally.

https://iowadot.gov/systems_planning/fpmam/IowaDOT-TAMP-2018.pdf

- Build, preserve, operate, maintain, upgrade, and enhance the transportation system more cost-effectively throughout its lifetime
- Improve the performance of the transportation system.
- Deliver to Iowa DOT's customers the best value for every dollar spent
  Enhance Iowa DOT's credibility and accountability in its stewardship of transportation assets

Iowa Strategic Highway Safety Plan (2019 – 2023)

Iowa has developed its Strategic Highway Safety Plan (SHSP) to meet the significant challenge of reducing fatal and severe injury crashes. This document is an update to Iowa's 2017 SHSP and is the fourth of such effort in Iowa since it became a requirement. Iowa's SHSP was developed in consultation with the SHSP Implementation Team, which is composed of individuals representing the E's of safety (education, emergency medical services, enforcement, and engineering).

https://iowadot.gov/traffic/shsp/home

For this update, the prioritization of Iowa's 18 safety emphasis areas was supported by an analysis of crash data and an extensive statewide input process involving Iowa's traffic safety stakeholders. The result of these efforts was the prioritization of eight of the safety emphasis areas that are now considered priority safety emphasis areas. For each of the emphasis areas, the plan highlights at least three strategies that provide the greatest opportunity to reduce fatalities and serious injuries. Below are the eight safety emphasis areas outlined in Iowa SHSP, 2019 to 2023.

1. Lane departures and roadside collisions
2. Speed-related: Focus on crashes caused by speeding
3. Unprotected persons
4. Young drivers
5. Intersections
6. Impairment involved
7. Older drivers
8. Distracted or inattentive drivers

Iowa State Freight Plan

The Iowa State Freight Plan is a multimodal freight plan designed to provide a safe, efficient, and convenient freight transportation system to Iowans. The plan is consistent with the national freight goals defined in the FAST Act, the goals contained in Iowa in Motion – Planning Ahead 2040 (safety, efficiency, and Quality of life), and the mission of the Freight Advisory Council (FAC). Iowa State Freight Plan presents 27 strategies to improve freight movements in the state. These strategies align with the national freight goals.

https://iowadot.gov/iowainmotion/specialized-system-plans/state-freight-plan.

Nebraska Long Range Transportation Plan – Vision 2032

Nebraska DOT is updating the current LRTP – Vision 2032. The update is scheduled to be done by 2021. Vision 2032 represents Nebraska's long-range guideline for multi-modal transportation. Long-range transportation planning is a process that builds upon the past and studies the present to help prepare for the challenges of the future. The Vision 2032 goals are centered on four themes: safety, mobility, environmental stewardship, and coordination and cooperation.

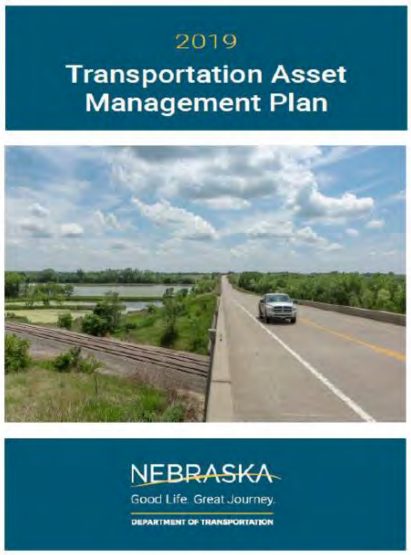
https://dot.nebraska.gov/projects/publications/lrtp/

Below are the goals of Vision 2032:

1. Improve safety on Nebraska's transportation system
2. Improve mobility on Nebraska's transportation system through increased reliability, capacity, and efficiency
3. Integrate environmental considerations into planning/design, construction and operational activities of Nebraska's transportation system
4. Collaborate with stakeholders to maximize the value of Nebraska's transportation policies and investments

Nebraska Transportation Asset Management Plan, 2019

This plan covers a 10-year financial period and will be reviewed and recertified by the Federal Highway Administration (FHWA) every four years. Nebraska DOT's TAMP describes current asset management practices to increase transparency. This TAMP also outlines Nebraska DOT's strategic approach to meet the needs of the system and its users on highways and bridges. The goal of NDOT concerning asset management is to operate, maintain, upgrade, and expand physical assets effectively throughout their life cycle. Many of Nebraska DOT's asset management objectives and policies were already established before the passage of the FAST Act. NDOT's major objectives outlined in the 2019 TAMP include:

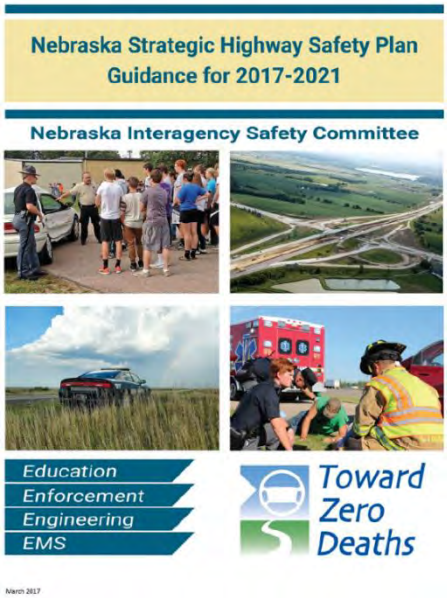


https://dot.nebraska.gov/media/13303/ndot-tamp.pdf

1. Maintain pavement and bridges in a state of good repair
2. Optimize budget expenditures
3. Meet or increase the expected lifespan of the major assets

Nebraska Strategic Highway Safety Plan 2017 - 2021

This plan is an update to 2012-2016 NDOT SHSP. In setting the goals for the 2017-2021 SHSP, the Interagency Safety Working Committee (IASWC) used a trend line of fatality rates from 2006-2015 to project future fatality rates through 2021. The goal is to reduce traffic fatalities per 100 million VMT from 1.10 (2011 – 2015 average fatality rate) to 0.90 fatalities by December 31, 2021. The State's ultimate goal is toward zero deaths. Nebraska DOT used crash records to identify the areas of emphasis outlined in the SHSP, based on the number of related fatal crashes. The identified areas of emphasis outlined in the plan represent the greatest opportunity for successfully reducing the number of serious injury crashes. The IASWC then used the same screening process as in the 2012-2016 SHSP that ultimately resulted in the continuation of the same five areas of focus for the 2017-2021 SHSP. The area of emphasis outlined in 2017 – 2021 SHSP includes.

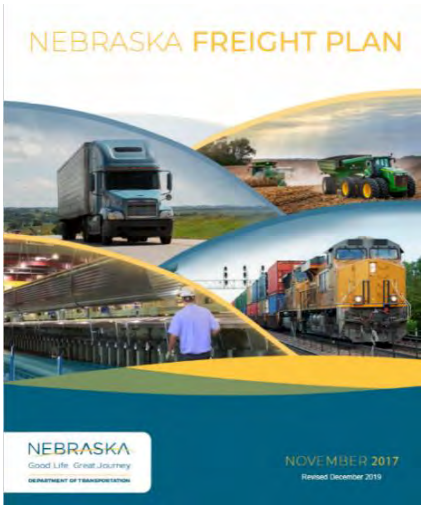


https://dot.nebraska.gov/media/7839/2017-2021-nebraska-strategic-highway-safety-plan.pdf

1. Increasing seat belt usage
2. Reducing roadway departure crashes
3. Reducing impaired driving crashes
4. Reducing intersection crashes
5. Reducing young driver's crashes

Nebraska Freight Plan

NDOT developed this first-of-its-kind Nebraska State Freight Plan (NSFP) to gain a deeper understanding of the industry drivers of goods movement, the impact of supply chains on transportation system condition and performance, and the link between land use, infrastructure, economic development, and workforce needs. The NSFP consists of two parts: a Plan Summary, and Ten Chapters containing the detailed technical information supporting the Plan Summary. The vision of the NSFP is to support and grow Nebraska's freight system efficiently and innovatively to promote the state's economic growth and competitiveness.



https://dot.nebraska.gov/media/10761/nebraska-freight-plan.pdf

The goals of the NSFP include:

1. Increase Nebraska's economic competitiveness
2. Identify innovative ways to better move freight and people safely within and across the state
3. Identify opportunities for the state to work more collaboratively and in better partnership with private businesses
4. Strengthen efforts of Nebraska state agencies to work together towards achieving the state's goals

South Dakota Statewide Long-Range Transportation Plan

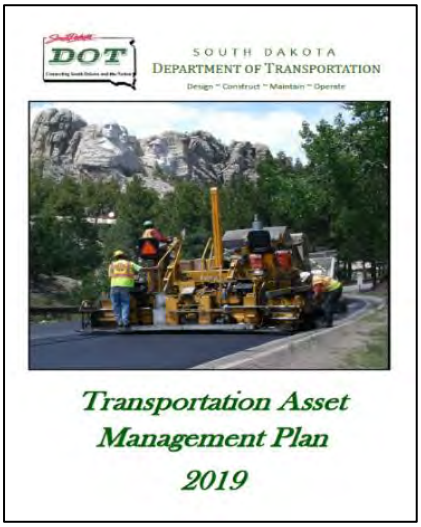
The purpose of the Statewide Long-Range Transportation Plan is to guide decision-making, monitor transportation challenges, and opportunities, strengthen beneficial intermodal relationships, and ensure that projects reflect fiscal and political reality and long-term financial sustainability. Instead of completing a detailed 20-year forecast of needed transportation projects and assume it is correct, this plan will guide annual decision-making for the Statewide Transportation Improvement Program (STIP), which is a five-year list of transportation projects scheduled for completion. Below are the goals of SD Statewide LRTP:

https://dot.sd.gov/projects-studies/planning/long-range-plan

1. Preserve and maintain South Dakota's transportation system
2. Promote transportation safety
3. Support access and connectivity to important facilities like grain elevators, ethanol plants, pipeline terminals, wind energy facilities, airports, freight terminals, large employment, and retail generators, and intermodal facilities
4. Promote transportation efficiencies within and among all transportation modes
5. Promote transportation facility enhancements within our authority and financial constraints
6. Support economic growth and tourism
7. Provide mobility and transportation choices
8. Preserve South Dakota's quality of life
9. Promote transportation security

South Dakota DOT Transportation Asset Management Plan

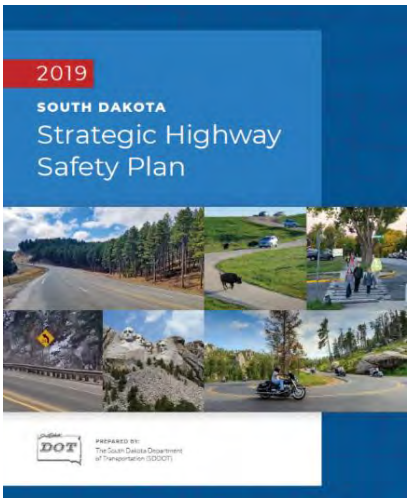
The SDDOT 2019 TAMP explains processes currently used to manage pavements and structures and describes the present condition and outlook for these important assets. The plan not only represents the SDDOT's response to requirements of the Moving Ahead for Progress in the 21st Century Act (MAP-21) laid out in 23 CFR Part 515 Asset Management Plans but also articulates the department's dedication to sound asset management principles and commitment of resources toward that end. The TAMP discusses how the plan's strategies integrate with other departmental efforts to achieve the national goals identified in 23 USC 150(b) National Goals and Performance Management Measures. The plan is organized into chapters that describe:



https://dot.sd.gov/media/documents/SDDOT2019TAMPFHWASubmittalrevised8-28-2019.pdf

- Data collection practices
- The current condition of pavements and structure
- Processes of analyzing the data
- Asset management objectives and condition goals
- Identification of performance gaps
- Risk management analysis
- Financial planning processes
- Investment strategies

South Dakota Strategic Highway Safety Plan, 2019

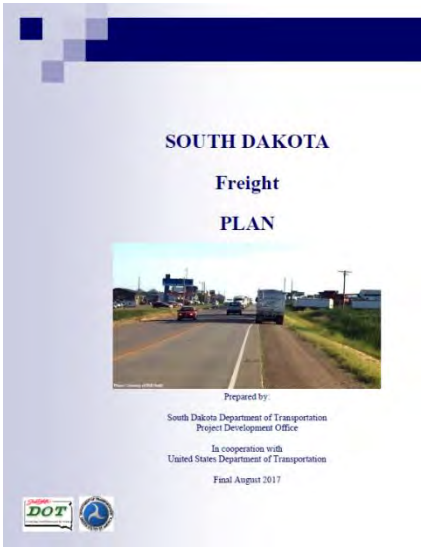


https://dot.sd.gov/media/documents/SHSP_FINAL_Reduced.pdf

The South Dakota SHSP vision expresses the intention that all travelers reach their destination without harm. That is accomplished by eliminating all traffic-related deaths and life-changing injuries. To achieve this the SHSP establishes interim goals to measure progress towards the vision. The specific goals for the SHSP are to reduce traffic fatalities to 100 or fewer deaths by 2024 and to reduce serious traffic-related injuries to 400 or fewer by the same year. Sixteen different types of crashes were evaluated using 2013-2017 severe crash records to determine 2019 SHSP emphasis areas. Although crash data was the driving factor for the selection of the emphasis areas, other considerations included priorities in the 2014 SD SHSP and the current SHSP, discussion with Study Advisory Team members, stakeholder feedback from three regional workshops, and responses from a survey open to the general public. The 2019 SHSP emphasis areas include:

- Drugs and alcohol
- Intersections
- Lane Departures
- Motorcycles
- Older Drivers
- Speeding and Aggressive Drivers
- Unbelted Vehicle Occupants
- Young Drivers

South Dakota Freight Plan



The SDDOT seeks to promote safety, monitor mobility, maintain assets, and support economic growth. This plan will accomplish these objectives by identifying opportunities, trends, technology, and by depicting and facilitating the planning and coordination process that will allow the department to take advantage of the strategies identified in the plan. The purpose of the SD Freight Plan is to guide the improvement of South Dakota's overall freight system and support SDDOT's mission to provide a safe and effective public transportation system. The plan identifies 11 objectives under the following areas:

PUBLIC PARTICIPATION PLAN

For the 2045 LRTP, SIMPCO used its 2018 Public Participation Plan (PPP) for distributing LRTP updates, drafts, and the final plan. This allowed citizens and other public offices and agencies to express their transportation opinions, concerns, and issues with the 2045 transportation planning and programming initiatives. In addition to this distribution plan, the SIMPCO MPO staff gathered public input from several different venues throughout the development of the plan (See Appendix A).

PUBLIC PARTICIPATION GOALS AND OBJECTIVES

Three goals and corresponding objectives have been identified for the 2045 LRTP's public participation. They were developed to provide a foundation for utilizing public opinion in every stage of the LRTP process.

GOAL 1: To provide early and continuing opportunities for public involvement.

Goal Objectives:

- Notifying individuals and groups that the plan is being developed and that they can contact SIMPCO to learn more about the LRTP process.
- Sending press releases describing recent project developments and public involvement opportunities to the various regional media.
- Maintaining a web home page (www.simpco.org) with planning recommendations and documents with a comment form and e-mail access.
- Distributing a public survey to gain public opinion on the current transportation system and to gage priorities for the future.
- Sharing updates and information on the plan on social networking internet sites including Facebook (https://www.facebook.com/SIMPCOCOG), and Twitter (www.twitter.com/SIMPCOCOG).

GOAL 2: To provide adequate time for public review and comment at key decisions points in the plan update.

Goal Objectives:

- Allowing a 30-day comment period before final approval of the LRTP.
- Providing SIMPCO staffs contact information, including phone number, fax number, address, and email on all public notices, mailings, and web page.

GOAL 3: To develop public support for planning recommendations and the plan.

Goal Objectives:

- Present to interest groups regarding planning recommendations and allow for discussion

- Publishing public comments in adopted planning recommendations and documents.

COVID-19

On March 13, 2020, President Trump declared a nationwide emergency in response to the COVID-19 pandemic. In response, businesses, schools, organizations, and governments imposed national lockdowns and prohibited gatherings of large groups of people. This has impeded the traditional public participation initiatives that rely on in-person interactions such as public speaking events and public meetings. To address the need to involve the public during the development of the LRTP and follow state/federal guidelines to prevent slow the spread of COVID-19, the MPO modified the approach to notify and gain public input on the LRTP.

- Distribute the public input survey via email, social media and newsletter.
- Present to interest groups that provided the opportunity to present the plan via video or telephone conference and allowed for discussion and comments.
- Post the draft document on the SIMPCO website inviting the public, local media outlets, interested parties, and stakeholder groups the opportunity to comment.
- Hold a public input meeting on the draft plan via video conference with the opportunity participate by telephone conference.
- Provide an opportunity for the public to meet one-on-one with staff, by appointment either in-person or on the phone to discuss the draft plan.

LRTP Revisions and Reviews

The SIMPCO MPO 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 metropolitan planning area. The LRTP will be updated at least once every five years. The review and updating will ensure continual citizen involvement and the LRTP's overall viability as the metropolitan planning area's long-range transportation planning document. Revisions are defined as changes to a LRTP that occur between scheduled periodic updates. There are two types of changes that occur under the umbrella of revision. The first is a major revision or "Amendment." The second is a minor revision or "Administrative Modification."

Amendment

An amendment is a revision to the LRTP that involves a major change to a project included in the LRTP. This includes an addition of a project or a major change in project cost, project phase initiation dates, design concept, or scope (e.g. change project termini or the number of through lanes). Changes to projects that are included only for illustrative purposes, do not require an amendment. An amendment is a revision that requires redemonstration of fiscal constraint or a conformity determination. Changes that affect fiscal constraint must take place by amendment of the LRTP.

Administrative Modification

A minor revision to the LRTP is an administrative modification. It includes minor changes to project phase costs, funding sources, previously-included projects, and minor changes to project/project phase initiation dates. An administrative modification is a revision that does not require redemonstration of fiscal constraint or a conformity determination.

Amendment vs. Administrative Modification

There are four main components that can be used to determine whether a project change constitutes an amendment or an administrative modification. They include the following:

- ***Project costs –*** Determination will be made based on the percentage change or dollar amount of change in federal aid. Projects in which the federal aid has been changed by more than 30 percent or total federal aid increases by $2.0 million or more will require an amendment. Anything less can be processed with an administrative modification.

- ***Schedule changes –*** Projects which are added to LRTP will be processed as amendments.

- ***Funding sources –*** Additional federal funding sources to a project will require an amendment. Changes to funding from one source to another will require an administrative modification.

- ***Scope of Changes –*** Changing project termini or changing the amount of through traffic lanes will be processed as an amendment. Other examples of changes that require amendment include changing the type of work from an overlay to reconstruction, or changing a project to include widening of the roadway.

Amendment vs. Administrative Modification Procedures

When requesting an amendment or administrative modification to the LRTP, member entities must request an amendment or administrative modification to staff. Once an amendment or administrative modification has been requested, staff will, as per Public Participation Plan (PPP) requirements, have the document available for public review for no less than 30 days, announced in the regional newspapers via public notice, and available in every courthouse and city hall in the Sioux City metropolitan planning area. Staff will follow the steps for public participation that are laid out in the FY 2018 MPO PPP. The Transportation Technical Committee will then review the amendment or administrative modification after the 30 day public comment period and make a recommendation to the Policy Board. A favorable vote from the Policy Board will allow the amendment or administrative modification to be added to the LRTP. All meetings of the MPO are open to the public and provide further opportunity for public comment on any LRTP amendments and administrative modifications.

Downtown Sioux City, looking west along 3rd street

CHAPTER CONTENTS

Current Trends

- Population
- Demographics
- Housing
- Jobs
- Transportation

Future Trends

- Population projections
- Housing projections
- Employment projections

***** A more in-depth analysis on the current and future trends of the SIMPCO MPO can be found in Appendix B.

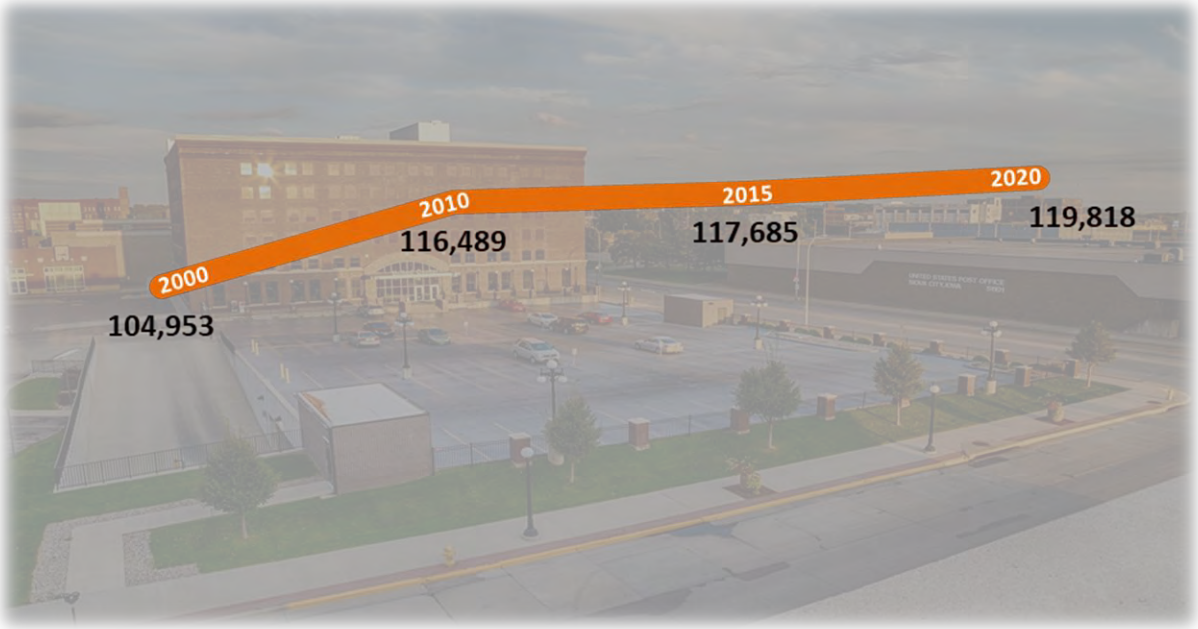


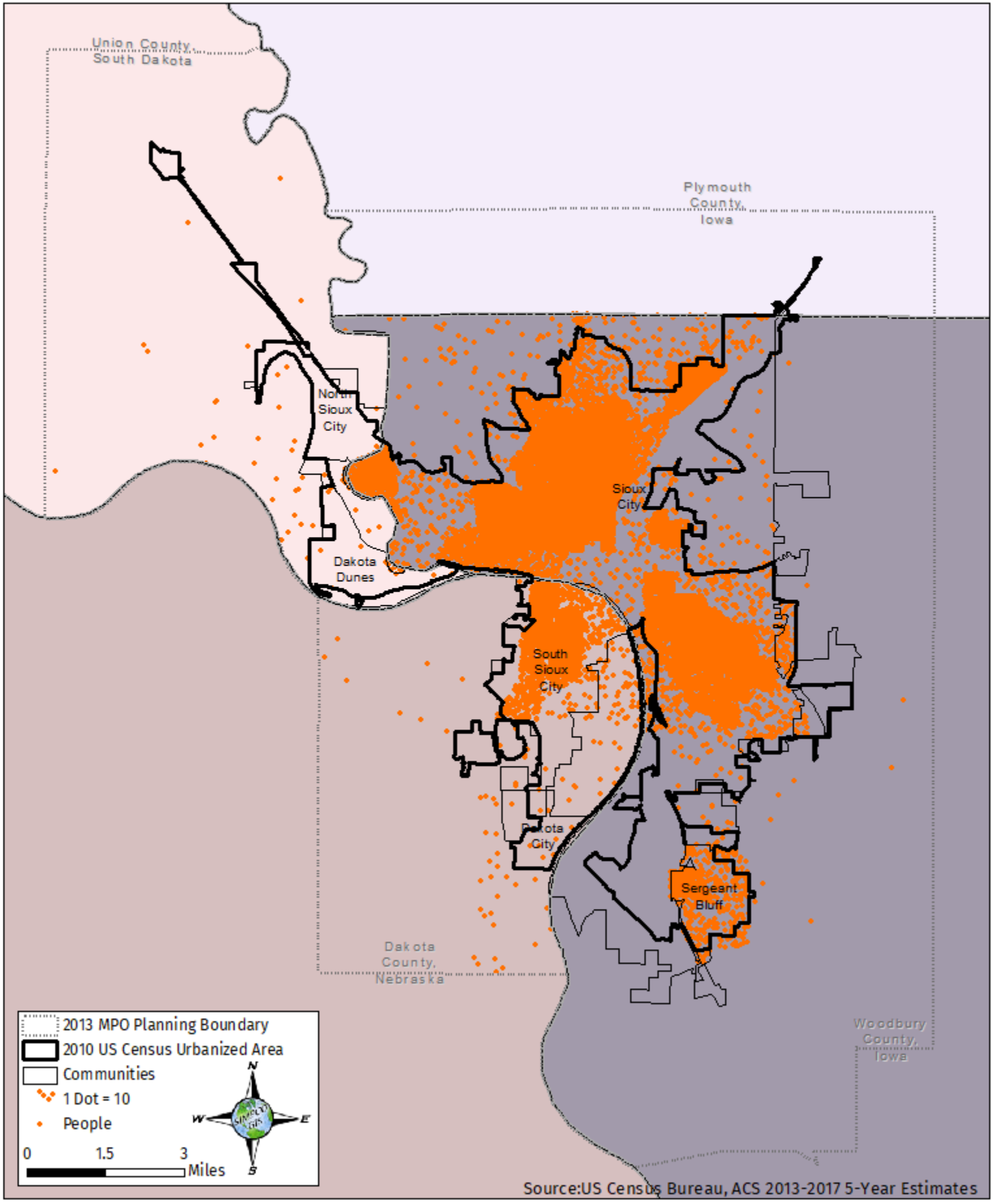
Figure 2.1: Population trends of the SIMPCO MPO from 2000 to 2020.

CURRENT TRENDS: POPULATION

Between 2000 and 2020, the population in the SIMPCO MPO planning area increased by 14.2%. While there was much variation for individual cities with respect to their population change, the SIMPCO MPO has seen steady, overall growth in the last 20 years. Dakota City, North Sioux City, Sergeant Bluff, and South Sioux City had higher growth rates than the SIMPCO MPO planning area's overall rate.

Map 2.1

SIMPCO MPO
2017 Population Density



CURRENT TRENDS: DEMOGRAPHICS

AGE

Map 2.2 shows the median age of the SIMPCO MPO planning area by census block group. Thirty-eight (38) of the block groups on the outer edge of the MPO planning area have older median ages, while the inner block groups of the MPO have younger median ages. Map 2.3 shows where residents 64 years of age and older live, with major concentrations (27.1% or more) present on the north and east sides of Sioux City.

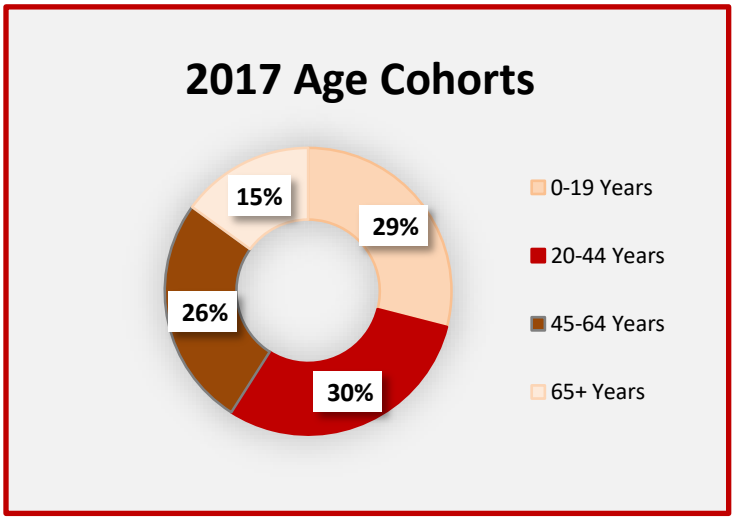


Figure 2.1: 2017 age cohorts by percentage.

Figure 2.1 shows the percentage of the population by age cohort. There is a growing trend with Millennials, Generation Z, and Baby Boomers to use transportation modes other than a personal vehicle. Planners and policy makers can better plan for future demand in transportation infrastructure with an understanding on the region's population through age cohorts.
Based on Map 2.3, 13.4% of the population indicate major concentrations of residents 65+ years of age reside in the Morningside and Northside neighborhoods of Sioux City.

Map 2.4 shows the Diversity Index of the MPO planning area. The Diversity Index is a calculation that shows the likelihood that two persons, chosen at random from the same area, belong to different races or ethnic groups. The Index ranges from 0 (no diversity) to 100 (complete diversity).

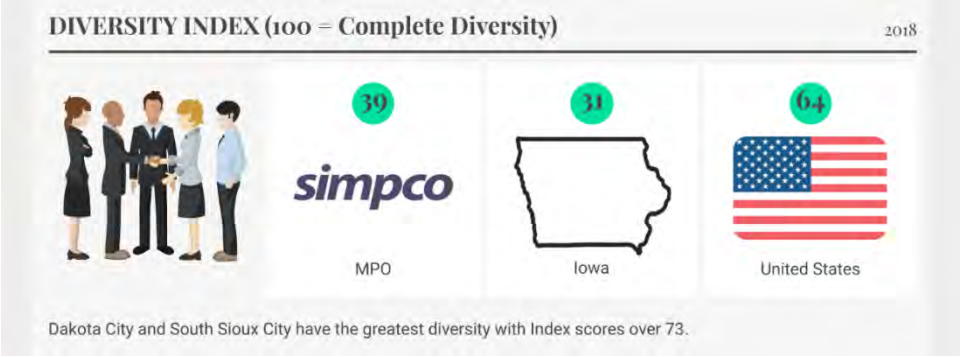
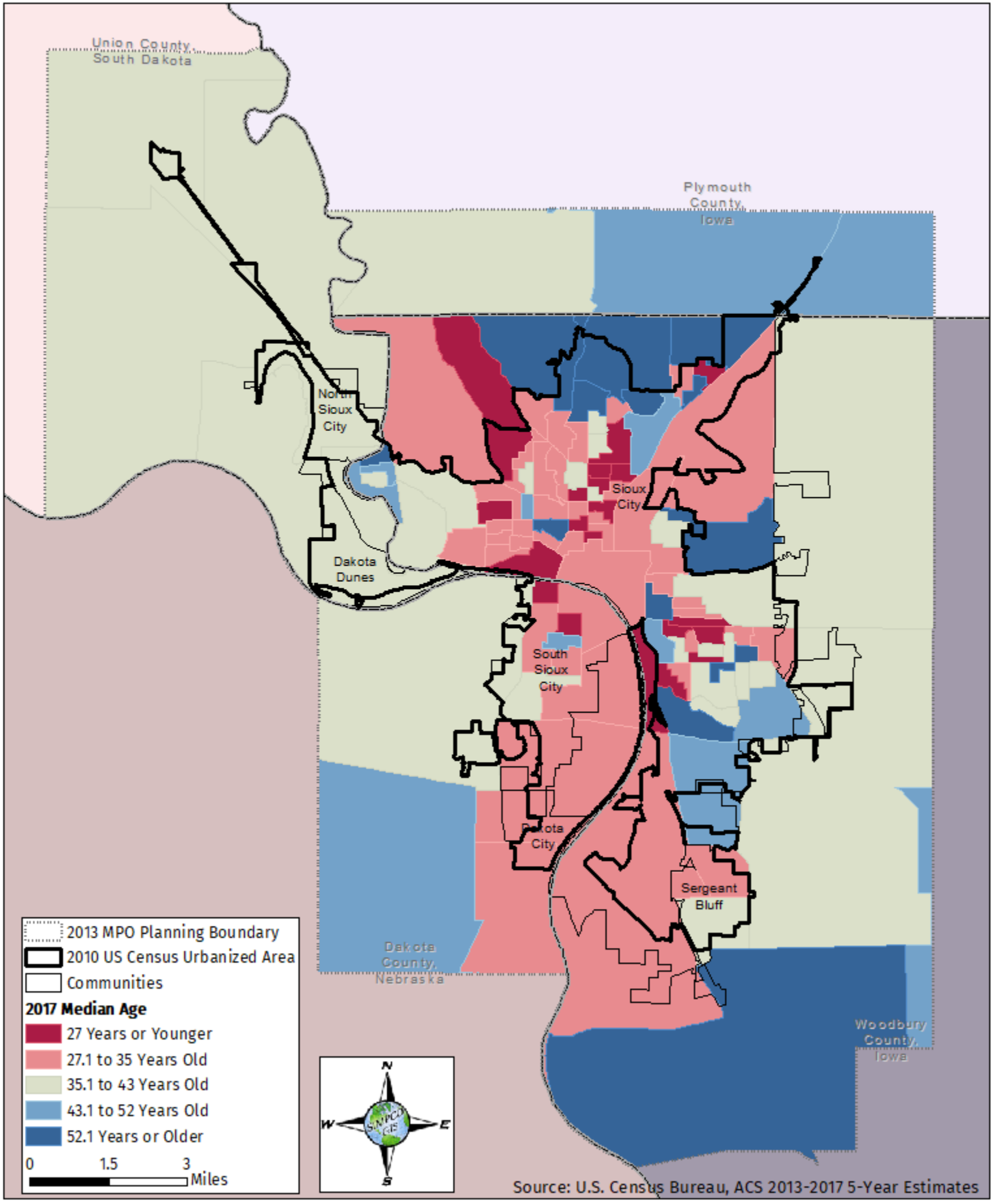


Figure 2.2: Diversity Index score comparisons.

Diversity in the U.S. population is increasing. The diversity score for the entire United States in 2012 was 61 and most recently increased to 64 in 2018. Dakota City and South Sioux City have the greatest amount of diversity in the SIMPCO MPO planning area with Index scores over 73. Figure 2.2 above, compares the different diversity index scores between the SIMPCO MPO, Iowa, and the United States.

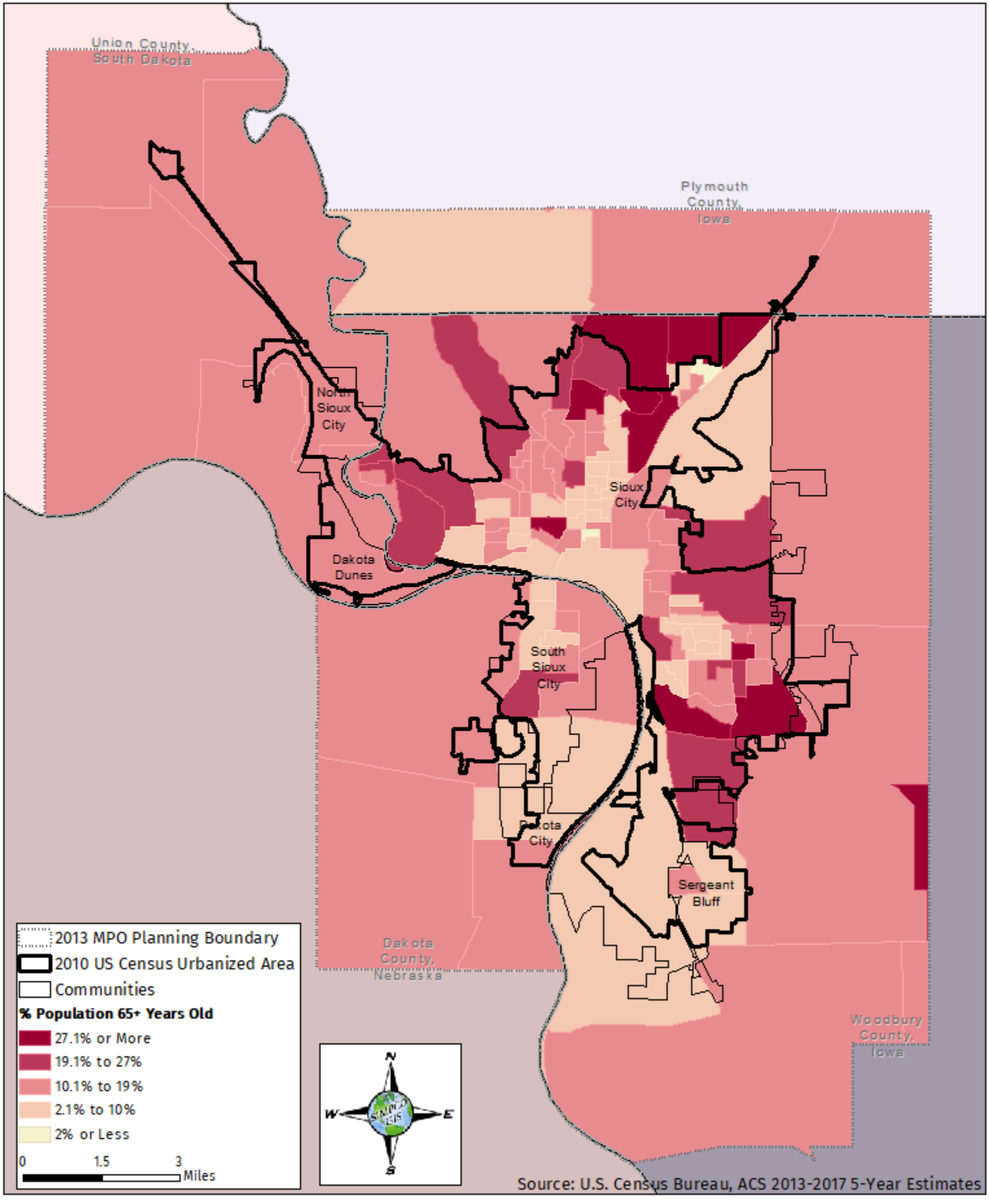
Map 2.2

SIMPCO MPO
2017 Median Age



Map 2.3

SIMPCO MPO
2017 Population Older Than 65

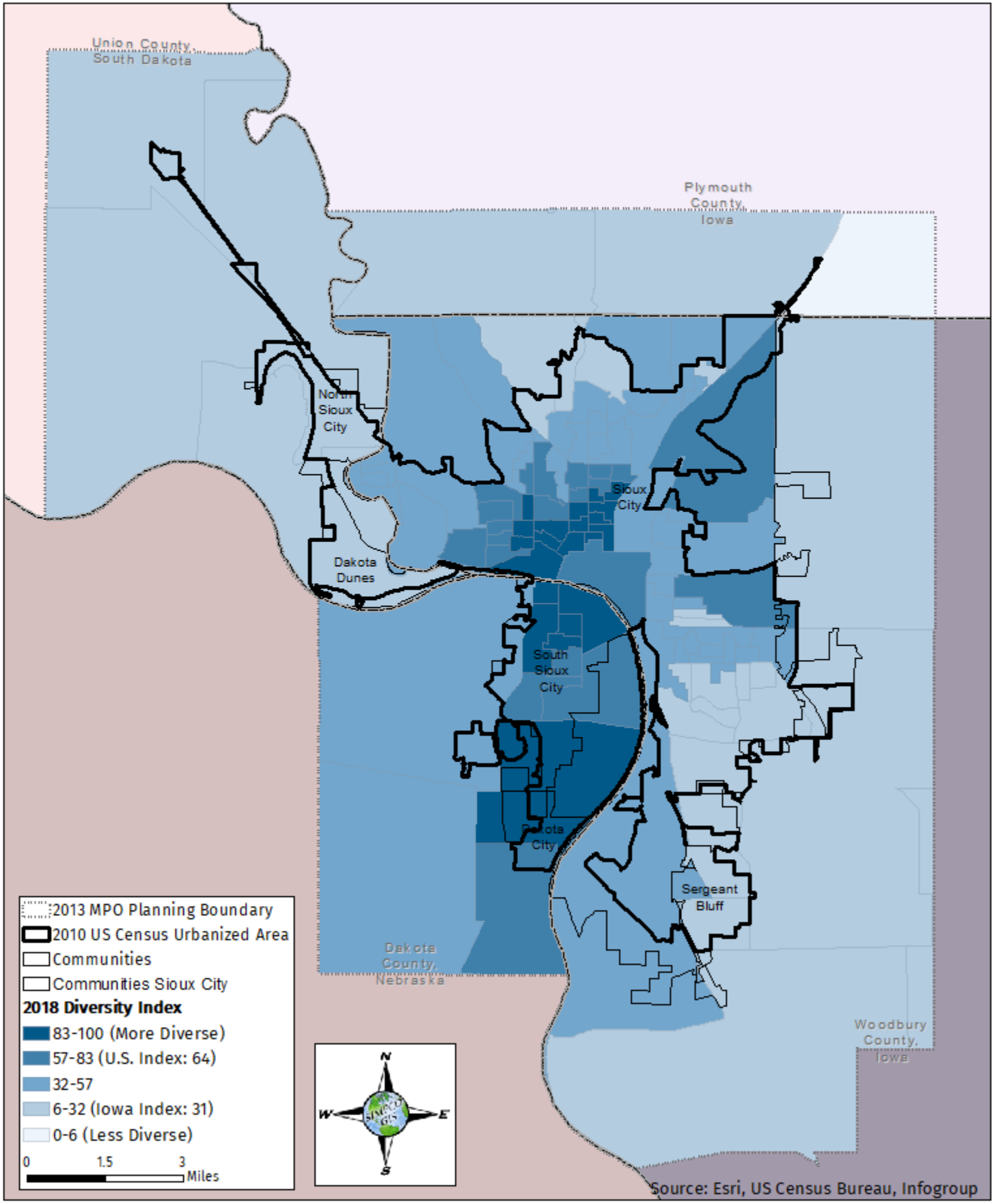


Source: U.S. Census Bureau, ACS 2013-2017 5-Year Estimates

Map 2.4

SIMPCO MPO
2018 Diversity Index

This map summarizes racial and ethnic diversity in the United States in 2018. The Diversity Index shows the likelihood that two persons chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity). Diversity in the state of Iowa and U.S. population has been increasing. The diversity score for the state of Iowa was 31 and 64 for the entire United States in 2018.



CURRENT TRENDS

HOUSEHOLD INCOME

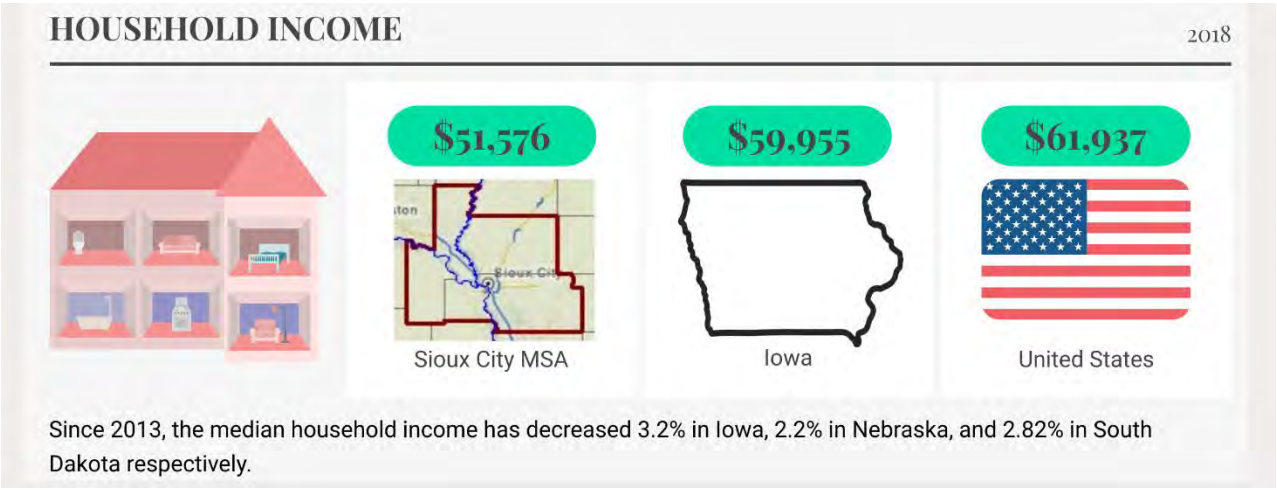
When making transportation project decisions, planners and policy makers should take into account median household income (Table 2.1). Sioux City Metropolitan Statistical Area (MSA), includes Woodbury and Plymouth Counties, Iowa, Dixon and Dakota Counties, Nebraska, and Union County, South Dakota. The 2018 median household income for MSA is 16.7% lower than that of the United States, 13.5% lower than Iowa's, 12.9% lower than Nebraska's, and 7.6% lower than South Dakota's. Since 2013, the MSA median household income has increased by $4,306, but lags behind the U.S median household income by 16.7%.

Table 2.1: Median household income 2013-2018. Data source: American Community Survey

	2013		2014		2015		2016		2017		2018	
	Income ($)	% of US	Income ($)	% of US	Income ($)	% of US	Income ($)	% of US	Income ($)	% of US	Income ($)	% of US
MSA	47,270	90.5	49,981	93.1	52,698	94.5	56,687	98.4	57,207	94.8	51,576	83.3
Iowa	52,229	99.96	53,712	100.1	54,736	98.1	56,247	97.6	58,570	97.1	59,955	96.8
Nebraska	51,440	98.4	52,686	98.2	54,996	98.6	56,927	98.8	59,970	99.4	59,566	96.2
South Dakota	48,947	93.7	50,979	95.0	53,017	95.1	54,467	94.5	56,521	93.7	56,274	90.9
U.S	52,250	100	53,657	100	55,775	100	57,617	100	60,336	100	61,937	100

Figure 2.3 illustrates the median household income in MSA, Iowa, and the United States. There is a correlation between income and mode of transportation. Those unable to own a personal vehicle because of financial constraints often rely on alternative transportation modes such as public transit, bicycling, walking, and carpooling. Map 2.5 shows the ratio of households living above the poverty line to those living below the poverty line. Much of Sioux City and South Sioux City have low ratios, indicating a large presence of households living below the poverty line. It is important to ensure proper access to all modes of transportation in these areas, to allow for these disadvantaged populations' mobility.

Figure 2.3: Median household income 2018. Data source: American Community Survey



HOUSING

Ratio of Owner-Occupied to Renter-Occupied housing is 7:3 in 2018 and has remained relatively unchanged since 2013. Table 2.2 details the housing statistics for the Sioux City MSA. Since 2013, rates of owner- and renter-occupied housing remained fairly consistent, while there was a 3.62% increase in number of housing units. The vacancy rate in 2018 is 7.2% which has increased by 0.2%. Though, rate has remained roughly steady between 7-8% over the past six years.

Table 2.2: Housing occupied vs Renter occupied

	2013	2014	2015	2016	2017	2018
	MSA	MSA	MSA	MSA	MSA	MSA
Owner Occupied (%)	71.0	68.8	68.5	69.4	69.2	68.2
Renter Occupied (%)	29.0	31.2	31.5	30.6	30.8	31.8
Total Occupied	63,754	64,369	63,198	64,589	65,877	65,930
Vacant	4,821	4,633	5,396	5,685	4,552	5,126
Vacancy Rate (%)	7.0	6.7	7.9	8.1	6.5	7.2
Total Units	68,575	69,002	68,594	70,274	70,429	71,056

The median home value increased by 27.4% since 2013 (Table 2.3). In addition, Figure 2.4 shows that the median mortgage value increased by 13.5% and the median rent value had a higher increase rate by 23.1%. Median mortgage reached its highest dollar amount in 2018 at $1,157 and median rent reached its highest value in 2018 at $799. From 2013 to 2018, the value of mortgage and rent has undergone similar growth.

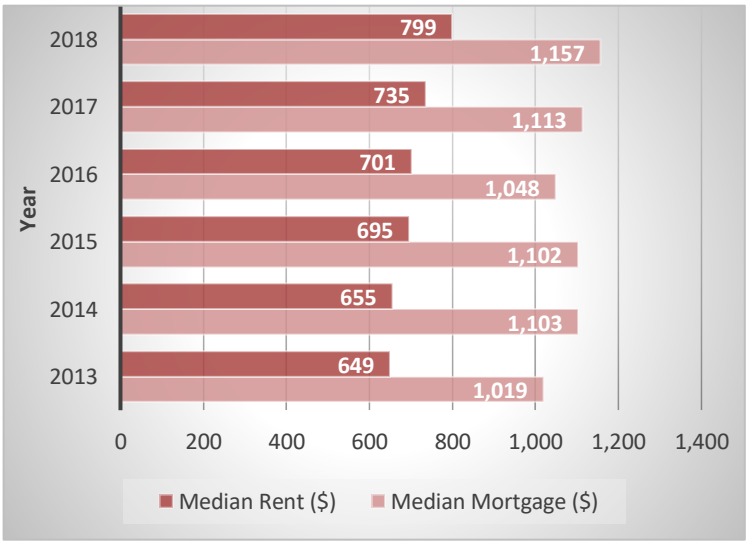
Table 2.3: Median home value

	2013	2014	2015	2016	2017	2018
Median Value (MSA)	$110,200	$117,600	$121,700	$123,700	$136,000	$140,400

Considering the median household income is relatively low compared to the higher housing costs, renters and owners have been increasingly burdened with housing costs over time. Map 2.6 shows the concentration of owner occupied housing for 2017. Since home ownership correlates to higher incomes and higher rates of car ownership, this information can be used to predict transportation patterns and needs throughout the area.

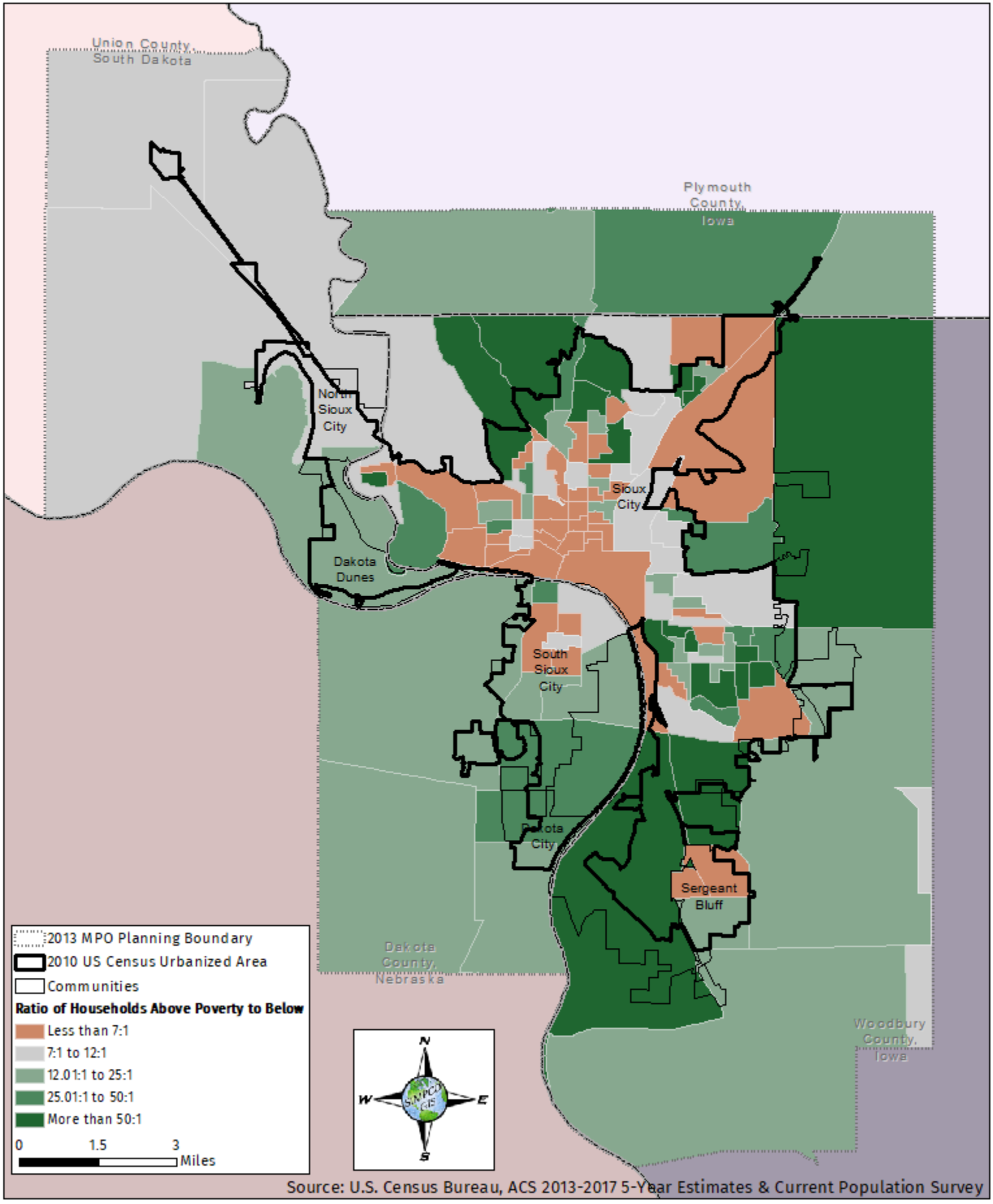
Roughly 68.2% of residents in the Sioux City MSA owned their home in 2018. About 7.2% of housing units were vacant in 2018. Median rent values have decreased since 2013, but are still high compared to median income changes. This is likely due to the lack of rental housing in the area.

Figure 2.4: Median rent vs mortgage



Map 2.5

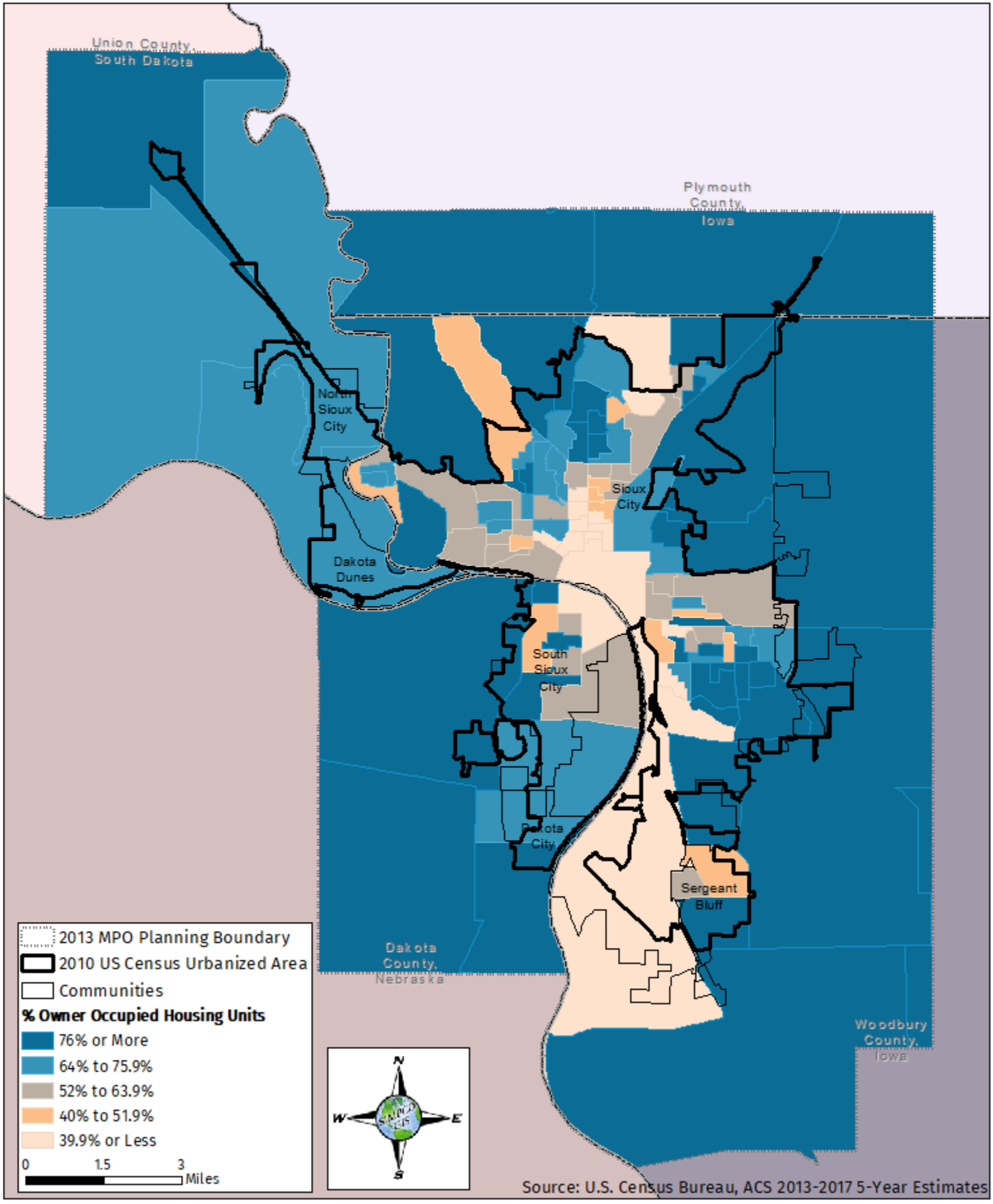
SIMPCO MPO - 2017 Ratio of Households Above Poverty to Below Poverty (Two Person Household)



Source: U.S. Census Bureau, ACS 2013-2017 5-Year Estimates & Current Population Survey

Map 2.6

SIMPCO MPO
2017 Owner Occupied Housing



Source: U.S. Census Bureau, ACS 2013-2017 5-Year Estimates

CURRENT TRENDS

JOBS

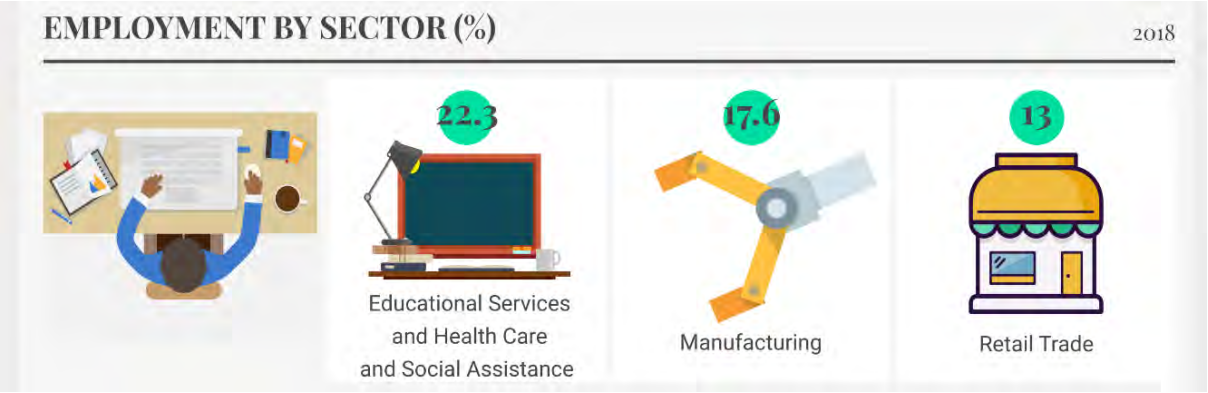
There are a variety of employment sectors within the SIMPCO MPO area. The three largest employment sectors are education services, and health care and social assistance (22.3%), manufacturing (17.6%), and retail trade (13%). Full information on employment, by sector, can be found in Table 2.4. Since 2013, total employment has steadily risen. However, the percent unemployment has risen since 2000, with a noticeable increase following the 2008 recession and a decreasing trend thereafter.

Table 2.4: Employment by sector for Sioux City MSA

Industry	2013		2015		2017		2018	
	Number	%	Number	%	Number	%	Number	%
Agriculture, forestry, fishing, hunting, mining	3,228	3.8	2,751	3.3	3,262	3.9	3,880	4.6
Construction	5,841	6.9	5,246	6.4	6,313	7.5	6,297	7.4
Manufacturing	15,393	18.3	15,282	18.6	17,876	21.2	14,890	17.6
Wholesale trade	2,660	3.2	2,576	3.1	2,895	3.4	2,589	3.1
Retail trade	9,792	11.6	9,508	11.5	9,558	11.3	11,057	13.0
Transportation and warehousing, and utilities	3,554	4.2	5,032	6.1	4,293	5.1	4,129	4.9
Information	1,151	1.4	808	1.0	844	1.0	876	1.0
Finance and insurance, and real estate	3,760	4.5	5,024	6.1	3,164	3.8	4,794	5.7
Professional, scientific, and management, and administrative and waste management services	5,578	6.6	4,576	5.6	4,705	5.6	5,413	6.4
Educational services, and health care and social assistance	17,969	21.4	16,288	19.8	17,552	20.8	18,892	22.3
Arts, entertainment, and recreation, and accommodation and food services	8,361	9.9	8,920	10.8	7,302	8.7	6,328	7.5
Other services, except public administration	3,781	4.5	3,616	4.4	3,802	4.5	3,231	3.8
Public administration	3,024	3.6	2,755	3.3	2,798	3.3	2,367	2.8
Total	84,092	100.0	82,382	100.0	84,364	100.0	84,743	100.0

Educational Services and Health Care and Social Assistance, Manufacturing, and Retail Trade have been the three largest sectors by employment since 2013. With the exception of a slight decrease from 2014 to 2015, total employment from 2013 to 2018 has slightly increased each year.

Figure 2.4: Employment by sector (%)



The unemployment rate in Plymouth and Union County has decreased since 2016. Two counties have the lowest unemployment rates compared to the others; Plymouth County, IA has a 1.6% rate and Union County, SD at 1.3%. The Sioux City MSA reached its lowest unemployment rate in 2016 at 2.5%, and has since increased slightly. The overall unemployment rate for the MSA is 2.7%. The unemployment rates for the states of Iowa, Nebraska and South Dakota have steadily decreased. Detailed unemployment information for the SIMPCO MPO planning area can be found in Table 2.5.

Table 2.5: Unemployment Rate Source: American Census 2018

	Unemployment Rate (%) by Year					
	2013	2014	2015	2016	2017	2018
Sioux City, IA	4.6	4.5	4.0	2.8	3.6	3.8
Sioux City, IA-NE-SD MSA	4.3	4.1	3.0	2.5	2.6	2.7
Dakota County, NE	5	5.3	5.2	4.9	5.3	3.9
Plymouth County, IA	2.4	2.4	2.4	2.4	2.0	1.6
Union County, SD	2.2	2.3	1.9	1.8	1.4	1.3
Woodbury County, IA	3.9	4.3	3.6	2.4	3.1	3.2
Iowa	3.3	3	2.8	2.7	2.4	2.4
Nebraska	3.2	2.9	2.2	2.5	2.3	2.4
South Dakota	2.8	2.7	2.7	2.6	2.4	2.0

TRANSPORTATION

The location of the SIMPCO MPO planning area causes a large amount of commuting between cities, counties, and states. Table 2.6 shows commute times by county, MSA, and urbanized area, for the SIMPCO MPO planning area. Based on this data, the majority of workers in the MSA have a mean commute of 19.2 minutes.

Table 2.6: Commute times to work in 2018.

	Commute in Minutes by % of Workforce								
	Minutes	<10	10-14	15-19	20-24	25-29	30-34	35+	Mean (min)
	Total Workers	Percentage of Workers (%)							
Dakota County, NE	10,115	31.8	20.1	24.5	10.6	2.7	4.1	6.1	15.5
Plymouth County, IA	13,180	34.9	15.8	10.6	9.9	5.3	10.3	13.2	18.2
Union County, SD	8,033	25.8	14.3	15.1	15.3	5.0	9.0	15.5	19.7
Woodbury County, IA	50,154	20.2	22.7	21.0	18.6	3.9	5.0	8.7	18.5
Sioux City, IA-NE-SD MSA	83,639	24.2	20.4	17.7	15.4	4.5	6.6	11.2	19.2
Sioux City Urbanized Are	40,803	19.5	24.4	26.2	15.0	3.1	5.8	6.0	17.0

Figures 2.5 and 2.6 show that homeowners tend to own more vehicles compared to renters and that driving alone is the transportation mode used the most. Maps 2.7 and 2.8 show the commuter range and concentration by place of residence into Siouxland.

Figure 2.5: Mode of Choice in 2018 Sioux City MSA.

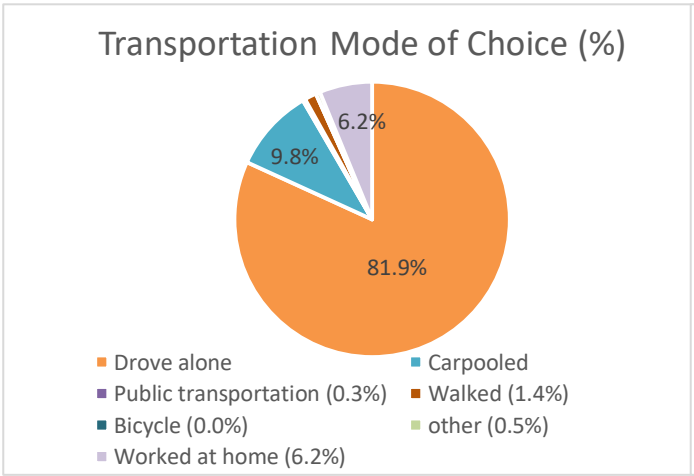
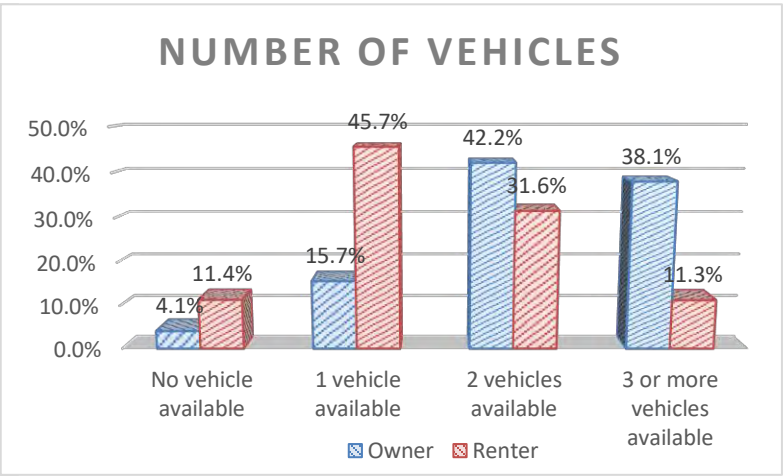
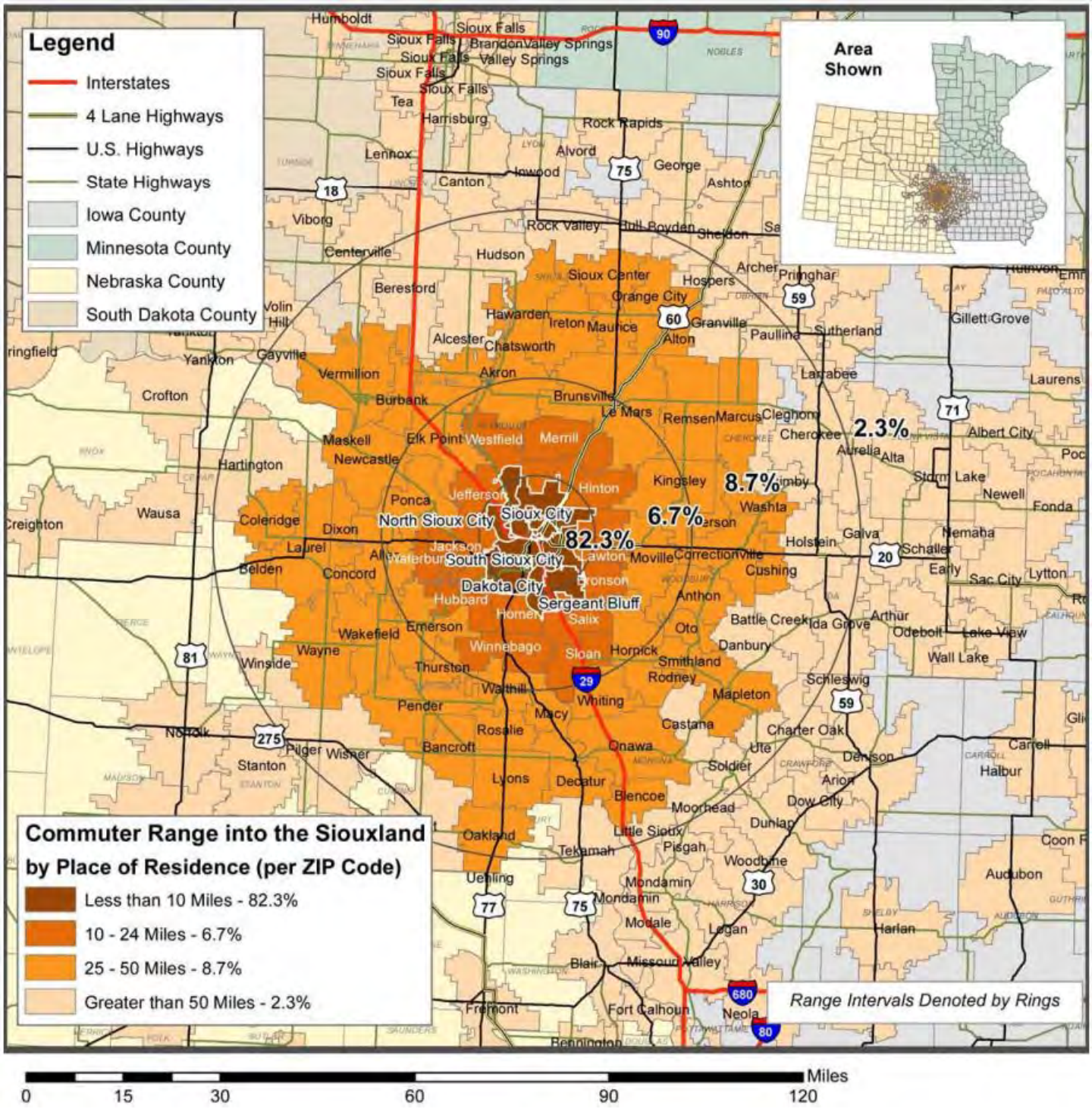


Figure 2.6: Number of vehicles per household, by housing type, in 2018.



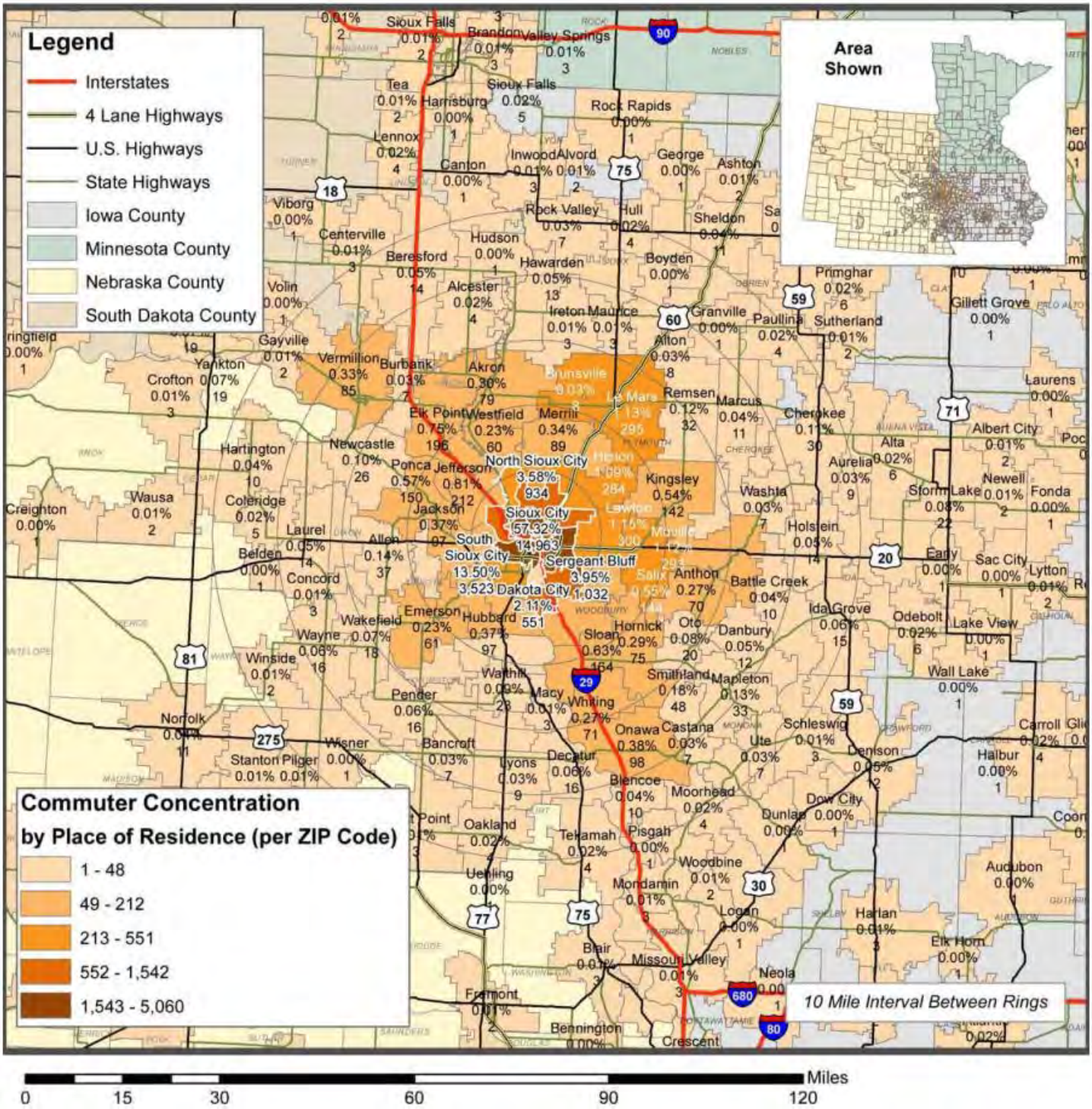
Commuter Range
By Place of Residence into Siouxland

Map 2.7



Map 2.8

Commuter Concentration By Place of Residence into Siouxland



FUTURE TRENDS

POPULATION PROJECTIONS

The population, household, and employment projections in this section were developed in conjunction with the Iowa Department of Transportation's System Planning staff for use in project planning and travel demand modeling. Table A.1 in Appendix B details the projection methodology for each jurisdiction, and Figure 2.7 shows the overall projected population change for the SIMPCO MPO planning area, which has been based off of the population change for each jurisdiction between 1990 and 2020. While the entire area's population is projected to increase by 14.1% by 2045, the growth of each of the 7 cities varies with Sergeant Bluff and South Sioux City expected to see the most growth.

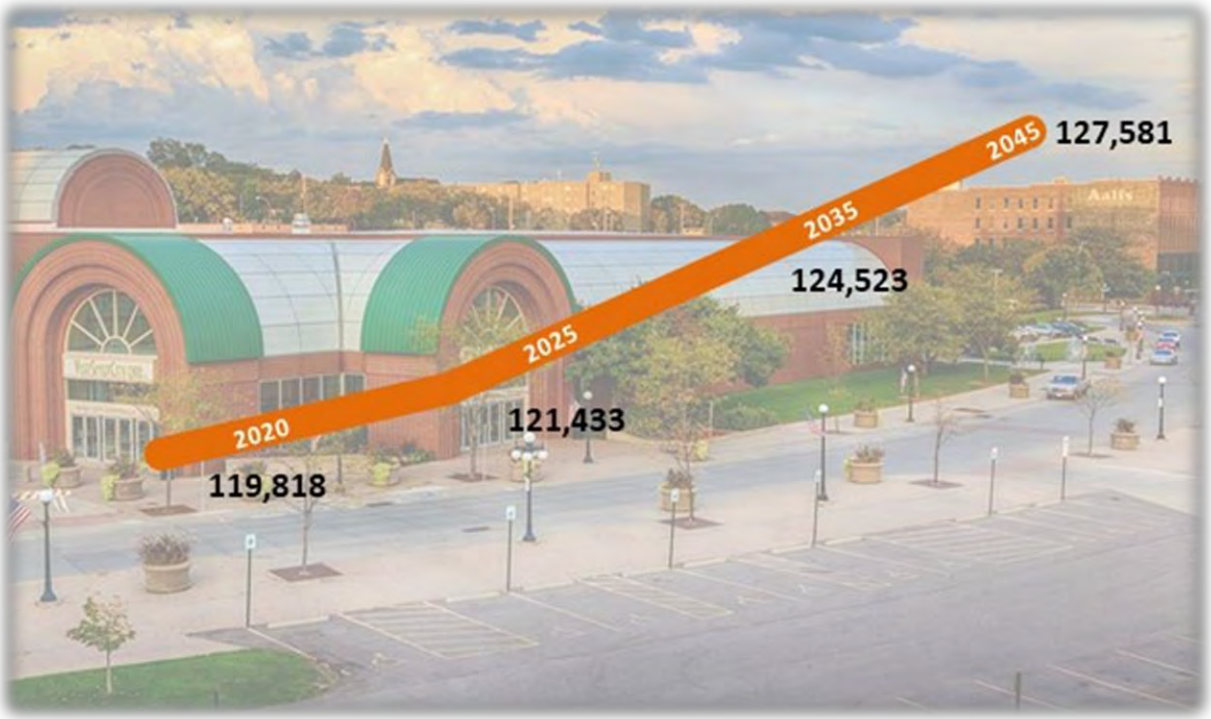
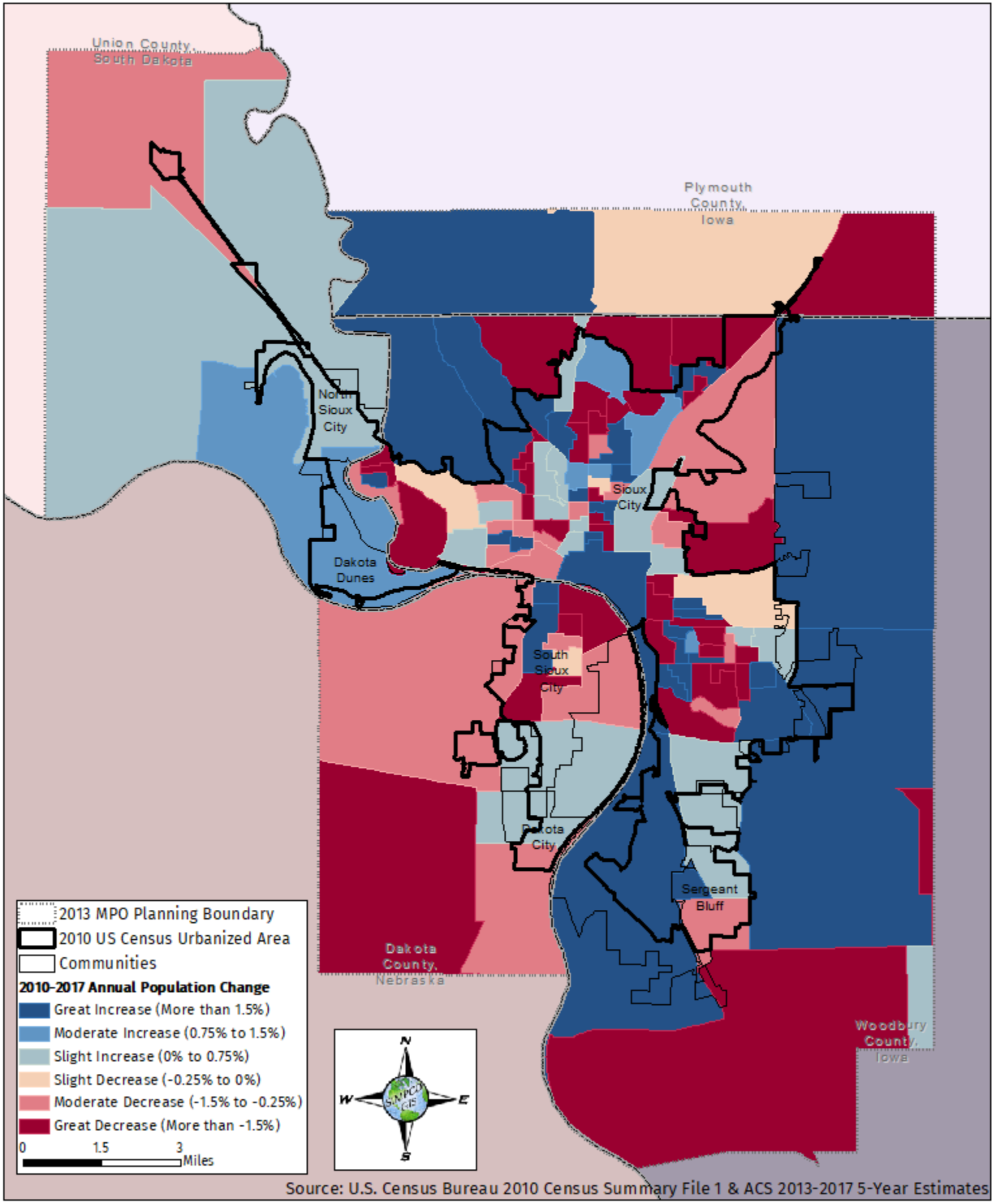


Figure 2.7: Population projections from 2020-2045.

Map 2.9

SIMPCO MPO
2010-2017 Population Change



Source: U.S. Census Bureau 2010 Census Summary File 1 & ACS 2013-2017 5-Year Estimates

FUTURE TRENDS:

HOUSING PROJECTIONS

Based on the projected population change between 2015 and 2045 and the respective persons per household for each jurisdiction that was calculated by the US Census Bureau, housing is expected to increase by 14%. There is expected to be 7,497 new housing units. Demand for new housing units is relatively high, home interest rates remain low, and the number of days homes spend on the market before selling remains low. Sergeant Bluff and South Sioux City are expected to see the largest housing stock increase.

EMPLOYMENT PROJECTIONS

The projection for new jobs is more subjective task than population and housing. As with any growing city, all jurisdictions have plans in place to increase employment for their growing populations. An increase in population does not directly correlate with an increase in jobs. To calculate projected employment in 2045, the 2045 projected population was multiplied by the 2015 population/employment ratio. Employment is expected to increase by 16.6% or 11,408 additional jobs by 2045.

Sergeant Bluff and South Sioux City are expected to see the largest increase in total employment. Manufacturing and service employment sectors will continue to be the largest employment sectors within the SIMPCO MPO.

* The projection for new jobs is a more subjective task than projecting population and housing. As with any growing city, all jurisdictions have plans in place to increase employment for their growing populations. An increase in population does not directly correlate with an increase in jobs.

CURRENT TRENDS

DEVELOPMENT

Several areas of the MPO have seen significant commercial and industrial growth recently and will continue to grow into the future, large areas will be converted from agricultural to industrial land uses in all SIMPCO MPO cities but Jefferson and Dakota Dunes, South Dakota. The Dakota Dunes has a few large tracts of land that are planned to develop into commercial uses. Sioux City's Southbridge development on the south side of the city continues to bring in new business and new jobs. In 2017, a new pork processing plant was built in the Southbridge area that employs approximately 2,400 people. There have been several other expansions in the Southbridge area equaling over 1,000 jobs in the past several years. Dakota Dunes and North Sioux City continue to grow their commercial and industrial areas with the expansion of Flynn Business Park and North Derby Industrial Areas. South Sioux City/Dakota City continue to expand the Roth Industrial park

OTHER FUTURE TRENDS

The rideshare industry (such as Uber, Lyft, Postmates, etc.) has exploded in popularity over the past several years, with companies devoted to making transportation safe, reliable and enjoyable. These companies include services that offer food delivery from anywhere or a rise. At the swipe of a finger and tap of a button, you can hail a car through your smartphone. Within minutes, you are picked up at any location and taken to your final destination, whether it's the grocery store, Movie Theater or a restaurant in town.

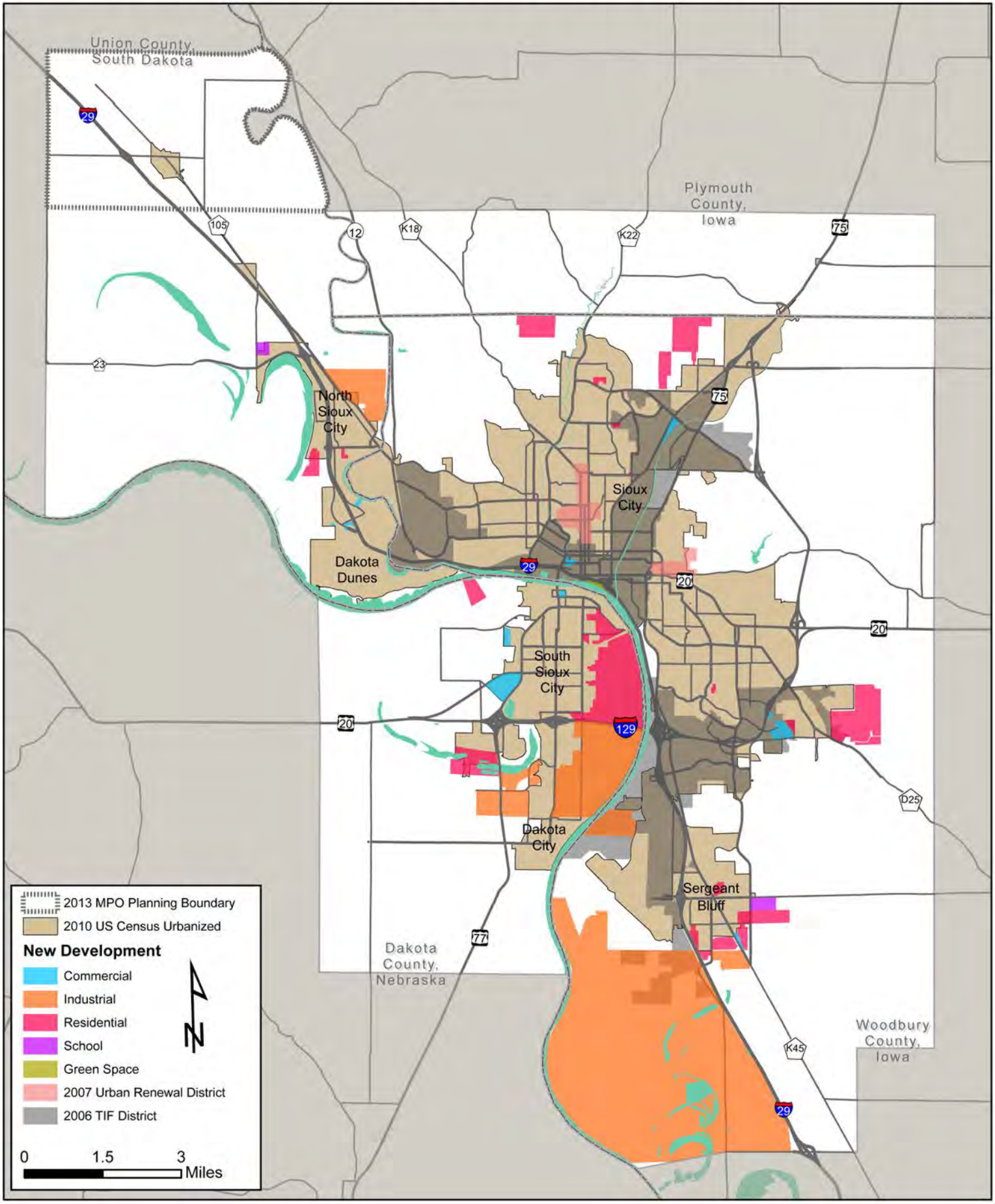
In addition, during the last decade, there have been considerable developments in automated driving technology. In the next few years, many manufacturers may begin to offer automated driving systems (ADS) that are equipped with various automation features. In the meantime, assistive or fully automated parking systems have arrived at the market as well. Driverless cars as an option to provide personal mobility services have become a major theme in the landscape of transportation. With their anticipated impacts, ADS definitely have the potential to lead to real and far-reaching ramifications in our society.

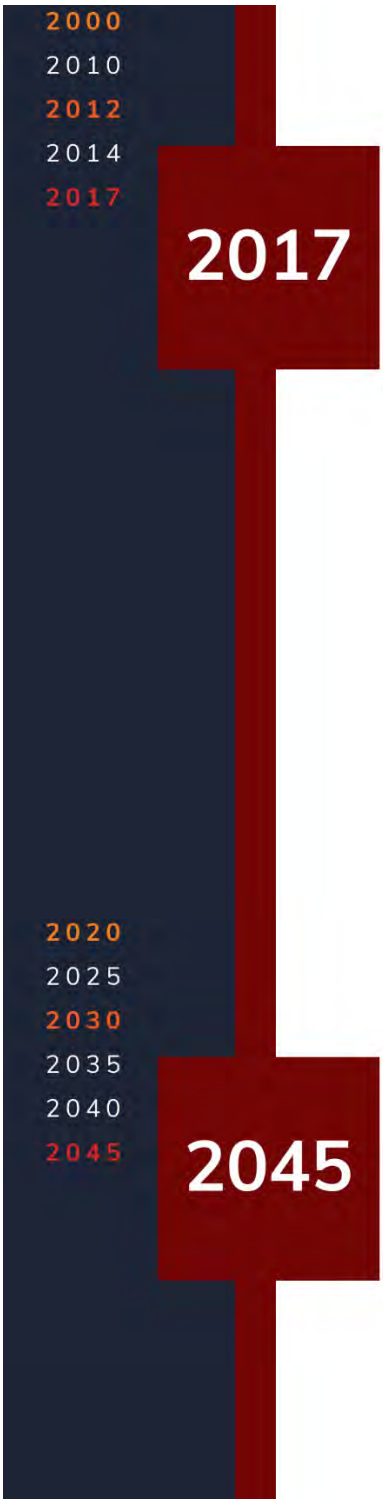
As technology continues to grow and play a larger role in consumers' lives, industries have transformed and adapted as well. Many people begin to use drones instead of cameras to capture breath taking photos from a "birds view".

Map 2.10

SIMPCO MPO

New Land Uses, Urban Renewal and TIF Districts





HERE WE ARE

20% population increase since 1980.

40% of the population is older than the age 44.

73% of jobs are in service, manufacturing, and retail trade.

<20 minute commute time for two-thirds of workforce.

83% of workers drive alone.

HERE WE GROW

139,148 RESIDENTS (14% GROWTH).

7,497 NEW HOUSING UNITS (14% GROWTH).

11,408 ADDITIONAL JOBS (16.6% GROWTH).

CHAPTER CONTENTS

Chapter 3: Active Transportation emphasizes non-motorized transportation. Throughout the six sections in this chapter, non-motorized transportation performance measures, existing bicycle and pedestrian activities and facilities, current and future outlook of the MPO's multi-purpose trail system and sidewalk network, extensions to the multipurpose trails, and a series of short and long-term policy recommendations towards improving the bicycle and pedestrian network are discussed.

CURRENT EFFORTS

SIMPCO MPO BICYCLE PEDESTRIAN ROUNDTABLE (BPR)

SIMPCO MPO BPR was formed in 2008 with the purpose of enhancing and promoting bicycle and pedestrian facilities. The roundtable meets at least quarterly to work on active transportation projects, report on active transportation activities, and to discuss bicycle and pedestrian infrastructure.

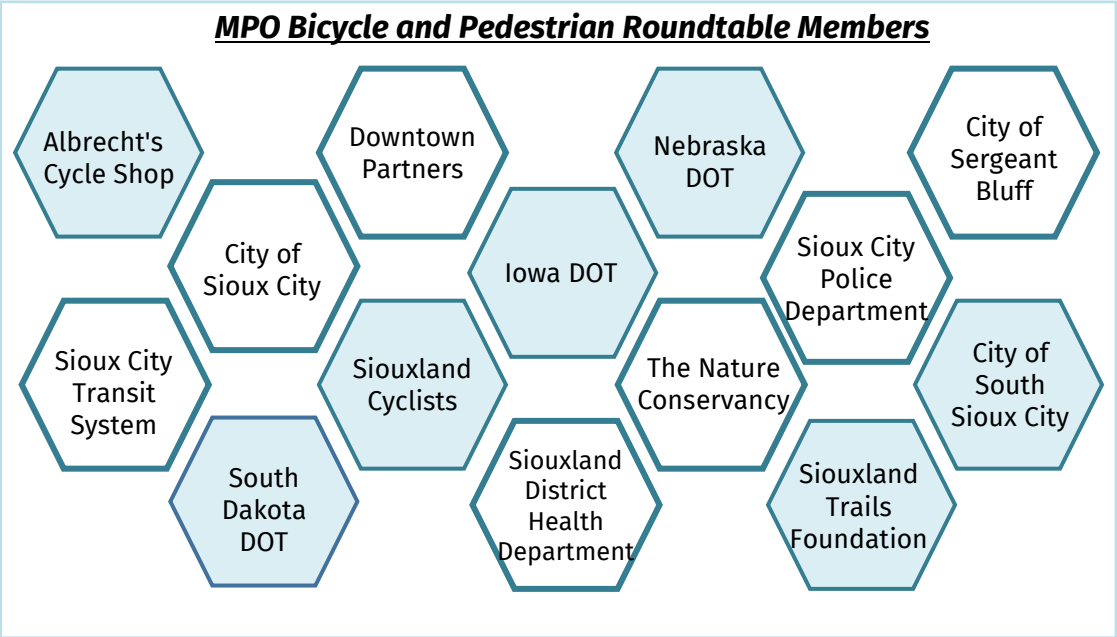


Figure 3.1: MPO BPR members.

The following events and projects have been coordinated through the MPO BPR, some of which will be discussed in detail later in this chapter.

- Annual Bike to Work Events
- Bike Rodeos
- Park(ing) Day
- Safe Routes to School Programs
- Sidewalk Assessments

The MPO BRP has ambitious future aspirations including the following.

- Obtain Bicycle Friendly Community Status for jurisdictions within the SIMPCO MPO,
- Offer bicycle training and education,
- Work with local stakeholders to improve bicycle and pedestrian facilities,
- Guide or conduct a Metropolitan Active Transportation Study / Trail Plan,
- Promote the use and expansion of the MPO area bicycle and pedestrian facilities
- Set up trail counters and provide data,
- Work towards creating an accessible multi-purpose trail system in residential areas, and
- Work with Sioux City Active Transportation Committee to install bike lanes throughout the metro area.

FEATURED PROJECTS AND EVENTS

Bike-to-Work Day

Each May, Bike-to-Work Day is part of a national effort, endorsed by the U.S. Department of Transportation and promoted by the League of American Bicyclists, to highlight the benefits of bicycling and to prove to people that it is feasible to leave the car at home for some commutes. The League of American Cyclists typically hosts National Bike Month and National Bike to Work Week annually in May. To compliment the effort, local businesses and groups often partake in providing discounts to those who participate. This event has been held annually in Sioux City since 2013 and is organized by the SIMPCO Bicycle and Pedestrian Roundtable.

Complete Streets

In the past decade, complete streets policies have been adopted by South Sioux City (2011), Sioux City (2014), Sergeant Bluff (2016), and the Iowa DOT (2020). Related projects resulting from said policies include a trail-width sidewalks within a commercial development along Floyd Boulevard in Sioux City. Chapter 6 of the State Bicycle and Pedestrian Long-Range Plan illustrates complete streets policies. This Plan is meant to guide Iowa DOT's decision-making, inform and influence local and regional agencies, and inspire the actions of advocates and non-profits.

Downtown Area Improvements

Sioux City's Downtown Partners developed a series of task forces to help plan and implement projects in Sioux City's downtown area. SIMPCO staff currently sits on their Environment Work Group (formerly the Transportation Task Force). Since its inception, the Environment Work Group has focused on improving walkability downtown, increasing wayfinding signage, creating a sense of place, quality of life improvements and greenspace planning. Recent accomplishments have included an annual Park(ing) Day event, improved lighting in downtown, the downtown trolley, litter pick-up, wayfinding implmentation, one–way to two-way conversion study, and murals. Featured on pages 3-8 to 3-10 is the Pearl Street Park project, Downtown Transportation Study, Wheelchair Charging Station project, and the implementation of the Downtown Wayfinding System. The group is currently working with SIMPCO on a comprehensive downtown transportation study and actively participates with the City of Sioux City's Active Transportation Advisory Committee and the SIMPCO Bicycle and Pedestrian Roundtable

Linking Health and Planning

Urban planning and public health share common missions and perspectives. SIMPCO continues to work with Siouxland District Health Department (SDHD) on mutual goals related to walking, bicycling, and creating healthy and safe environments. SIMPCO and SDHD work on a variety of committees together including Healthy Partners, Bicycle and Pedestrian Roundtable, the Sioux City Active Transportation Committee, Safe Routes to School Committee, and the All Abilities Health and Wellness Collation. Both SIMPCO and SDHD have found benefits working together to link planning and health. One of the outcomes of the partnership features the safe routes and walking school bus route in Sergeant Bluff displayed on Map 3.2.

Safe Routes to School (SRTS)

SRTS programs are sustained efforts by parents, schools, community leaders, public health, and MPOs to improve the health and well-being of children by enabling and encouraging them to walk and bicycle to school. Successful programs include policy development, planning and implementation of strategies such as improvements to streets and sidewalks, education and encouragement of children and parents, and increased enforcement of traffic laws. In prior years, SIMPCO has partnered with Siouxland District Health Department (SDHD) to conduct Walkability and Bikeability Suitability Audits (WABSAs) for schools in Sioux City. Issues were identified through the WABSAs and led to a swift response to improving communities. Since then, many enviornmetal improvements have been made, in both Sioux City and Sergeant Bluff, to creat safer routes for kids walking to and from school.

SIMPCO and SDHD continue to provide technical asistance to Sergeant Bluff-Luton School District and Woodbury Central Community School Distict. Currently, Walking School Bus initiatives are in the progress of implementation at Sunnnyside Elementary and Spalding Park Elementary schools in Sioux City. Bicycle education has been provided (before March, when COVID-19 hit) with the assistance of the Iowa Bicycle Coalition in many elementary schools throughout Woodbury County. Map 3.1 shows the safe routes to school map in Sergeant Bluff as of 2020.

Sioux City Active Transportation Adviosry Committee

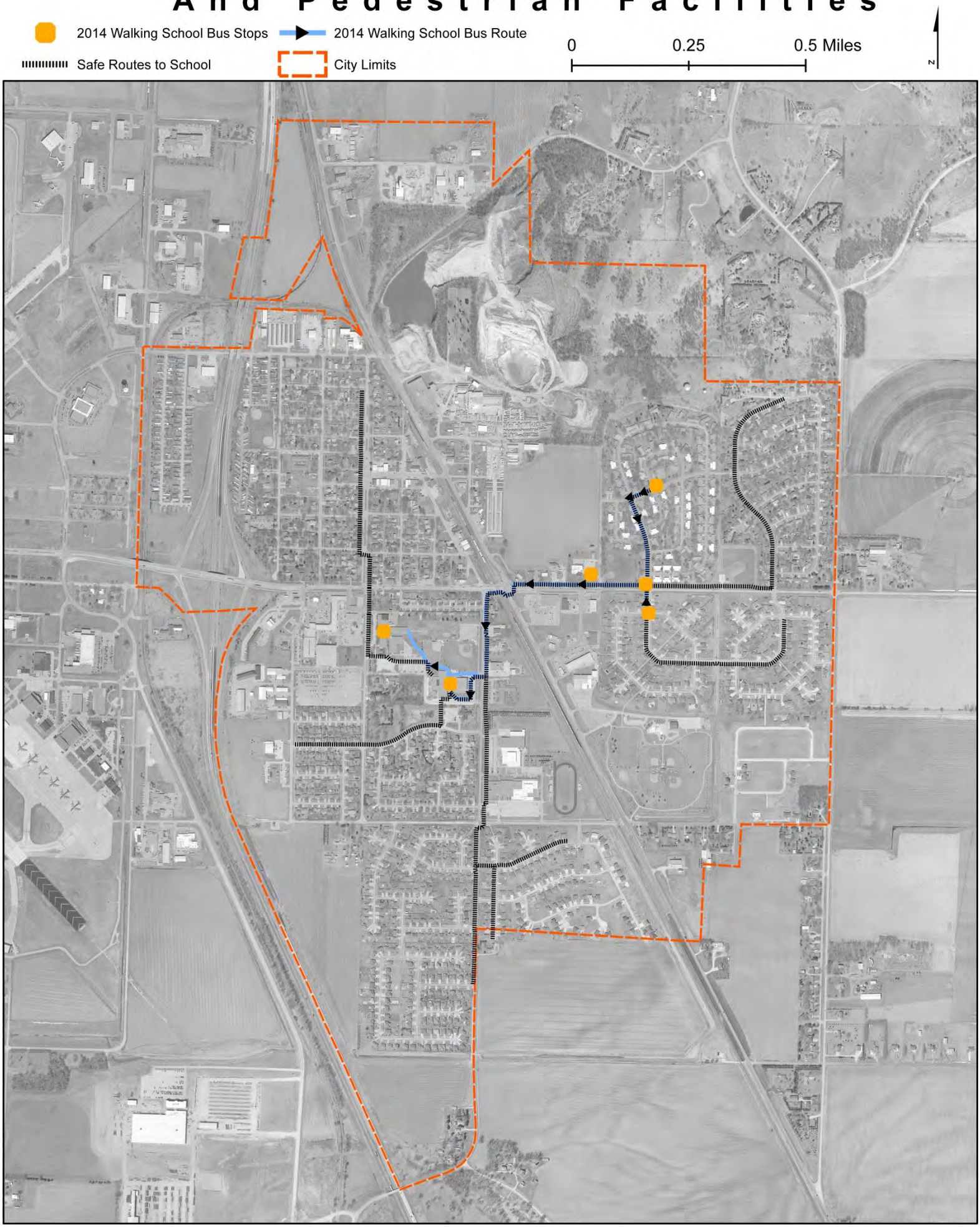
In 2019 the City of Sioux City enacted the Active Transportation Advisory Committee (ATAC). This committee was created based on a recommendation from a 2015 project with the University of Iowa. Students through the Iowa Initiative For Sustainable Committees developed the Sioux City Active Transportation Plan. The plan is designed to reduce and overcome barriers to walking and bicycling, providing safe and accessible connections for pedestrians and bicyclists, and encourage community participation in active transportation. The Active Transportation Advisory Committee has been tasked to review and implement the recommendations of the plan. Additional work by the ATAC includes reviewing site plans to ensure bicycle/pedestrian infrastrucure is considered, reviewing munipcal codes to ensure they are complatible with active transportation priorities, and addressing comments/concerns from the general public on the current bicycle/pedestrian infrastrucure system in the City. SIMPCO's Executive Director currently sits on the advisory committee.

Trail Network

Since adoption of the previous MPO LRTP, a series of trail improvements and construction have taken place. Trail segments, some currently being constructed and others have been completed, include a trail-width sidewalk along Christie Road (Sioux City), Clark School Connection (Sioux City), Leeds Connector (Sioux City), Riverfront Trail (Sioux City) between Chautauqua Park and Chris Larson Park, Floyd Boulevard, and Outer Drive Trail Connection (Sioux City), Riverside Trail Connections – Big Sioux River (Sioux City), Atokad Trail (South Sioux City), Connecting Schools Trails (South Sioux City), and Streeter Drive Trail (North Sioux City). A breakdown of the network's existing and programmed trails can be viewed on Map 3.3.

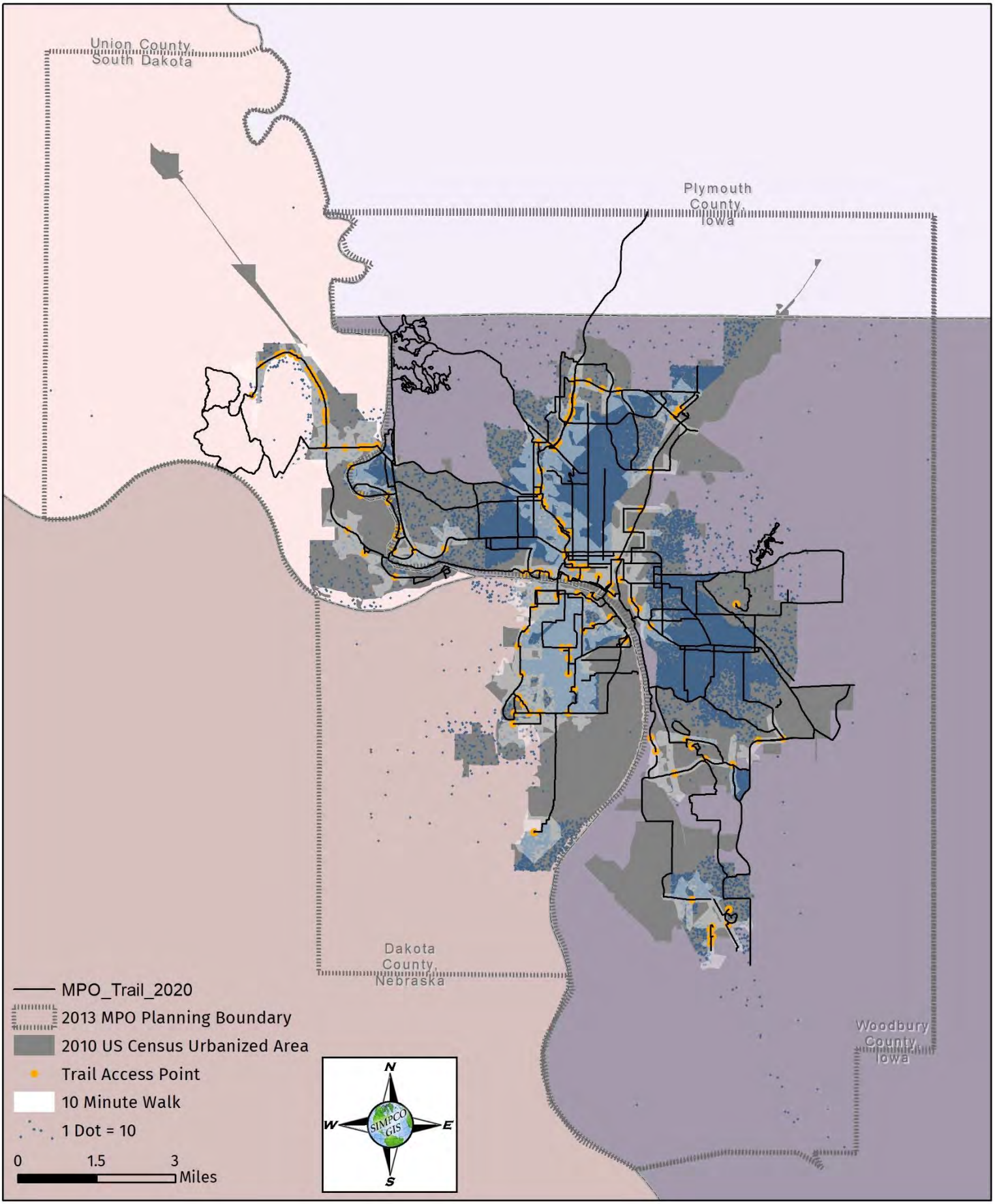
Map 3.1: Sergeant Bluff Safe Routes to School

Map 3.2: Sergeant Bluff Bicycle And Pedestrian Facilities



Map: 3.3

SIMPCO MPO 2017 Population & Existing/Programmed Trails



PROJECT OVERVIEW

Pearl Street Park

In 2017, Sioux City dedicated a new downtown urban green space, Pearl Street Park. Influenced by the Urban and Regional Planning students from the University of Iowa participating in the Iowa Initiative for Sustainable Communities (IISC), the park features play surfaces, interactive musical features, shade structures, stone boulders, bicycle racks, paved walking paths, landscaping, and pedestrian lighting (see images 3.1 and 3.2). The park is intended to enhance the area, serve as a gathering place to support the existing LaunchPad Children's Museum as well as future events including Food Truck Fridays, outdoor concerts, and family-friendly activities. SIMPCO played a role in the development of the park through a partnership with Sioux City, Downtown Partners, and IISC.

Image 3.1: Seating area and stone boulders.

Image 3.2: Play surfaces, musical play feature, etc.

Downtown Transportation Study

In the fiscal year 2020, SIMPCO contracted with the SRF Consulting Group in partnership with RDG Planning and Design, to conduct a Downtown Transportation Study in the MPO area. The study area is shown in image 3.3. One-way to two-way street conversions of 5th and 6th Street in downtown Sioux City is one of three components in the study. The goal is to analyze the traffic impacts of reducing lanes between two streets in each direction, the anticipated level of service at the signalized intersections, and the anticipated effects of traffic flow between neighboring streets. The study will also include potential enhancements to the skywalk system to attract new economic development downtown. Developing recommendations for improvements could increase pedestrian use of skywalks and highlight the downtown environment to attract and support new capital investment. Lastly, the study will analyze the pedestrian network of Sioux City's downtown. Recent efforts have been made to improve the pedestrian network and downtown accessibility, which is a priority as the downtown continues to grow and change.

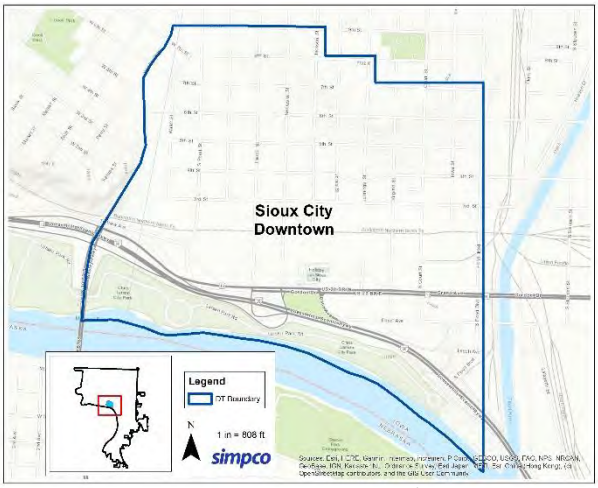
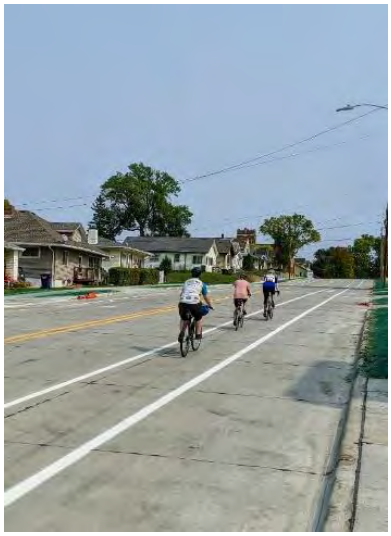


Image 3.3: Downtown Transportation Study area

Wheelchair Charging Station:
Funded through a grant awarded to the Siouxland District Health Department (SDHD), Sioux City installed the first electric wheelchair charging station in the state of Iowa at the Martin Luther King Ground Transportation Center. Located at Fifth and Nebraska Streets facility, the station features a standard power cord and charger, providing individuals who use motorized wheelchairs or electric scooters an additional opportunity to charge outside their homes. The project was seen through the partnership of SIMPCO and SDHD's All Abilities Health and Wellness Coalition.



Bicycle Lanes
In 2020, the Sioux City metro designated its first official bicycle lane on Leech Ave. The bicycle lane was put in as part of the reconstruction project of the corridor and offers a designated bicycle path on the roadway between So. Fairmount Street and So. Rustin Street. Additional bike lanes will open in 2021 on IA 12/Riverside Boulevard in Sioux City.

Downtown Wayfinding System
In 2020, the Downtown Wayfinding System will be completed. Led by Downtown Partners, the new signage and maps provide identification of local destinations and attactions to ease navigation and enhance walkability along downtown's main vehicle and foot traffic corridors. Due to recent growth and redevelopment within Downtown Sioux City, there is a need for a new cohesive, expandable wayfinding signage system. The goal of the project is to make navigation easier for residents, commuters, and visitors, connect these users to more destinations within Downtown Sioux City, and turn drivers into pedestrians by encouraging more foot traffic along the pedestrian corridors. The project will assist Downtown Partners in establishing an identity and brand for downtown and make connections between the Historic 4th Street and Pearl Street Districts, to Pearl Street Park, and down to the Riverfront as well. One of the most impactful outcomes anticipated is the ability of the project to help the interstate travelers and rural Woodbury County residents, who are unfamiliar with Downtown Sioux City, identify where the attractions and amenities are located, which may increase their stay and encourage spending in the community. The first phase of the project is considered the pedestrian phase and includes the addition of brightly colored vinyl wraps over existing signal cabinets. The second phase of the wayfinding project is to fabricate and install vehicular signage scheduled for late 2020.

I-29 Riverfront Trail

2020 saw the long anticipated connection of the Sioux City Riverfront trail from Chautauqua Park connecting at Chris Larson Park. The trail then extends to the Riverside area. This 12-mile continuous segment is a critical trail connection which had been included for completion with the I-29 reconstruction project.

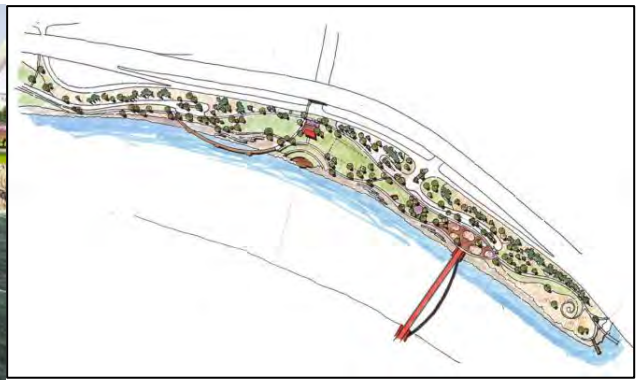
FUTURE PROJECTS

TRAIL NETWORK

Map 3.4 shows the 35 new miles of trail that are proposed for addition to the network outlined in this plan. Currently, the cities of Sergeant Bluff and Le Mars, Iowa, are working to connect to the City of Sioux City's trail network linking the Lewis and Clark Multi-Use Trail. In addition, the cities of Sioux City and South Sioux City are currently researching funding options to link the two communities and states via a pedestrian bridge over the Missouri River.

Proposed Pedestrian Bridge

For years, Sioux City has sought ways to renovate its Missouri Riverfront area to provide for more recreation for residents and as a means to draw tourists. The proposed pedestrian bridge would begin at Chris Larsen Park Road, maintain elevation so as not to interfere with boating on the river, and serve as an iconic landmark to draw visitors off Interstate 29.



Active Transportation

Active transportation infrastructure within the SIMPCO MPO planning area was identified by current member agency staff as a part of their internal planning process as well as during one-on-one meetings between them and SIMPCO staff. In FY 2021, the MPO allocated planning funds to conduct a bicycle lane study in the City of Sioux City. The study will identify potential corridors to implement additional bicycle lanes.

There are about 9 miles of programmed trails and 24 proposed trails. Additionally, there is one existing bike lane, 3 proposed bike lanes, and about 6 miles of proposed shared roadway.

Environmental Justice

Diversity Index

Map 3.5 shows the Diversity Index of the SIMPCO MPO planning area. The diversity index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity). Diversity in the U.S. population is increasing, and the score for the entire United States was 64 in 2018. Based on this dataset, Dakota City and South Sioux City have the greatest amount of diversity in the SIMPCO MPO planning area. The trail system shows to be providing adequate service to Dakota Dunes, North Sioux City, Sioux City downtown area, and South Sioux City. There are some diverse areas in Sioux City that are beyond a 10-minute walk to a trail access point which includes the areas immediately West and North of the downtown area, and the Northeast corner of the City.

Poverty Ratio

Map 3.6 shows poverty ratio (households above to households below) for the SIMPCO MPO planning area. The poverty ratio dataset compares the number of households living above the poverty line to the number of households living below. Based on this dataset, Sioux City has a significant number of Census Block groups with a low ratio (less than 7:1) of households living above to households living below the poverty line in the MPO planning area. The trail system shows to be providing adequate service to areas with a low poverty ratio in South Sioux City and the Sioux City Downtown area. There are several concentrations of block groups with a low poverty ratio that are beyond 10-minute walk to trail access point which include the areas immediately West and North of the downtown area, the Northeast corner of the City, and the Morningside residential area.

Population 65 Years or Older

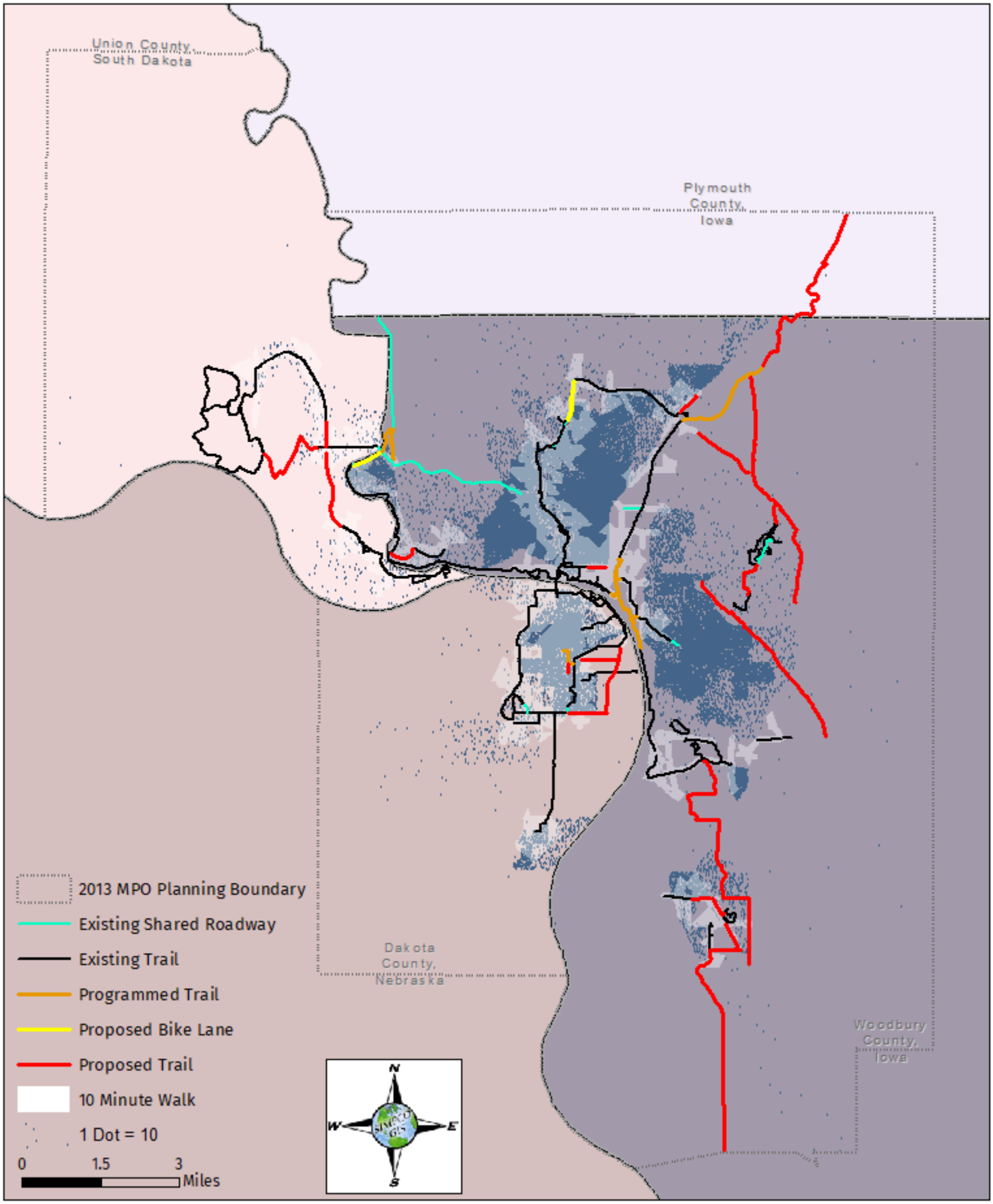
Map 3.7 shows the population distribution of persons who are 65 years of age and older. Based on this dataset, major concentrations of residents 65 years of age and older residing in the Morningside and Northside neighborhoods of Sioux City. There are quite a few assisted living facilities in these block groups, which could be contributing to this pattern. The trail system shows to not be providing adequate service to areas with a high concentration of residents aged 65 or older. Areas with high concentrations that are beyond a 10-minute walk include the Morningside and the Northeast residential area in Sioux City.

Population Ages 18-64

Map 3.8 shows the population distribution of persons who are 18-64 years of age. This map is important because of the national and even global trend of people in this age group wanting to have the option of alternative forms of transportation instead of a personal vehicle. Based on this dataset, the trail system does provide adequate service to areas with high concentrations of this age bracket in the block groups just Southeast of North Sioux City and the Sioux City downtown area. There are high concentrations of the age bracket southeast of the downtown area that are beyond a 10-minute walk, however.

Map 3.4

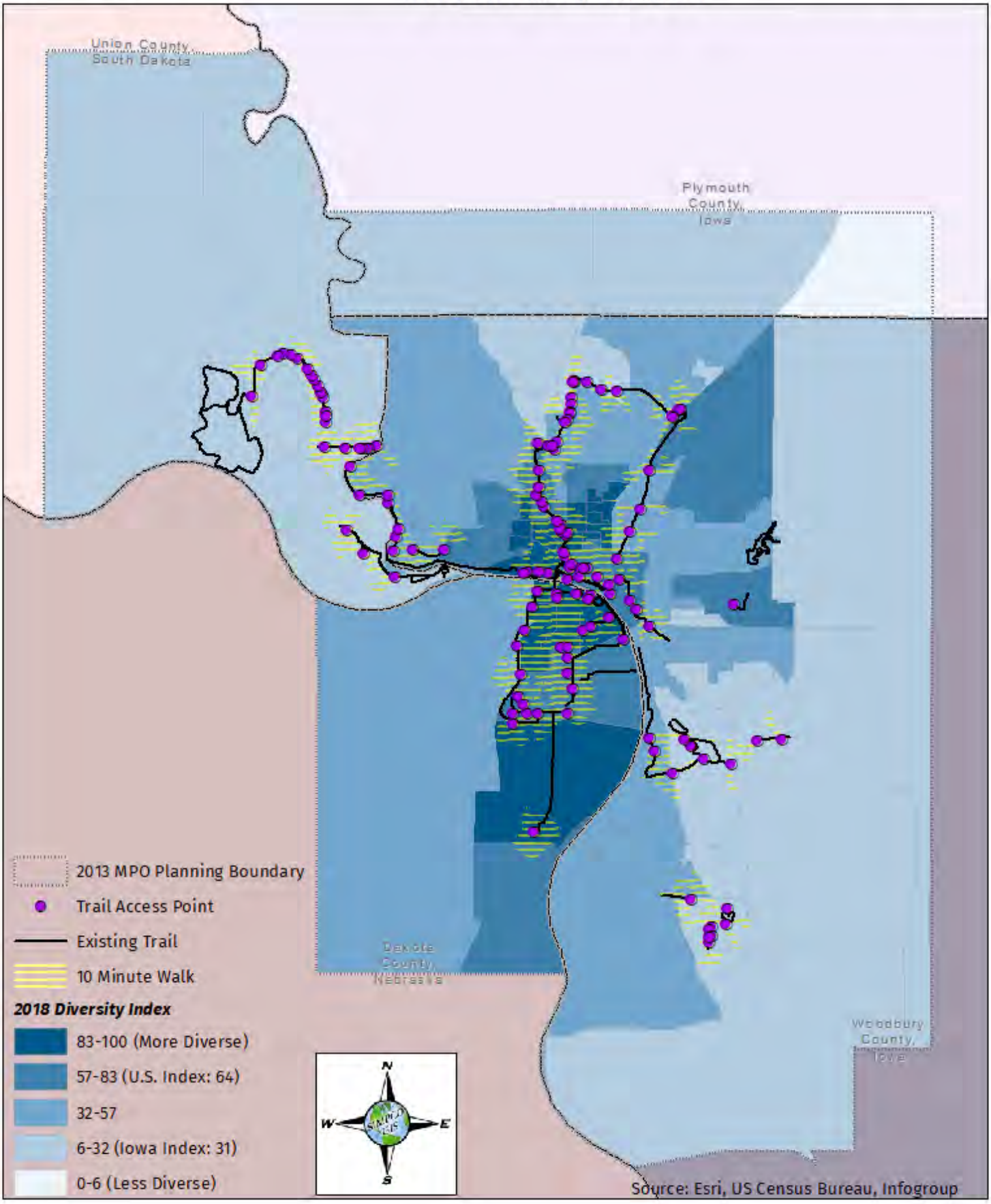
SIMPCO MPO 2017 Population & Existing/Programmed/Proposed Infrastructure



Map 3.5

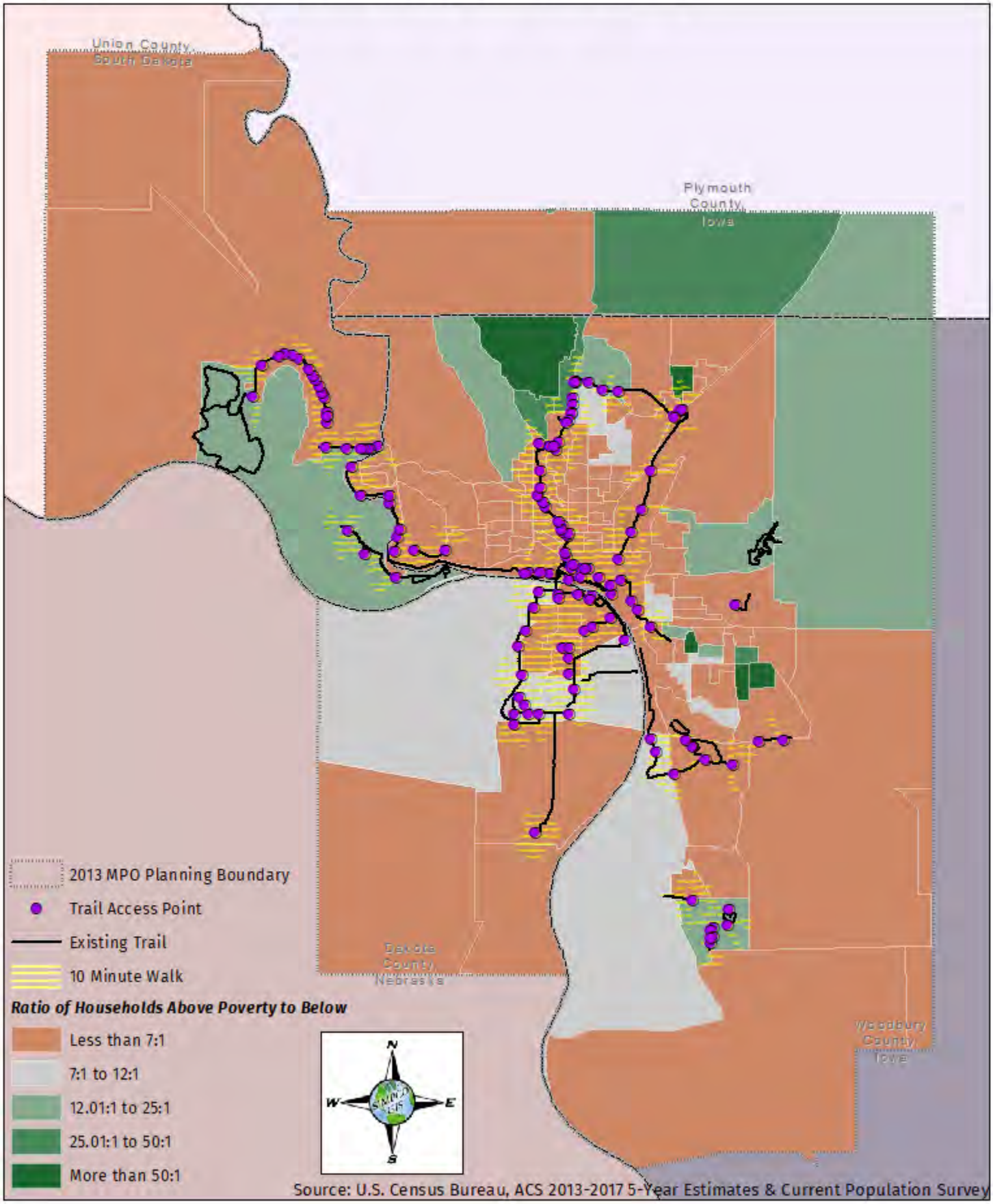
SIMPCO MPO Diversity Index

This map summarizes racial and ethnic diversity in the United States in 2018. The Diversity Index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity). Diversity in the state of Iowa and U.S. population has been increasing. The diversity score for the state of Iowa was 31 and 64 for the entire United States in 2018.



Map 3.6

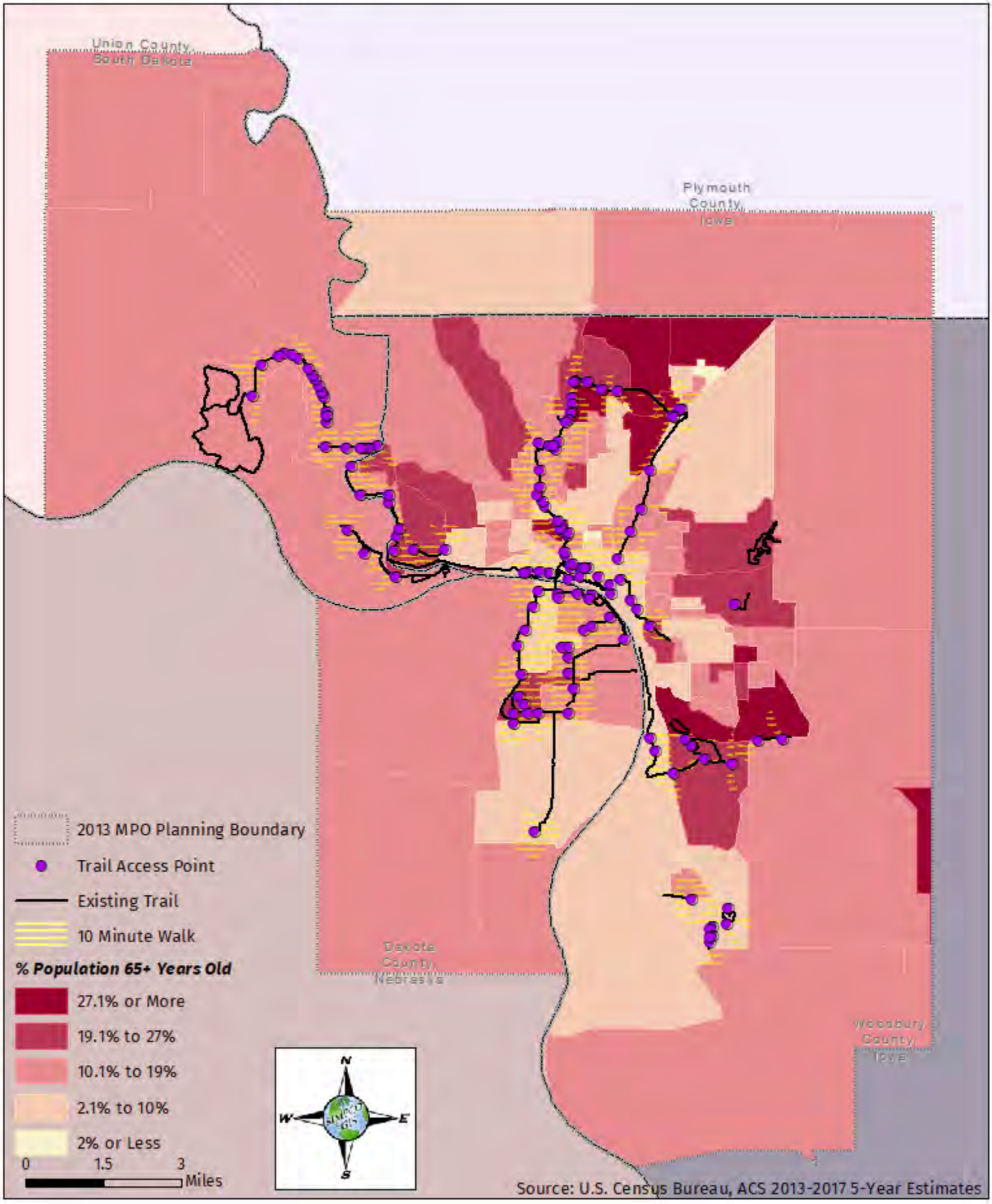
SIMPCO MPO
Ratio of Households Above Poverty to Below Poverty



Source: U.S. Census Bureau, ACS 2013-2017 5-Year Estimates & Current Population Survey

Map 3.7

SIMPCO MPO
2017 Population Older than 65

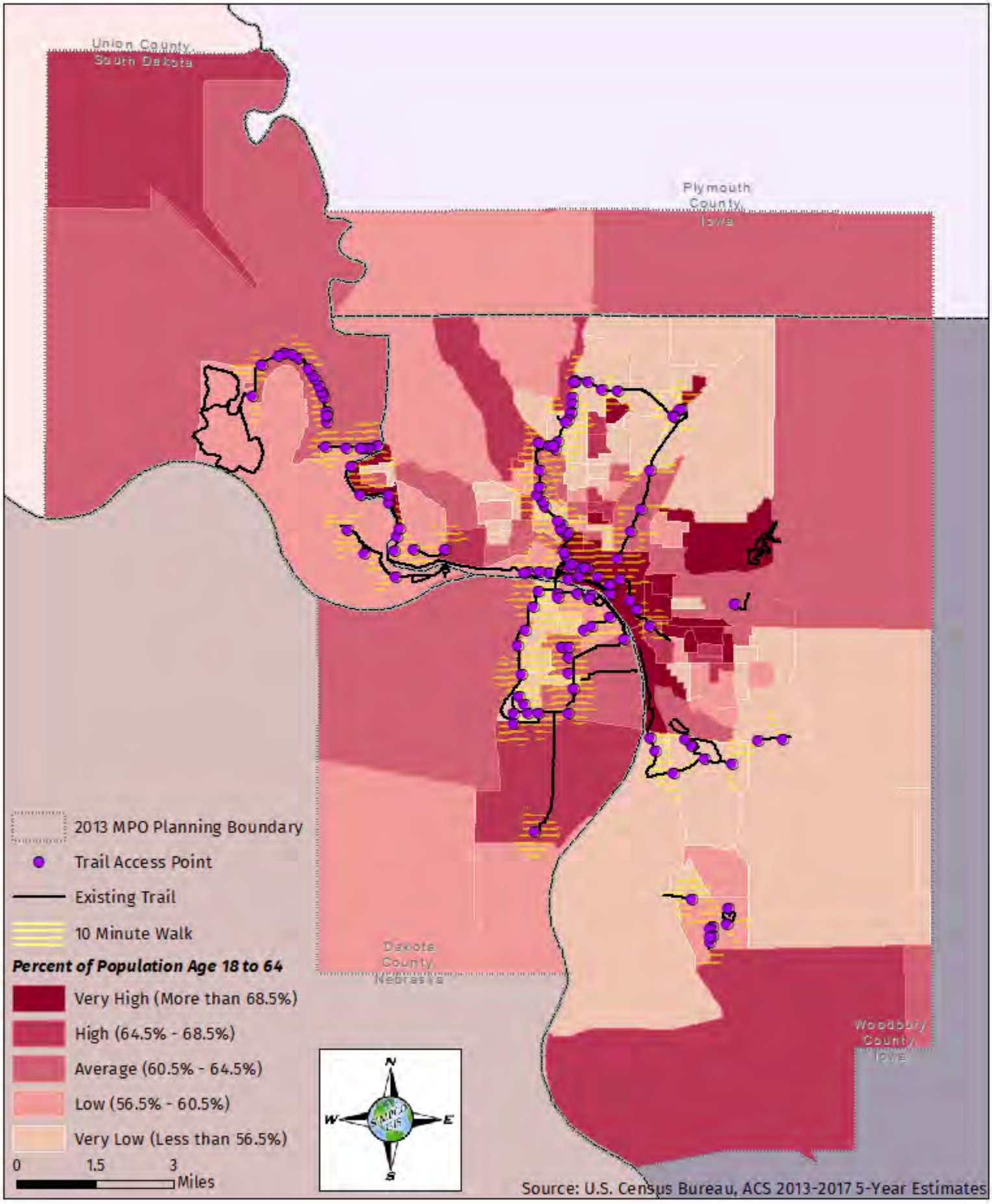


Source: U.S. Census Bureau, ACS 2013-2017 5-Year Estimates

Map 3.8

SIMPCO MPO

Population Ages 18-64



RECOMMENDATIONS

5-Year

The following 5-year (short-term) goals have been identified:

- Encourage member agencies to develop non-motorized plans and maintenance policies
- Encourage member agencies to develop a bicycle and pedestrian programs like active transportation plans, complete streets, safe routes to school, and walking school bus
- Support the Sioux City Active Transportation Plan's goals, as well as any other cities' plans that may be adopted
- Continue to improve connections between trails and other facilities
- Provide safe, efficient non-motorized access between major traffic generators like schools, major employers, commercial districts, public facilities, and residential areas
- Continue to support the inter-city trail between Sioux City and Le Mars, Iowa
- Continue to support the inter-city trail between Sioux City and Sergeant Bluff
- Acquire bicycle/pedestrian counters and develop an annual count-collecting program
- Develop and maintain a sidewalk dataset to highlight areas in need of improvement
- Promote safety education for bicyclists and pedestrians
- Improve cycling signage by encouraging the placement of signs, sharrows, and/or roadway markings on roadways with on-street bicycle facility designation

25-Year

The following 25-year (long-term) goals have been identified:

- Double the percent of the population that have residential access to the trail system
- Monitor the use of the trail network and any additional on-street bicycle infrastructure, like sharrows or bike lanes, and continue to promote the trails to increase use
- Connect Sergeant Bluff and Le Mars to Sioux City via trail system
- Complete within and connect the SIMPCO MPO planning area to the Lewis and Clark Recreational Multiuse Trail
- Connect Sioux City and South Sioux City via pedestrian bridge over the Missouri River

CHAPTER CONTENTS

Chapter 4: Transit Services focuses on the current and future state of the two primary public agencies operating within the SIMPCO MPO, Sioux City Transit System (SCTS) and Siouxland Regional Transit System (SRTS). SRTS is sub-contracted by SCTS to provide Federal Transit Authority (FTA) required paratransit services. The SIMPCO MPO reviews the goals of the transit system, examines the current conditions of the transit system, proposes safety and security improvements of the transit system, and plans for future public transit needs and projects. The data provided in this chapter is derived from transit route studies, surveys, performance measures, National Transit Database (NTD) annual reports, and operational analysis.

SIOUX CITY TRANSIT SYSTEM

Fixed route public transit in the SIMPCO MPO planning area is provided by the SCTS. SCTS was formed in 1969 when the City of Sioux City purchased the failed Sioux City Lines, Inc. SCTS is administered by the Assistant City Manager, who reports to the City Manager. The City Council approves recommendations on policy and budgets for the Assistant City Manager and the Transit Advisory Board. Currently, SCTS employs forty-three employees, including both full-time and part-time positions.

SCTS facilities are comprised of the Martin Luther King Jr. Ground Transportation Center (MLK Center) and a separate maintenance & storage facility. The MLK Center is located on Nebraska Street between 5th Street and 6th Street. It serves as the transfer center for the SCTS, as the system allows for each bus to be there every hour at twenty-minutes after. This center is also comprised of transit administrative and dispatcher offices, the Jefferson Lines ticket office, and a parking ramp that accommodates over 400 vehicles. The center has access to the skywalk system connection to the Orpheum Theatre and Frances Building. The current SCTS bus system features 450 bus stops along ten fixed routes. There are 36 bus shelters along its fixed routes as well.

Map 4.1 shows the SCTS routes. There are ten routes (depicted in bright blue) that cover 4 of the 7 MPO planning area member cities: Sioux City and Sergeant Bluff, Iowa, North Sioux City, South Dakota, and South Sioux City, Nebraska. It is beneficial to examine the walking distance from transit routes, as most riders will be walking from their origin to the bus stops, and then walking again from the bus stops to their destinations. Based on walkability and livability trends, a ten minute, or ¼-mile walk is a good estimate of walking access to any location. Using this distance, the transit system's routes were buffered by ¼-mile, to create the "walking zone" of the system, which is the light blue line on Map 4.1. Using this in combination with 2010 US Census Data, the Sioux City Transit system services ~81% of persons in the MPO planning area. When looking only at the 4 jurisdictions serviced by Sioux City Transit, 88.4% of the population living there has access to the transit routes.

Table 4.1: Approximate number of people served by Sioux City Transit in both the MPO planning area, and the 4 cities that provide transit service.

Area	Persons served	Total Population	Percent
MPO Planning Area	94,451	116,519	81.0%
Serviced Communities	92,626	104,788	88.4%

*Source: 2010 US Census

Overall, based on a simple GIS overlay analysis of population and employee/places of employment counts within the ¼- mile walking access buffer; it seems that the coverage of the SCTS is adequate for the MPO planning area. The MPO planning area's geography creates gaps between certain major employers and the Census urbanized boundary. Due to this, there will always be a percentage of the population and workforce that cannot reach their destination by transit. There have been public/private partnerships between Tyson Foods in South Sioux City, Seaboard Triumph in Sioux City, and various businesses in North Sioux City, where the businesses have provided funds for SCTS to provide service to their locations. This is a viable option for any employer that does not currently have transit access.

SIOUX CITY TRANSIT SYSTEM EXISTING CONDITIONS

ROUTES

SCTS currently operates 10 fixed bus routes during peak service, and 7 additional school tripper routes under contract for the Sioux City Community School District. School transportation by SCTS reduces the amount of students, decreases the costs, and improves the efficiency for the school district's bus fleet, benefiting all regional tax payers.

All SCTS vehicles and the Martin Luther King Jr. Ground Transportation Center meet the standards of the Americans with Disabilities Act (ADA). SCTS operates from 6 a.m. to 6 p.m., Monday through Friday, and Saturdays from 7 a.m. to 6 p.m., with no service on Sundays or six major holidays. The South Sioux City Route (#9) does not operate on Saturdays.

FARES

Sioux City Transit has a variable fare structure. Discounts are provided for students, residents 62 years of age and older, people with disabilities, and children (Table 4.2). Fares may be paid in cash, a paper one-ride token, weekly punch tickets (10 punches), and monthly passes. Transfers are free if used on the same trip within the same day. Transfers are requested upon initial boarding and at the MLK Center. Transfers, children under 5, and veterans with a VA documented service-connected disability with VA photo ID ride free.

Table 4.2: SCTS Fare Structure

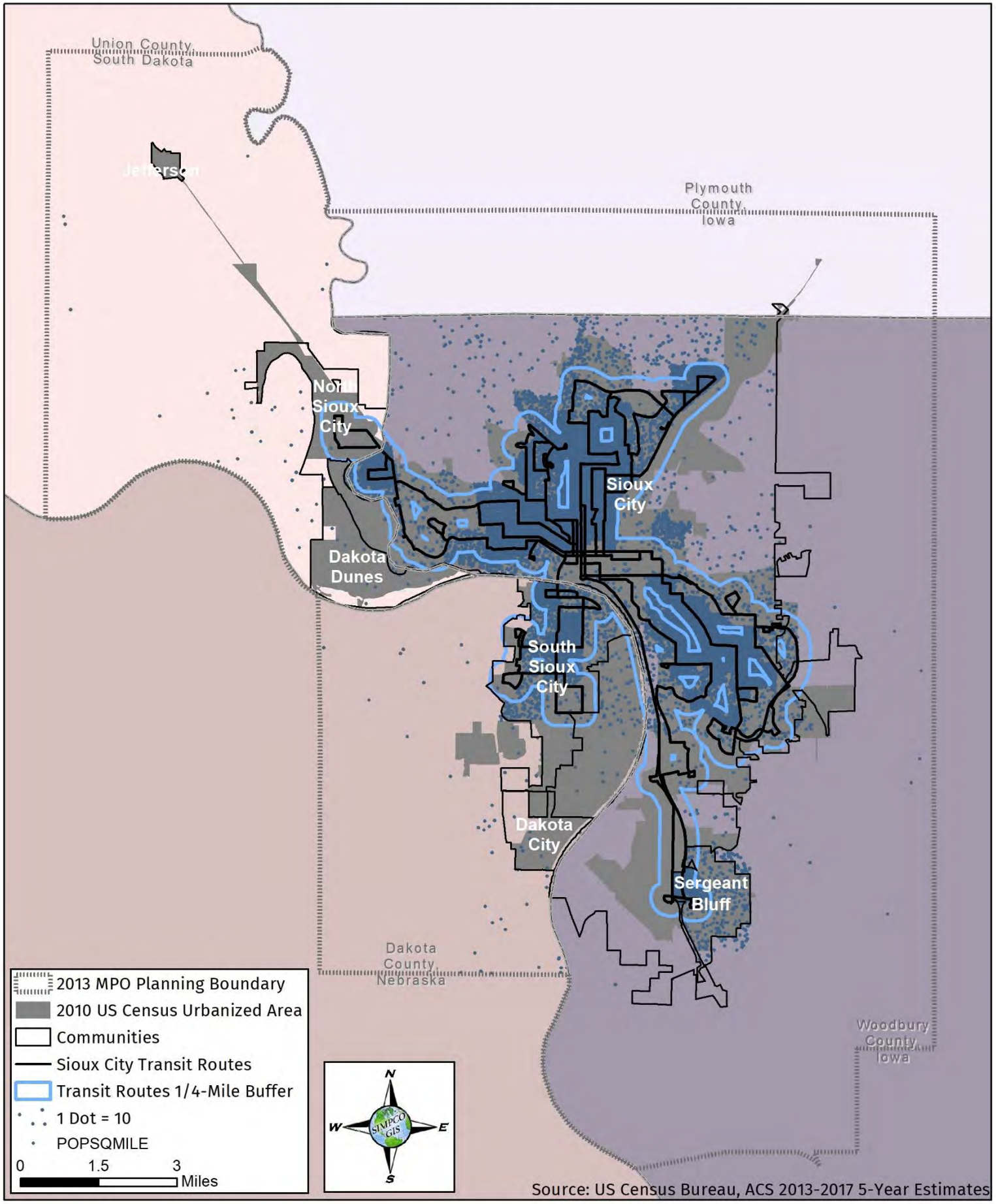
TICKET TYPE	FORM	COST
Tokens	Single	$1.80
	20	$31.00
Adults	Cash	$1.80
	Monthly Pass	$48.00
	10-Ride Punch Ticket	$18.00
Youth/Student	Youth Cash	$1.55
	10-Ride Punch Ticket	$15.50
Senior Citizen/ Medicare Cardholder/ Disability	Cash	$0.90
	Monthly Pass	$42.00
	10-Ride Punch Ticket	$9.00

Source: Sioux City Transit System, 2020.

Map 4.1

SIMPCO MPO Transit Routes and 1/4-Mile Walking Buffer

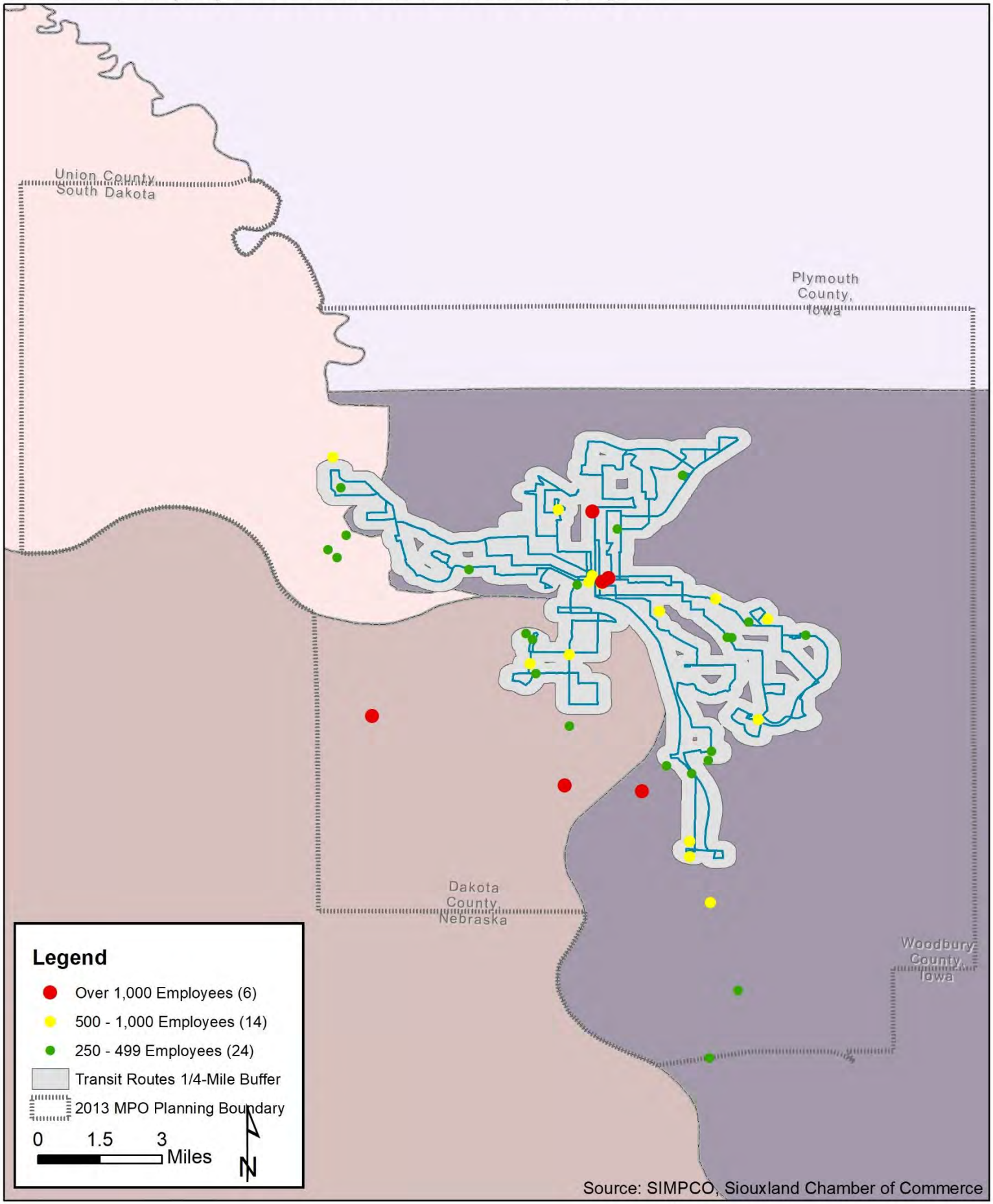
There are 10 transit routes that run through the MPO planning area. The route coverage seems to be adequate, when comparing the population density, to the routes, and the routes' 1/4-mile buffer around the routes, which indicates the walkable distance to and from the route.



Source: US Census Bureau, ACS 2013-2017 5-Year Estimates

Map 4.2

SIMPCO MPO
Places of Employment with 250 or More Employees



FLEET

SCTS's fixed route fleet consists of 29 active vehicles. About one-third of SCTS's fleet, 11 vehicles, is greater than or equal to the federal replacement threshold of fourteen years/500,000 miles (Table 4.3). Previously, a portion of the bus fleet had been comprised of used buses procured from California for school tripper routes and backup. Bus replacement in Iowa must adhere to the Public Transit Management System (PTMS) which uses age, miles, and ridership to rank all Iowa public transit vehicles for capital grant funding. With the current federal capital funding appropriation for Iowa and surrounding rural states, around $2 million, getting a bus replaced is very slow. Iowa DOT has been adding a portion of the Iowa Clean Air Attainment Program, about $3 million per year, to the current capital funding appropriation. SCTS buses have not been funded for several years. In FY 2019, SCTS was awarded eight heavy duty replacement buses through the PTMS System and IDOT award of FTA competitive Grant funding (Section 5339 Bus & Bus Facilities Grant). Replacement vehicles will be delivered in late 2021 or 2022.

Table 4.3: Bus Fleet

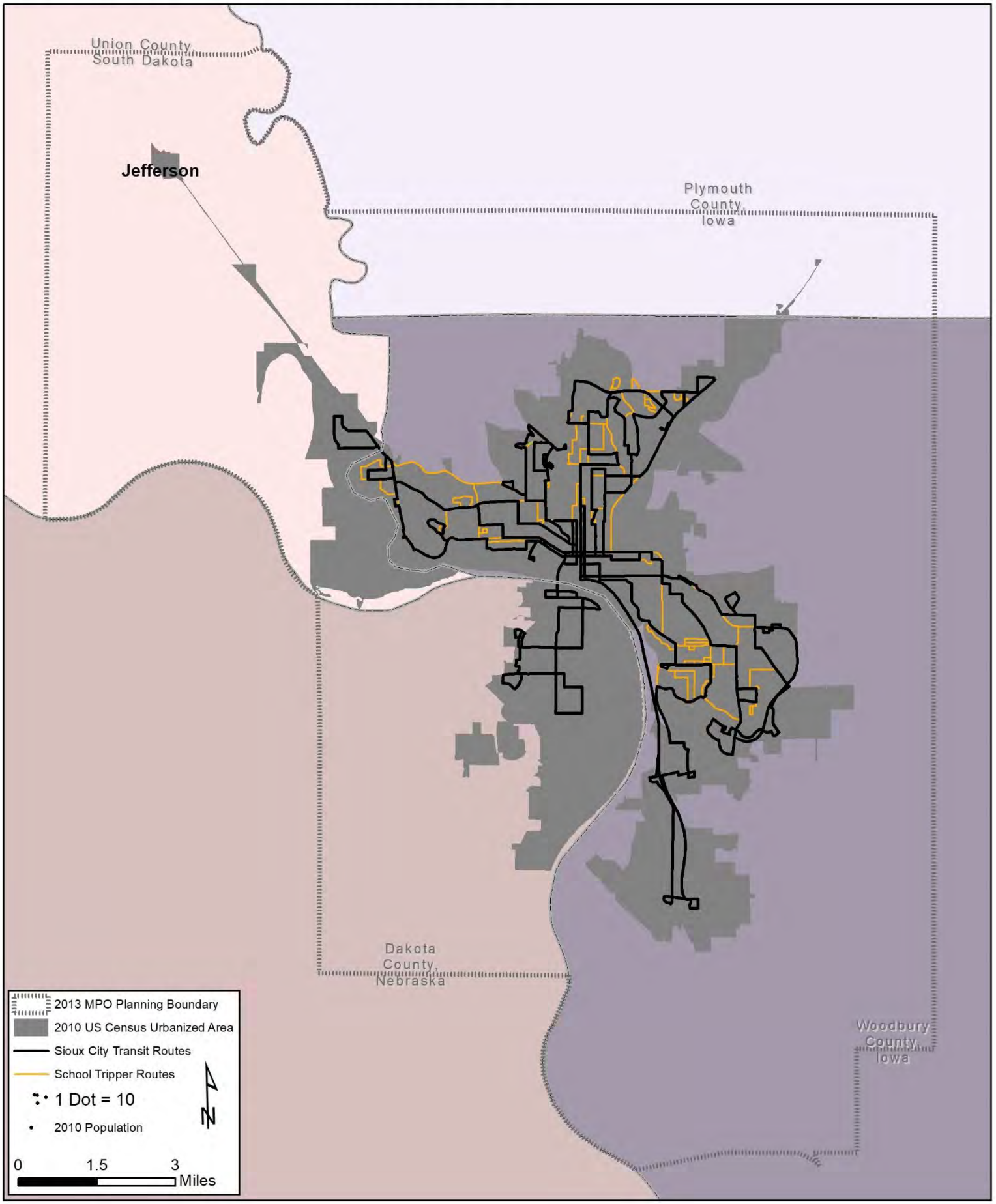
					Acquisition Type				
	Property ID Number	MFG. Year	Model	In Service Date	New Used Ordered	Cost	Seating Capacity	FY2019 Total Mileage	Federal Replacement Threshold
1	1097	2004	HD 35' Low Floor	2/6/2004	New	$264,151	32/2	619,054	12yr / 500,000 mi.
2	1300	2004	HD 35' Low Floor	8/12/2004	New	$266,964	32/2	609,957	12yr / 500,000 mi.
3	1301	2004	HD 35' Low Floor	8/12/2004	New	$266,964	32/2	622,446	12yr / 500,000 mi.
4	1302	2004	HD 35' Low Floor	8/12/2004	New	$266,964	32/2	648,716	12yr / 500,000 mi.
5	1324	2011	MD 31' Low Floor	3/11/2010	New	$192,302	19/2	96,334	7yr / 200,000 mi.
6	1325	2011	MD 31' Low Floor	3/11/2010	New	$192,302	19/3	95,335	7yr / 200,000 mi.
7	1326	2011	MD 31' Low Floor	10/12/2011	New	$213,126	19/3	86,395	7yr / 200,000 mi.
8	1330	2006	35' Low Floor	6/12/2006	New	$283,864	32/2	610,172	12yr / 500,000 mi.
9	1331	2007	35' Low Floor	7/7/2007	New	$288,906	32/2	527,155	12yr / 500,000 mi.
10	1332	2009	35' Low Floor	6/9/2009	New	$311,501	32/2	422,008	12yr / 500,000 mi.
11	1338	2009	35' Low Floor	6/9/2009	New	$316,887	32/2	438,688	12yr / 500,000 mi.
12	1339	2010	35' Low Floor	8/12/2010	New	$332,398	32/2	350,926	12yr / 500,000 mi.
13	1340	2010	35' Low Floor	8/13/2010	New	$332,398	32/2	354,738	12yr / 500,000 mi.
14	1341	2012	40' Low Floor	8/31/2012	New	$347,456	39/2	261,828	12yr / 500,000 mi.
15	1343	2000	40' HD - D40LF	8/27/2013	Used	$53,500	37/2	660,837	6yr / 250,000 mi
16	1345	2000	40' HD - D40LF	8/31/2015	Used	$58,555	37/2	713,739	6yr / 250,000 mi
17	1350	2003	HD 40' Low Floor	8/31/2015	Used	$58,555	37/2	48,615	6yr / 250,000 mi
18	1351	2003	HD 40' Low Floor	9/1/2015	Used	$58,555	37/2	32,675	6yr / 250,000 mi
19	1352	2005	HD 40' Low Floor	7/25/2016	Used	$68,565	40/2	361,326	6yr / 250,000 mi
20	1353	2002	HD 40' Low Floor	7/25/2016	Used	$68,565	40/2	118,753	6yr / 250,000 mi
21	1354	2002	HD 40' Low Floor	9/11/2017	New	$404,703	40/2	454,155	6yr / 250,000 mi
22	1359	2017	HD 35' Low Floor	11/20/2017	New	$404,703	40/2	70,807	12yr / 500,000 mi.
23	1360	2017	HD 35' Low Floor	11/20/2017	New	$404,703	40/2	57,477	12yr / 500,000 mi.
24	1361	2018	MD 30' LF Enviro 200	9/17/2018	New	$338,711	19/3	7,047	10yr / 350,000 mi.
25	1363	2018	HD 40' Low Floor	Dec. 2018	New	$419,506	40/2	17,690	12yr / 500,000 mi.
26	1364	2018	HD 40' Low Floor	Dec. 2018	New	$419,506	40/2	13,729	12yr / 500,000 mi.
27	1365	2018	HD 40' Low Floor	Dec. 2018	New	$419,506	40/2	13,953	12yr / 500,000 mi.
28	1369	2019	HD 35' Low Floor	Oct. 2019	New	$417,407	32/2	N/A	12yr / 500,000 mi.
29	1370	2019	HD 35' Low Floor	Oct. 2019	New	$417,407	32/2	N/A	12yr / 500,000 mi.
30	1373	2020	MD 30' LF Enviro 200	11/17/2020	New	N/A	19/3	N/A	N/A
31	1374	2021	HD 35' Low Floor	Ordered	N/A	N/A	N/A	N/A	N/A
32	1374	2021	HD 35' Low Floor	Ordered	N/A	N/A	N/A	N/A	N/A
33	1374	2021	HD 35' Low Floor	Ordered	N/A	N/A	N/A	N/A	N/A
34	1374	2021	HD 35' Low Floor	Ordered	N/A	N/A	N/A	N/A	N/A
35	1374	2021	HD 35' Low Floor	Ordered	N/A	N/A	N/A	N/A	N/A
36	1374	2021	HD 35' Low Floor	Ordered	N/A	N/A	N/A	N/A	N/A
37	1374	2021	HD 35' Low Floor	Ordered	N/A	N/A	N/A	N/A	N/A

Source: Sioux City Transit System, 2019* highlighted vehicles were reported as not active

Map 4.3

SIMPCO MPO
Transit and School Tripper Routes

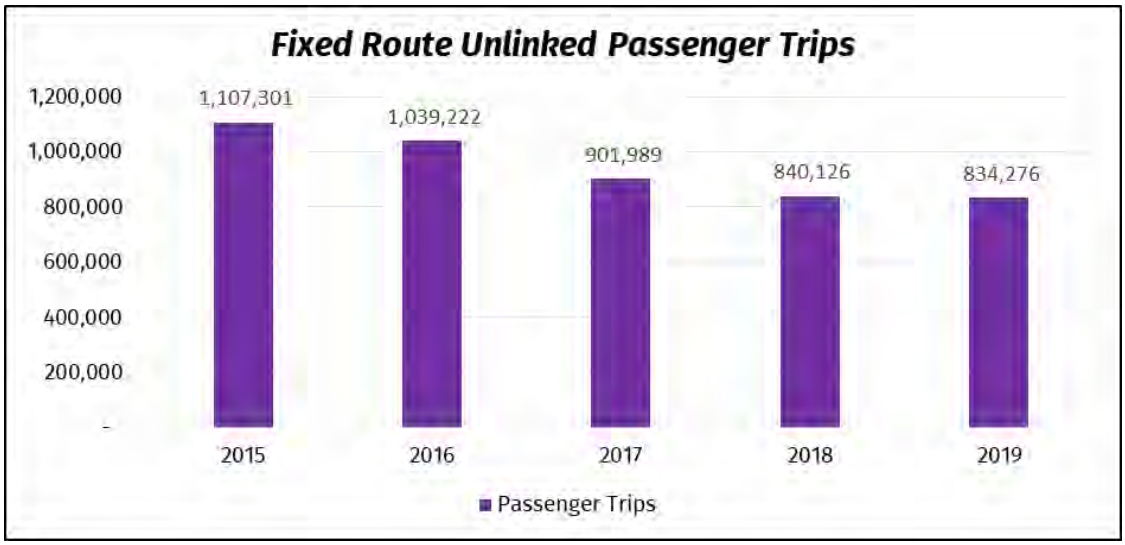
There are 8 school tripper transit routes that run in Sioux City, supplementing the Sioux City Community Schools District's school bus routes.



RIDERSHIP

Currently, there are 10 fixed routes with 7 additional buses serving school Tripper Routes based on the same fixed routes. As shown in the chart 4.1, there has been a significant decrease of passenger trips from 2017-2019. This is due to fewer school contracts for student riders, changing economic conditions where bus routes either do not serve business locations, or businesses have laid off workers. Some decline arose because of Uber and Lyft ridesharing services. In addition, there have been increases in car registrations which allow people more freedom compared to public transit. These trends predate the COVID-19 Virus Pandemic, but COVID-19 will impact passenger trips in 2020.

Chart 4.1: SCTS Unlinked Passenger Trips



Source: Sioux City Transit System, 2019

REVENUE AND EXPENDITURES

Revenues and expenditures for operations include general administration, vehicle, equipment & facility maintenance, MLK Center & parking ramp, and the paratransit services. Table 4.4 gives a revenue summary of the FY 2019 for Sioux City Transit System. Vehicle operation represented the largest portion of the operating expense at 58% followed with paratransit at 20.1%.

Table 4.4: FY 2019 Revenue & Expenditure Summary

REVENUES			EXPENDITURES		
Revenue Source	Amount	% of Budget	Department	Amount	% of Budget
Total Fixed Route Income	$1,339,124	25.5%	Administration	$288,647	5.3%
Paratransit Revenues	$160,691	3.1%	Operation	$3,170,110	58.0%
IDOT Operating Subsidy	$355,356	6.8%	Maintenance	$623,905	11.4%
Transit Property Tax Levy	$1,813,764	34.6%	MLK Center	$276,524	5.1%
Federal Operating Grant	$1,573,836	30.0%	Paratransit	$1,095,837	20.1%
Total Operating Revenue	$1,503,462	28.6%	Total Expenses	$5,464,178	100.0%
Federal Capital Grant	$48,757	0.9%			
State Capital Grant	$0	0.0%			
Total Capital Revenue	$48,757	0.9%			

Source: Sioux City Transit System, 2019

ENVIRONMENTAL JUSTICE

Diversity index

Map 4.4 shows the Diversity Index of the MPO planning area. The diversity index shows the likelihood that two persons, chosen at random from the same area, belong to different racial or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity). Diversity in the U.S. population is increasing, and the score for the entire United States was 64 in 2018. Local diversity scores revealed that Dakota City and South Sioux City have the greatest amount of diversity. SCTS seems to be providing adequate service to areas with the greatest diversity amongst MPO planning area.

Poverty Ratio

Map 4.5 shows the poverty ratio (households above to households below) for the MPO planning area. The poverty ratio dataset compares the number of households living above the poverty line to the number of households living below. Based on this dataset, Sioux City has a significant number of Census block groups with a low ratio (Less than 7:1) of households living above to households living below the poverty line. Nearly the entire network of SCTS's routes cover census block groups with a low ratio.

Population 65 Years or Older

Map 4.6 shows the population distribution of persons who are 65 years of age and older. Based on this dataset, major concentrations of residents 65 years of age and older reside in the Morningside and Northside neighborhoods of Sioux City. There are quite a few assisted living facilities in these census block groups, which could be contributing to this pattern. SCTS does appear to be providing adequate to the Morningside and Northside neighborhood as well as other areas with major concentrations in the MPO planning area, including the west side neighborhoods of Sioux City.

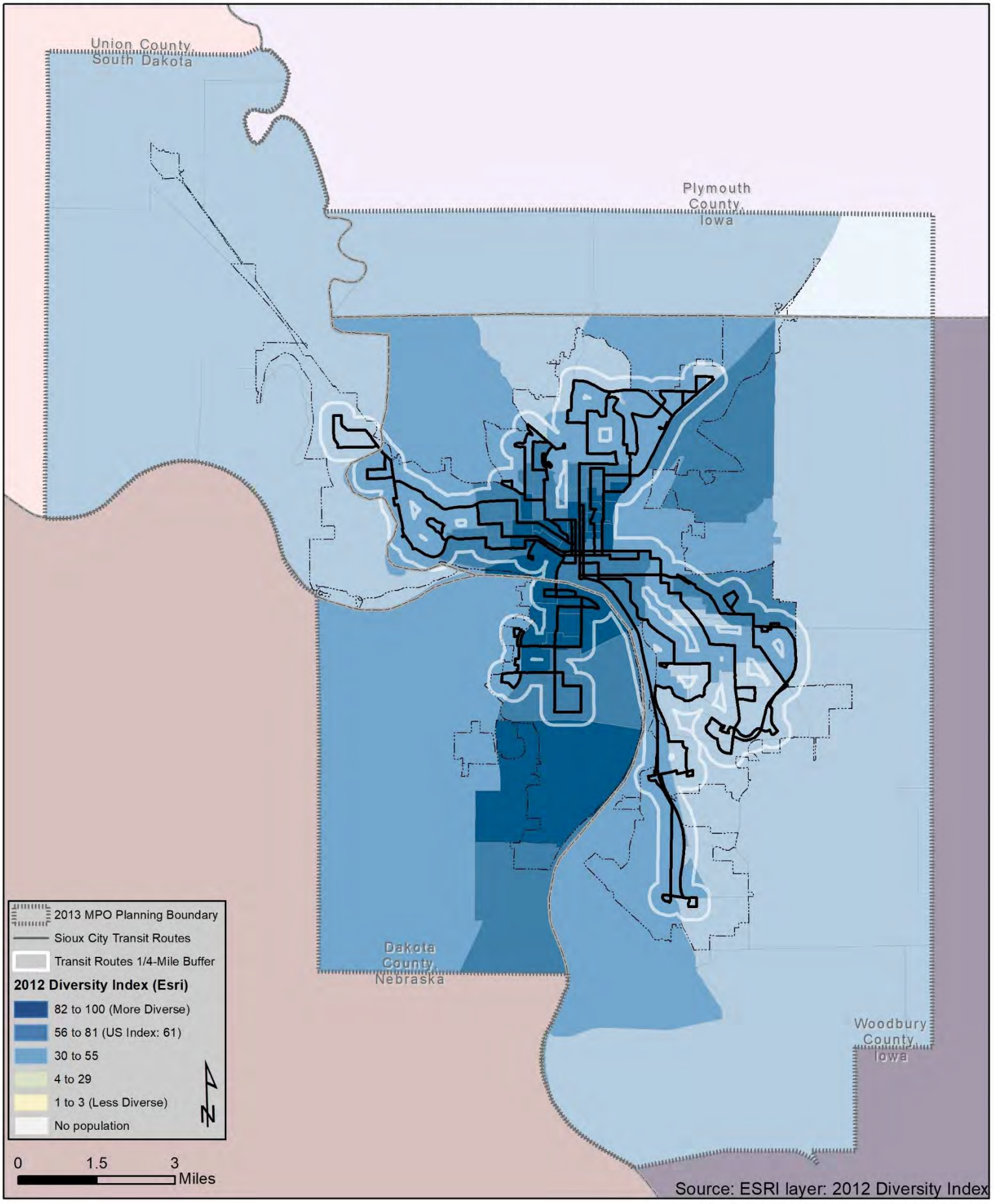
Population's Median Age

Map 4.7 shows the population's median age distribution. This map is important because of the national and even global trend of an increased desire to have the option of using public transit instead of a personal vehicle, particularly for persons between 18 and 65 years of age. SCTS appears to be doing well in providing adequate service to all age groups, especially areas with a median age younger than 35 and older than 43 years old.

Map 4.4

SIMPCO MPO Diversity Index

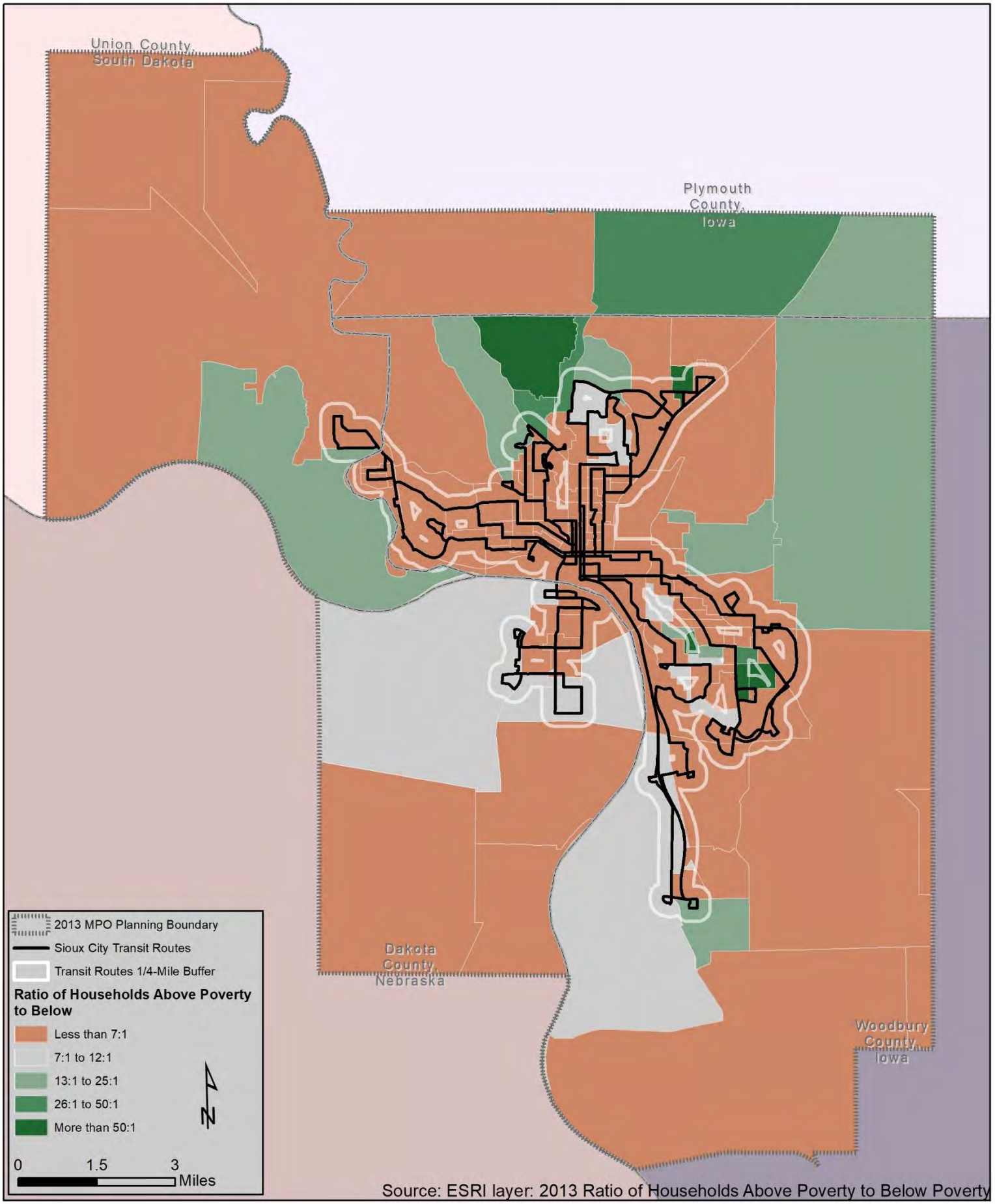
This map summarizes racial and ethnic diversity in the United States in 2018. The Diversity Index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity). The diversity score for the state of Iowa was 31 and 64 for the entire United States in 2018.



Map 4.5

SIMPCO MPO

Ratio of Households Above Poverty to Below Poverty

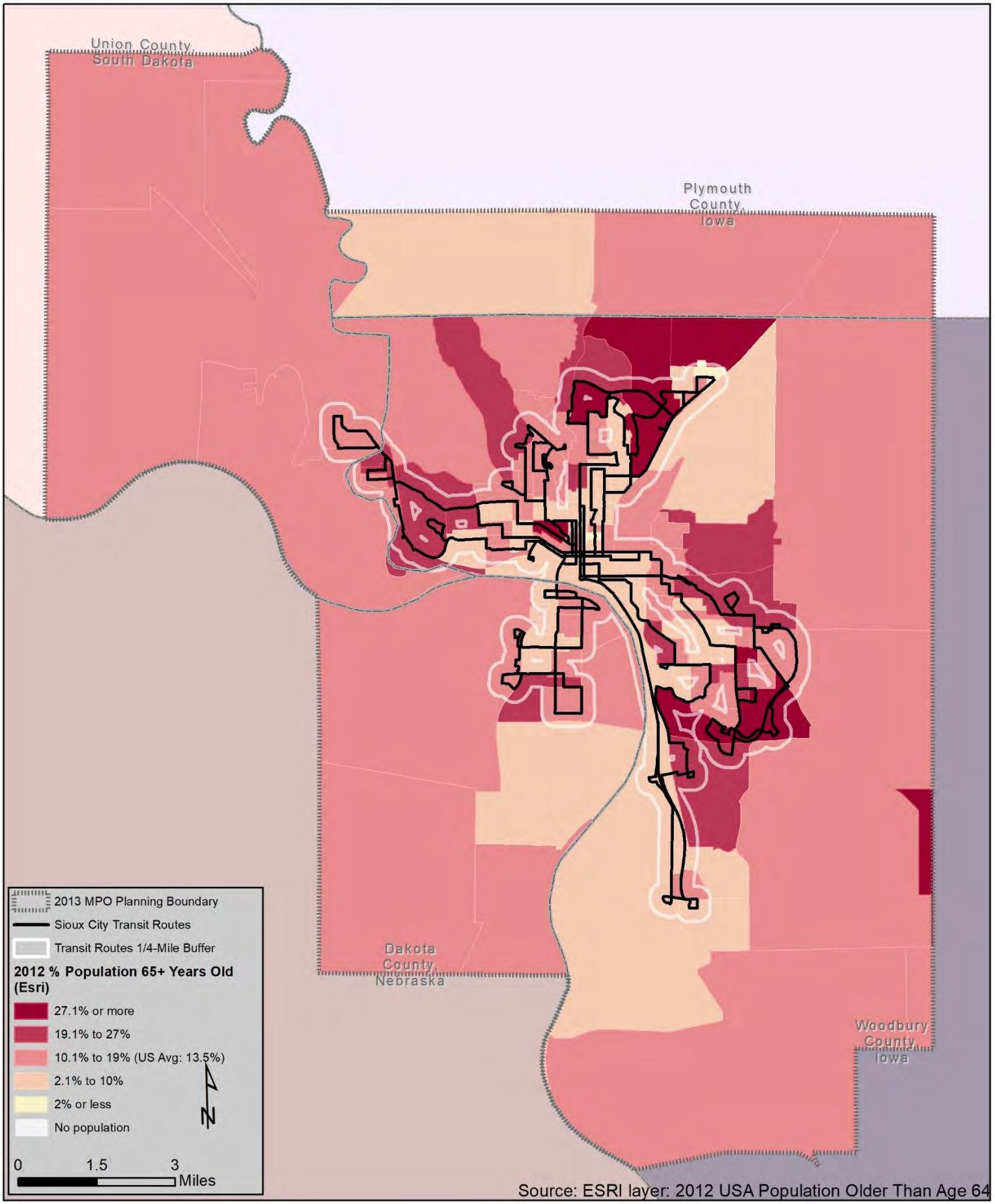


Source: ESRI layer: 2013 Ratio of Households Above Poverty to Below Poverty

Map 4.6

SIMPCO MPO

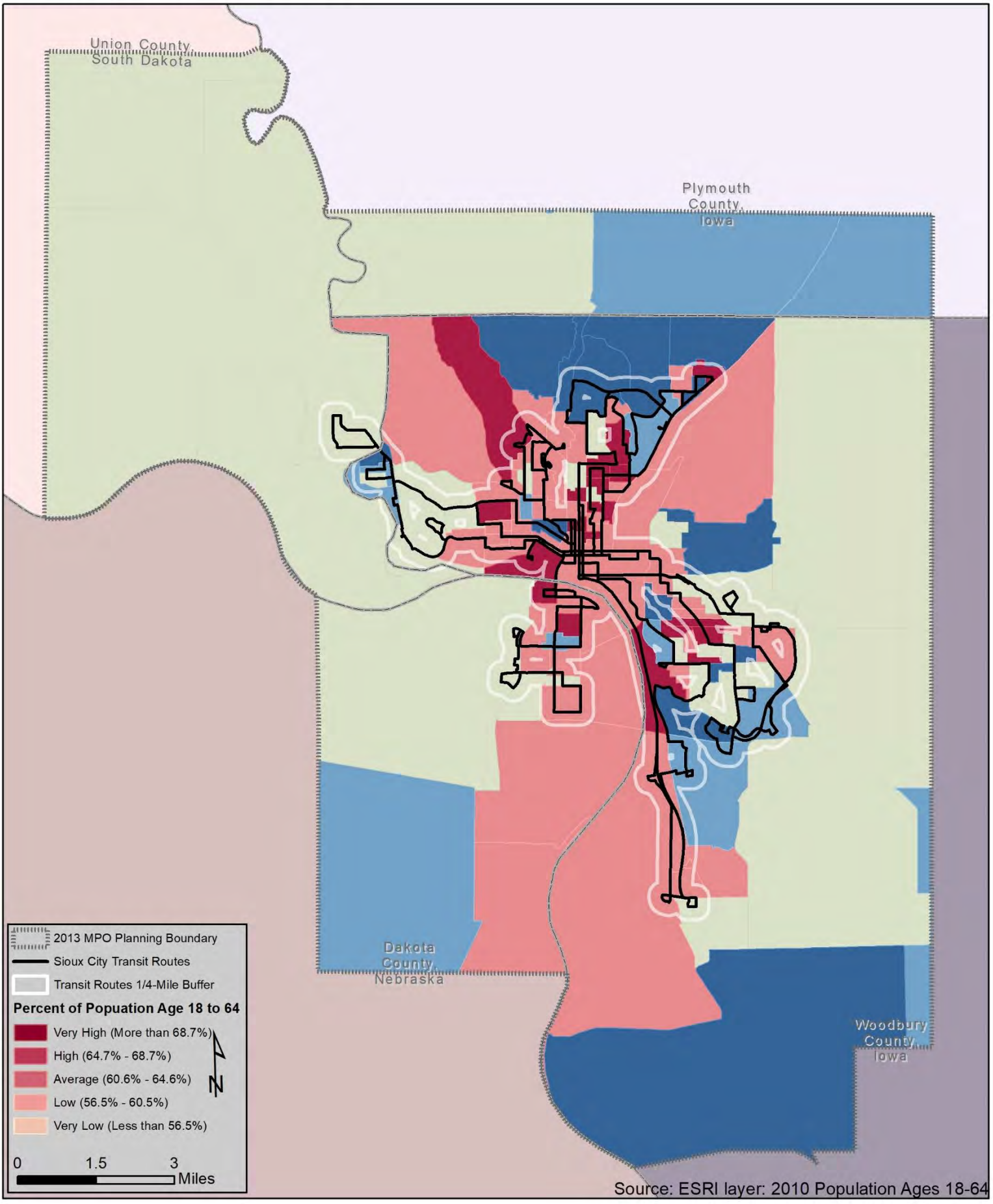
Population Older Than 64



Source: ESRI layer: 2012 USA Population Older Than Age 64

Map 4.7

SIMPCO MPO
Population Ages 18-64



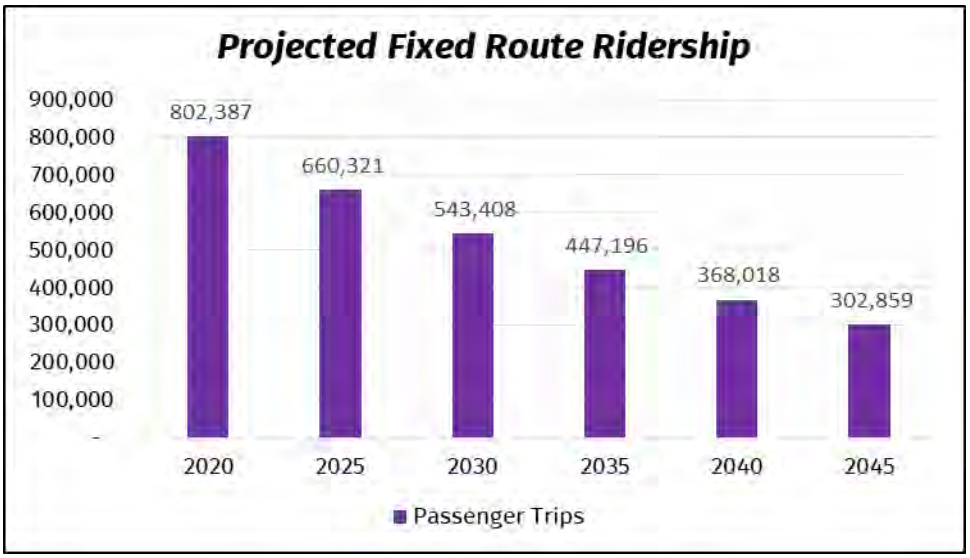
Source: ESRI layer: 2010 Population Ages 18-64

SIOUX CITY TRANSIT SYSTEM FUTURE CONDITIONS

PROJECTED RIDERSHIP

Based on past ridership experience, route configurations, funding resources, population statistics, and economic dynamics, future public transit ridership may decrease from three to four percentage points per year. Growth is problematic due to declining federal and state grant support, an aging vehicle fleet that is very expensive to maintain, and an aging but static population. Assuming no dramatic economic change, or more specifically, sectors in the Siouxland economy that impact people who must use public transit for mobility, or work commute, then ridership will continue to slowly decline. The changes in retail buying will eliminate brick & mortar stores & their jobs. When public transit cannot meet the timeframe necessary for work shifts, then people find alternative modes of transportation. This happens with packing house jobs. SCTS has not been able to fund fixed route changes for agreeable operating hours to accommodate a business work shift that might significantly increase ridership.

Chart 4.2: Projected Fixed Route Ridership



Source: Sioux City Transit System, 2019

PROGRAMMED PROJECTS

Any plan to further expand the bus network and/or the operating hours on selected fixed routes are constrained by funding. The expansion would require additional funding, including collaborative private sector funding, that is not readily available for transit. South Sioux City has expressed a desire to expand its current route and/or add a route to the Tyson plant. SCTS did a feasibility study of the expansion and concluded that adding a new bus route and bus is not financially feasible at the moment, and SCTS does not have enough buses to do so. The additional geographic distance and time to expand the route for a Tyson stop would have to stay within the one-hour maximum requirement of the current hub and spoke system. Other existing bus stops would have to be removed around South Sioux City in order to make up for the distance and time it would take to go to Tyson.

SCTS currently participates in Transportation Advisory Group (TAG) meetings and activities, which include Transit Training Day. Continued support in TAG and its activities, will help SCTS learn and address mobility challenges throughout the SIMPCO MPO.

SCTS has evaluated compressed natural gas (CNG) in comparison to diesel as an interim fuel step to the probable evolution of battery electric energy. It was determined that CNG conversion would not be cost-effective, and unattainable without considerable collaboration among and between other public and private entities who would want to convert. There is no CNG infrastructure to distribute it to City facilities. The operating expenses for additional CNG safety compliance and personnel would rise prohibitively as well. The LRTP for SCTS's fleet energy is a piecemeal transition to electric.

CNG

SCTS is committed to a transition to electric buses for the fleet. Pricing on electric buses (approximately double the cost of diesel-powered buses) preclude the investment in not only the vehicle, but also the maintenance and storage facility including retrofitting maintenance service bays, new equipment, mechanic training, charging stations, and collaboration with Mid-America Energy to supply the building with the needed additional electricity. The primary benefit of using electric buses is environmental, as they release no Green House Gases. There is, however, no sector of the service in Iowa under a mandatory clean air attainment directive. ***An additional cautionary determinant is that the current use of electric buses empirically documents that battery electric vehicles cannot hold the required electric charge in cold weather which adversely impacts completing routes on time.*** Running out of electrical charge is an expensive proposition with service interruption, maintenance, and public opinion about dependability and reliability to use the system. The use of Battery Electric Buses would likely result in a new route schedule to be instituted to accommodate the constraints of the vehicle range.

The City is actively seeking federal and state grant funding to build a new Transit Maintenance & Storage Facility on Hawkeye Drive within the next five years. The facility design includes provisions for electric buses. Transit is working with FTA Region VII staff to implement the project. A major capital grant proposal was submitted for the FY 2019 Section 5339 program but was not funded.

PROJECTED REVENUES AND EXPENDITURES

SCTS's projected operating expenses from 2018 to 2021 are displayed in Table 4.5 and 4.6. The long range estimates assume that compared to previous years, there will be a significant decrease in route structure, economic impact will alter ridership, and federal and state grant funding and local real estate tax support for transit will decline. SCTS still administers the New Freedoms program, though the program no longer has any federal funding, private funding has been raised to keep this program.

Table 4.5: Projected Fixed Route Expenditures

EXPENDITURES:	FY18 Actual	FY19 Actual	FY20 Approved Budget	FY21 Approved Budget	$ Change	% Change
Transit Administration	$249,936	$288,650	$284,202	$262,771	$21,431	7.5%
Transit Operations	$3,232,341	$3,170,109	$3,335,635	$3,352,025	$16,390	0.5%
Transit Maintenance	$338,522	$623,904	$800,834	$803,226	$2,392	0.3%
MLK Building	$194,231	$224,810	$211,371	$221,609	$10,238	4.8%
Paratransit	$740,733	$1,025,031	$1,060,613	$1,232,404	$171,791	16.2%
New Freedom	$11,857	$9,155	$10,375	$10,375	-	0.0%
Total Expenditures	$4,767,620	$5,341,659	$5,703,030	$5,882,410	$179,380	3.1%

Source: Sioux City Transit System, 2020

Table 4.6: Projected Operating Revenues

Revenues:	FY18 Actual	FY19 Actual	FY20 Proposed Budget	FY21 Proposed Budget	$ Change	% Change
Charges for Services	$1,241,749	$1,283,915	$1,337,500	$1,320,284	$17,216	1.3%
Contributions	$1,457	$20,638	$8,000	$8,000	-	0.0%
Federal Gov. Oper. Grants	$1,584,013	$1,573,836	$1,800,000	$1,700,000	$100,000	5.6%
Local Gov. Payments	$93,723	$105,852	$101,539	$101,539	-	0.0%
Miscellaneous	$933	$1,426	$500	$500	-	0.0%
Refunds and Reimb.	$40,325	$24,943	$10,610	$8,910	$1,700	16.0%
Rentals and Leases	$56,526	$79,936	$76,308	$76,765	$457	0.6%
State Gov. Operating Grants	$325,918	$354,405	$365,000	$358,000	$7,000	1.9%
Poperty Taxes	$1,391,976	$1,896,708	$2,003,573	$2,308,412	$304,839	15.2%
Total Revenue	$4,767,620	$5,341,659	$5,703,030	$5,882,410	$179,380	3.1%

Source: Sioux City Transit System, 2020

COVID-19 Virus Pandemic will impact ridership and revenues for many months to come. Post Pandemic ridership changes are hard to predict. If a reliable or cheaper means to a destination arose out of necessity, it is hard to change back. As the smaller ridership trend continues, service will be cut back and result in fewer operating hours, fewer days, fewer routes, and employment layoffs, etc.

BUS REPLACEMENT SCHEDULE

Figure 4.1: SIMPCO MPO Transit Funding Table

MPO-29 / SIMPCO (3 Projects)

Fund	Sponsor	Transit # Expense Class Project Type	Desc / Add Ons / Addnl Info		FY21	FY22	FY23	FY24
PTIG, 5307	Sioux City	5688 Operations Other	MLK Structural Rehabilitation, concrete sealing, and concrete repairs	Total FA SA	75,000 60,000			
STA, 5307	Sioux City	5812 Operations Other	Governor's apportionment for 5307 from IA, NE, & SD plus Iowa STA	Total FA SA	3,761,249 1,694,749 371,751			
5310	Sioux City	5817 Operations Other	Projects & Svc Exceeding ADA Requirements, Saturday SSC Demand Response Rides	Total FA SA	10,000 5,000			

Source: TPMS

PARATRANSIT / SRTS

Paratransit service is provided to meet the requirements of the Americans with Disability Act (ADA). Individuals who cannot use the fixed-route bus services may use this parallel service. The paratransit service is contracted through the Siouxland Regional Transit System (SRTS). Eligibility for paratransit services is obtained through an evaluation of the applicant's ability to use the fixed route system, and by certification of a physician. The application process is administered by SCTS.

Expanded transportation services through SCTS's New Freedom Nights & Weekends Program give eligible riders greater access to mobility, an enriched quality of life, and increased options for affordable transportation outside of normal public transit hours of operation. The eligible rider may purchase a discounted voucher for a one-way ride costing $7.00. Passengers may contact participating vendors directly to arrange a ride. Participating vendors include Care-A-Van, Siouxland Taxi, Action Taxi, and EZ Cabs Inc.

PARATRANSIT / SRTS EXISTING CONDITIONS

FLEET

There are thirteen paratransit vehicles. As of November 2020, there are no paratransit vehicles beyond either the age or federal mileage replacement thresholds (Table 4.7). Paratransit vehicles are replaced using the IDOT PTMS. SCTS may utilize the federal operating grant (Section 5307) for heavy duty or for cutaway van vehicles. Section 5310 funding may be used to acquire cutaway vans for the demand response service as need arises from a larger Age demographic group requiring greater mobility.

Table 4.7: Paratransit Vehicles

	Property ID Number	MFG. Year	Model	In Service Date	Acquisition		Seating Capacity	FY 2019 Total Mileage	Federal Replacement Threshold
					New Used	Cost			
1	1347	2013	Glaval - Universal Titan II	10/25/2013	NEW	$74,159	14 / 2	123,805	4yr / 100,000 mi.
2	1348	2013	Glaval - Universal Titan II	10/25/2013	NEW	$74,159	14 / 2	153,601	4yr / 100,000 mi.
3	1349	2017	Glaval - Universal Titan II	5/22/2017	NEW	$73,379	12 / 3	140,430	4yr / 100,000 mi.
4	1355	2017	Glaval - Universal Titan II	6/8/2017	NEW	$73,379	12 / 3	51,668	4yr / 100,000 mi.
5	1356	2017	Glaval - Universal Titan II	6/28/2017	NEW	$73,379	12 / 3	71,452	4yr / 100,000 mi.
6	1357	2017	Glaval - Universal Titan II	6/28/2017	NEW	$73,379	12 / 3	51,814	4yr / 100,000 mi.
7	1358	2018	Glaval - Universal Titan II	8/31/2018	NEW	$72,333	12 / 3	59,157	4yr / 100,000 mi.
8	1362	2018	Glaval - Universal Titan II	12/3/2018	NEW	$72,333	14 / 3	17,227	5yr / 150,000 mi.
9	1366	2018	Glaval - Universal Titan II	12/3/2018	NEW	$72,333	14 / 3	11,059	5yr / 150,000 mi.
10	1367	2018	Glaval - Universal Titan II	12/3/2018	NEW	$72,333	14 / 3	12,443	5yr / 150,000 mi.
11	1368	2018	Glaval - Universal Titan II	12/3/2018	NEW	$72,333	14 / 3	13,159	5yr / 150,000 mi.
12	1371	2019	El Dorado Aerotech	3/29/2019	NEW	$72,549	14 / 3	652	5yr / 150,000 mi.
13	1372	2020	El Dorado Aerotech	3/24/2020	NEW	$72,487	14 / 3		5yr / 150,000 mi.
14	1381	2021	El Dorado Aerotech	Ordered					

Source: Sioux City Transit System, 2019

SERVICE AREA

The service area for both fixed routes and paratransit demand response services includes the corporate limits of following municipalities within the SIMPCO MPO: ***North Sioux City, Sergeant Bluff, Sioux City, and South Sioux City.***

While many paratransit services have a ¾-mile limitation on either side of a fixed route, SCTS's paratransit service does not. SCTS paratransit does not go into Dakota Dunes, South Dakota but there is a SRTS vehicle that runs from the MLK Center to the Dakota Dunes. This SRTS service assists those who need to get to the multiple medical offices and facilities that are located in the South Dakota community.

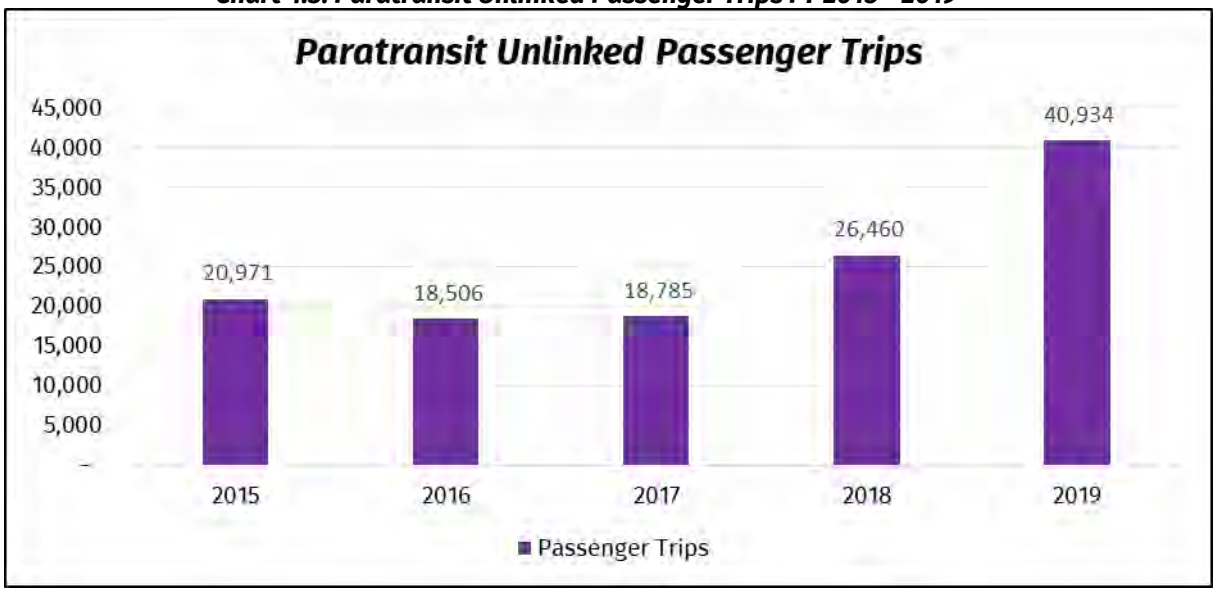
FARES

Reservations must be made a minimum of 24 hours in advance and up to 14 days prior. The basic cash fare for paratransit is double the fixed route fare or $3.60 for curb-to-curb service per one-way trip. Door-to-door service will be given when requested with 24-hour notice or at the time of the ride reservation. Each trip has one scheduled destination, with no changes happening after the passenger boards. An additional stop can be added but at the cost of another full $3.60 trip charge as well.

RIDERSHIP

Paratransit trips have shown an increase between the years 2015 to 2019. Over this four-year period, there was a significant increase in trips from 2018 to 2019, with approximately a 55% increase. There was a change in Medicaid reimbursement tiered rates to providers by the State of Iowa. In result, agencies are putting their clients on the paratransit system to save money, causing paratransit ridership increased significantly.

Chart 4.3: Paratransit Unlinked Passenger Trips FY 2015 - 2019

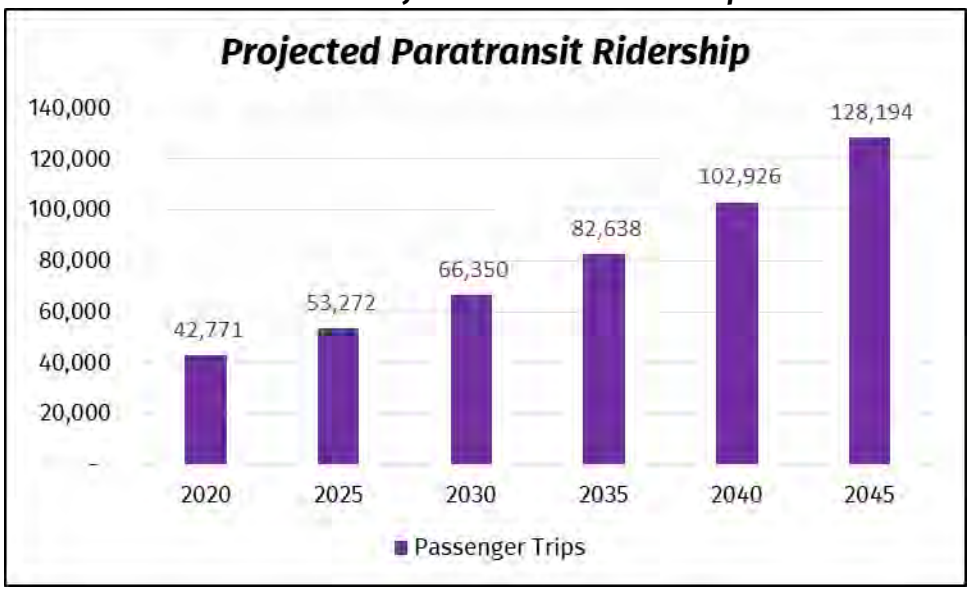


Source: Sioux City Transit System, 2019

PROJECTED RIDERSHIP

Projections suggest that paratransit ridership will increase 4% to 5% per year. This is likely due to the aging population demographics. However, the number of persons who become certified and ride will be affected by Medicaid Waiver rules and other restrictions. Recent changes to Medicaid Waivers have led to an increase in the number of trips. By the year 2045, projections point to a large increase in the total number of eligible clients who ride paratransit more frequently. The projected increase in the cost of these demand response services will significantly impact future budgeting. Such changes may force the agency to make service cutbacks and/or seek greater local tax support.

Chart 4.4: Projected Paratransit Ridership



Source: Sioux City Transit System, 2019

BUS REPLACEMENT SCHEDULE

Figure 4.2: Capital Replacement Program FY 21- FY 24

MPO-29 / SIMPCO (24 Projects)

Fund	Sponsor	Transit # Expense Class Project Type	Desc / Add Ons / Addnl Info		FY21	FY22	FY23	FY24
5339	Sioux City	5691 Capital Replacement	New Transit Maintenance & Storage Facility	Total	9,513,971			
				FA	7,547,337			
				SA				
5310	Sioux City	5814 Capital Replacement	Light Duty Bus (176" wb) UFRC, VSS Unit #: 1349	Total	76,000			
				FA	60,800			
				SA				
5307, 5339	Sioux City	5815 Capital Other	Automated Fare Collection Hardware, Software & Technology	Total	150,000			
				FA	120,000			
				SA				
5310	Sioux City	5816 Capital Expansion	Capital Expenditure to retrofit fixed route buses with annunciators.	Total	119,846			
				FA	95,877			
				SA				
5307	Sioux City	5818 Capital Replacement	Garage Parking Lot concrete replacement - Phase III	Total	170,000			
				FA	136,000			
				SA				
PTIG, 5307	Sioux City	5819 Capital Replacement	MLK Heat Pump Replacement: five units	Total	85,000			
				FA				
				SA	68,000			
PTIG, 5307	Sioux City	5820 Capital Replacement	MLK Boiler and Chiller repairs and replacement	Total	30,000			
				FA	24,000			
				SA				
5307	Sioux City	5821 Capital Replacement	New Project Unit #: 1303	Total	45,000			
				FA	36,000			
				SA				
5307	Sioux City	5823 Capital Replacement	New Project Unit #: 1304	Total	60,000			
				FA	48,000			
				SA				
5339, 5307	Sioux City	5825 Capital Replacement	Medium Duty Bus (29-32 ft.) Diesel, UFRC, VSS, Low Floor Unit #: 1324	Total	199,800			
				FA	169,830			
				SA				
5339, 5307	Sioux City	5826 Capital Replacement	Medium Duty Bus (29-32 ft.) Diesel, UFRC, VSS, Low Floor Unit #: 1325	Total	199,800			
				FA	169,830			
				SA				
5339, 5307	Sioux City	5827 Capital Replacement	Medium Duty Bus (29-32 ft.) Diesel, UFRC, VSS, Low Floor Unit #: 1326	Total	199,800			
				FA	169,830			
				SA				
5339, 5307	Sioux City	5828 Capital Replacement	Heavy Duty Bus (35-39 ft.) Unit #: 1331	Total	459,200			
				FA	390,320			
				SA				
5339, 5307	Sioux City	5829 Capital Replacement	Heavy Duty Bus (35-39 ft.) UFRC, VSS, Low Floor Unit #: 1332	Total	834,120			
				FA	709,002			
				SA				
5339, 5307	Sioux City	5830 Capital Replacement	Heavy Duty Bus (35-39 ft.) UFRC, VSS, Low Floor Unit #: 1338	Total	834,120			
				FA	709,002			
				SA				
5339, 5307	Sioux City	5831 Capital Replacement	Heavy Duty Bus (35-39 ft.) Diesel, UFRC, VSS, Low Floor Unit #: 1339	Total	469,200			
				FA	398,820			
				SA				
5339	Sioux City	5832 Capital Replacement	Heavy Duty Bus (35-39 ft.) Diesel, UFRC, VSS, Low Floor Unit #: 1340	Total	469,200			
				FA	398,820			
				SA				
5339, 5307	Sioux City	5833 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor Unit #: 1341	Total	493,300			
				FA	419,305			
				SA				
5339, 5307	Sioux City	5835 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor Unit #: 1352	Total	493,300			
				FA	419,305			
				SA				
5339, 5307	Sioux City	5836 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor Unit #: 1353	Total	493,300			
				FA	419,305			
				SA				
5339	Sioux City	5837 Capital Replacement	Heavy Duty Bus (40-42 ft.) Diesel, UFRC, VSS, Low Floor Unit #: 1354	Total	493,300			
				FA	419,305			
				SA				
PTIG, 5339, 5307	Sioux City	6100 Capital Replacement	New Project to replace Bus Wash Equipment	Total	300,000			
				FA				
				SA	240,000			
5339, 5307	Sioux City	6101 Capital Other	New Project - electric bus charging system & equipment	Total	124,032			
				FA	99,225			
				SA				
PTIG	Sioux City	6102 Capital Replacement	New Project - Replace ADA sliding doors in MLK Lobby	Total	39,000			
				FA				
				SA	31,200			

Source: TPMS

PARATRANSIT/SRTS FUTURE CONDITIONS

PROGRAMED PROJECTS

There are no programmed projects currently in place for expansion of the paratransit system. Potential programmed projects include the replacement or expansion of the existing bus fleet for future paratransit growth. The paratransit system potentially could experience difficulty pertaining to its ability to meet the demand of their services with their existing fleet as the Baby-Boomer generation is entering into the elderly stage of their lives, potentially increasing the number of individuals who are dependent on public transportation.

Image: Example of SRTS ADA bus

CURRENT TRANSIT SERVICE EFFORTS

TAG AND PTP

With the passage of SAFETEA-LU, it was required that a Coordinated Public Transit-Human Service Transportation Plan be developed through a local process including representatives from public and private transportation providers, human service agencies, interested parties, and the public. This process is in place to improve transportation services for persons with disabilities, older adults, and individuals with lower incomes by ensuring communities coordinate transportation resources provided through multiple federal programs. This coordination is designed to enhance transportation access, minimize duplication of services, and facilitate the most appropriate and cost-effective transportation possible with available resources.

The Transportation Advisory Group (TAG) and Passenger Transportation Plan (PTP) came into existence from a SIMPCO workshop that was held in 2006 in response to a series of Mobility Action Plan (MAP) workshops being held by IA DOT around the state. TAG has been meeting regularly since 2006 to discuss transportation issues in the MPO and SRTPA planning area and to develop the PTP.

As part of the update to the 2020 – 2024 PTP, a Siouxland Mobility Survey was distributed in 2018 in an effort to identify existing needs and coordination issues. In addition to feedback given by the respondents of the survey, concerns documented at regularly held TAG meetings were also taken into consideration for identifying existing needs and coordination issues. The following needs and coordination issues pertaining to transportation were identified:

- Affordable transportation
- Expanded Schedule of availability
- Information on what is available
- Demand greater than services available
- Limited or no funding for the internal transportation program

- Too many disconnects between districts and agencies
- Riders and or transportation providers have inflexible schedules
- Access to information on what is available

- Ensured accessibility for all passengers at all times
- Important for Sergeant Bluff to maintain access to transportation using both Sioux City Transit and SRTS

- Transit needs to evolve to meet the needs of a growing younger generation that does not drive. For example, having an electronic trolley/bus that can provide limited services on popular routes to the downtown area.

The needs listed above have been the focus of the group and will remain the focus of the TAG group in the future as well as guide the direction of projects and goals listed in the LRTP. The PTP can be found at the SIMPCO office as well as online at: https://simpco.org/divisions/transportation-planning/passenger-transportation-plan/

Modal Connectivity

Linkage among and between transportation modes is critical for convenient, cost-effective passenger planning and travel. Intermodal connectivity in the metropolitan planning area was made easier in 2004 with the opening of the MLK Center in downtown Sioux City. The MLK Center serves as the transfer center for SCTS routes. Passengers are able to transfer among all SCTS routes and can make connections to inter-city buses, private cars, an airport, or taxicab from neighboring cities like Omaha and Sioux Falls. The MLK Center provides bicycle carriers on each bus and secure bicycle parking at the transfer point.

In the greater Sioux City area, there are several taxicab and limousine services. Jefferson Bus Lines, located in the MLK Center, provides inter-city bus service within Iowa in addition to connections to Kansas City, Sioux Falls, Council Bluffs, Des Moines, Ames, and many other popular destinations.

Transit Security

SCTS ensures a secure and safe environment through multiple approaches. The security of the vehicles, passenger centers, and garages are covered by security cameras 24/7, monthly facility inspections, and daily equipment checks. A lock-out procedure prevents damaged or broken equipment from being used. Vehicle preventative maintenance adheres strictly to the manufacturers' and to FTA guidelines.

An eight-camera audio/video security system is installed on all fixed-route buses. All paratransit vans are camera-equipped. Cameras cover both interior and exterior areas of the buses. Extensive security camera coverage exists for the transit administration building and MLK Center. Electronic locks that use proximity cards for access are in place at the MLK Center and the transit maintenance facility. During the operating hours, security guards (off-duty uniformed police) patrol the MLK Center and ride buses randomly. ***By 2045, the goal is to achieve real-time camera access on all buses for monitoring passengers, MCO's, and the environment around them. This will also allow remote web access to monitor all building areas 24/7.***

RECOMMENDATIONS

The 2002 Ridership Operation Utilization/Transit Efficiencies Study (ROUTES) listed several observations about SCTS, the City of Sioux City, and the Transit Advisory Board with directions to follow when looking at approaches to improve the overall system. Some of these observations have been or are in the process of being implemented. These observations and recommendations are still pertinent today and are in accordance with the goals stated at the beginning of this chapter. The following is a list of recommendations to be implemented or utilized for future transit planning.

STRATEGIC PLAN

The Sioux City Transit System should develop a Strategic Plan or Transit Development Plan that is updated regularly. That plan should include an updated on-board rider survey, ridership analysis, and trends, route evaluations using available tools such as GIS, an examination of operating costs and financial plans, and proposed strategies to ensure an efficient and cost-effective transit system.

Image: Example of Omaha MTA hybrid bus

The strategic plan should have built-in flexibility to adjust to rapidly changing circumstances. With this goal in mind, constant operating efficiency comparisons to similar systems nationwide and an evaluation of the latest available technologies are necessary to further the goal of efficiency. Examples of implementable technologies include Battery-Electric buses and other alternative-fueled bus powertrain options. To evolve to an alternate fuel, multiple partnerships among and between the private sector and governmental jurisdictions would be necessary. The necessary infrastructure for an alternative energy source would be essential. Both public and private sectors would need to work together to fund and install such capital improvements; and to encourage the market for its consumption.

ITS

Sioux City Transit should continue to implement ITS architecture, as outlined in 2005 ITS Architecture for Metropolitan Sioux City Area, in an effort to improve the safety, security, efficiency, and cost-effectiveness of the transit system. To this end, the scope of present technologies like Automatic Vehicle Location (AVL) that are already available could be expanded. ***New operating services could include linkage to transit passenger personal computers, tablets, and smartphones. Direct onboard video surveillance links to emergency officials could also be pursued to enhance the goal of improved safety and security.***

The difficult IT cost benefit decision arises from the significant procurement cost, and on-going expense to maintain new electronic systems. The primary determinant is whether the investment pays for itself, or saves expense while providing more reliable convenience and benefits. Trading the cost of a technology application for that of an employee is hard to determine for a small agency. For example, would an autonomous vehicle (NO HUMAN DRIVER) performing a circular route to key destinations in the downtown area provide more satisfaction than just the cost and novelty? Budget decisions play a crucial role in deploying services that are needed by the majority of public transit dependent riders. Over eighty percent of regular passengers fit this category. Understanding their needs, preferences, and financial capabilities for new technology are constraints to consider. It will be necessary to utilize a transportation consultant(s) to layout the most feasible and likely scenario of the future operations. The required detailed data and statistics must be gleaned internally and externally to make solid decisions long term.

The other significant aspect of investment in technology is dependable recurring grant funding at both the federal and state levels. There are no public transit systems that totally support themselves through fares, advertising, and local revenue streams. The level of funding for the reauthorization of surface transportation, Federal Highway & Transit Program, is critical for any public transit agency to survive.

Geographic Positioning Systems (GPS), automatic cash-less fare systems, automatic stop enunciation, and electronic passenger counters will be standard in future years. All of these features will help SCTS not only provide reliable service but also provide a more effective service as well. ***Riders are now able to access Google maps to mark out their transit route, bus scheduling & route apps, and transit-related social media news can be taken into consideration as SCTS moves forward.*** With so many technological advances happening so quickly, it is important for SCTS to keep up with these advances as they develop.

MARKETING

SCTS should develop a marketing plan to encourage increased ridership and improve the public image of the transit service. Expanding advertising on buses should be continued by looking into options such as bus wraps, which could bring in extra income for bus services. SCTS should also keep pursuing more private/public partnerships with companies such as Tyson, Sabre, and other major employers in the SIMPCO MPO area. Employees working at a partnered business would receive discounted transit rates and the company would pay SCTS for having a bus route that runs by their business. Advertising about the public transit service should be done throughout the SIMPCO MPO, allowing people to learn what services are available, how to ride a bus, and what promotional events are being done. Also, observing the best marketing practices of other transit systems in the region can help SCTS' future marketing efforts.

CHAPTER CONTENTS

- Current Traffic Conditions
- Current and Proposed Improvements
- Future Traffic Trends
- Future Projects
- Environmental Justice
- Recommendations

Streets and highways comprise a large portion of transportation planning as motor vehicles make up the vast majority of commuter trips made within the SIMPCO MPO planning area. This chapter describes street and highway performance measures, the road network characteristics, the travel demand model, and future recommendations.

CURRENT TRAFFIC CONDITIONS

ROAD NETWORK

The SIMPCO MPO planning area is located at the intersection of many major Midwest highways that radiate in all directions, providing a very effective pattern of highway connections for the region. Most north-south traffic is served by I-29, which connects the area to Omaha, NE, Kansas City, MO, Sioux Falls, SD, Fargo, ND, and Winnipeg, Manitoba, Canada. Other north-south routes include US 75, which connects to Omaha, NE, Topeka, KS, and Manitoba, Canada, and US 77, which connects to Lincoln, NE. US 20 carries much of the east-west traffic, which services eastern Iowa and Illinois to the east, and Wyoming, Montana, and Oregon to the west. To the northeast, the area has access to controlled access highway, IA 60, which leads into Minnesota. Finally, to the southwest, NE 35 provides access to the major farming areas of northeastern Nebraska.

FEDERAL FUNCTIONAL CLASSIFICATION (FFC)

Mobility occurs through a network of interdependent roadways, with each segment moving traffic through the system to a destination. The idea behind the concept of functional classification is to define the role played by each road segment in serving the traffic through the network. Federal Highway Administration (FHWA) classifies roadway systems into the interstate, other freeways, and expressways, principal arterial, minor arterial, major and minor collectors, and local roads. The table below shows the relationship between functional classification and travel characteristics.

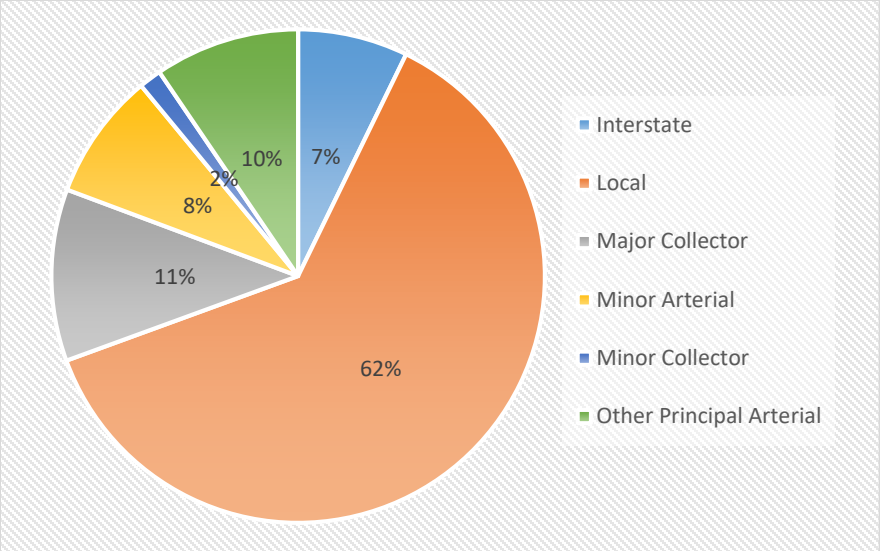
Table 5.1: FFC

Functional Classification	Distance Served (and Length of Route)	Access Points	Speed Limit	Distance between Routes	Usage (AADT and DVMT)	Significance	Number of Travel Lanes
Arterial	Longest	Few	Highest	Longest	Highest	Statewide	More
Collector	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Local	Shortest	Many	Lowest	Shortest	Lowest	Local	Fewer

Sources: Highway Functional Classification Concepts, Criteria and Procedures, US DOT, FHWA, 2013 Edition

Figure 5.1 shows the percent of roadway mileage by FFC in the MPO areas. The MPO has approximately 1,232 miles of roads. The majority of the road network in the MPO, like any other urban area in the country is local road. Approximately 38 percent of the road network in the MPO has a collector or above FFC, making them eligible for federal funding – see Map 5.1 below.

Figure 5.1: Roadway Mileage by Federal Functional Class



TRAFFIC VOLUME

Map 5.2 illustrates the most recent annual average daily traffic (AADT) count figures for the metropolitan area. Primary roads see the largest AADT counts (Table 5.2).

The primary facilities traversing through the SIMPCO MPO planning area represent many of the facilities with the highest AADT counts for 2015. Other major traffic corridors of note include E 6th St, G St, E 39th St, W 29th St, and Riverview Drive, respectively, in South Sioux City, Harbor Drive, W 19th St at Hamilton Blvd, Outer Dr., Fairmount St, S Lakeport St, and Singing Hills near I29 in Sioux City. These carry 3,785 to 11,260 AADT.

Table 5.2: 2015 Base Year Primary AADT Statistics

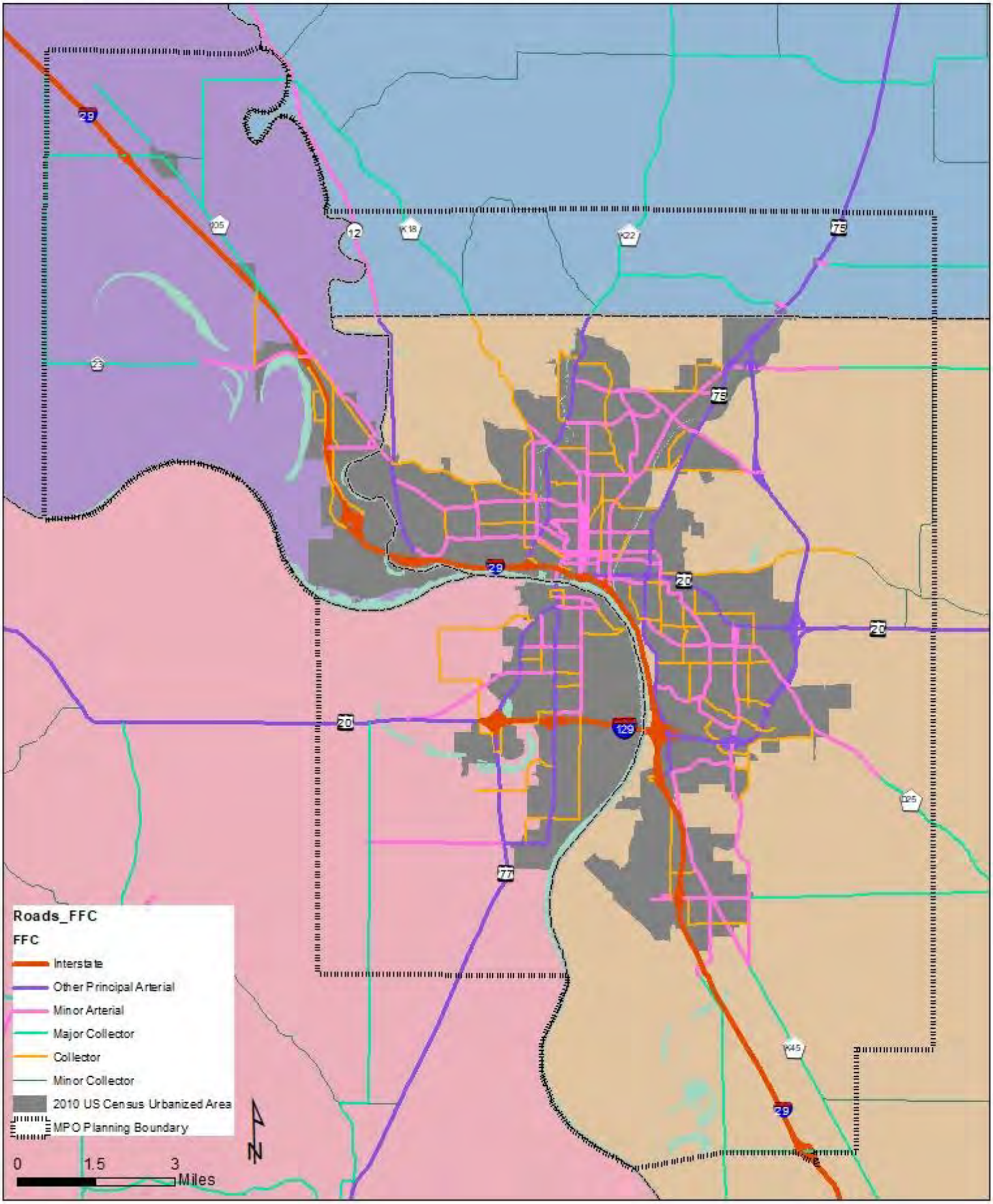
Primary Roadway	AADT Average	AADT Range
US77: Urban (Veterans Memorial Bridge to Dakota City)	8,083	4,485-16,145
US77: Rural	5,869	3,552-7,105
I29: Urban (McCook Lake to Sergeant Bluff)	27,272	14,984-42,000
I29: Rural	16,928	13,870-21,000
US20/Gordon Drive/IA12	16,773	5,200-24,000
US20/75 Bypass	20,129	8,200-33,200
US75	15,745	10,300-20,500
Note: AADT is for both directions		

Source: SIMPCO 2015-2045 Travel Demand Model

Map 5.1

SIMPCO MPO

Federal Function Classification (FFC)

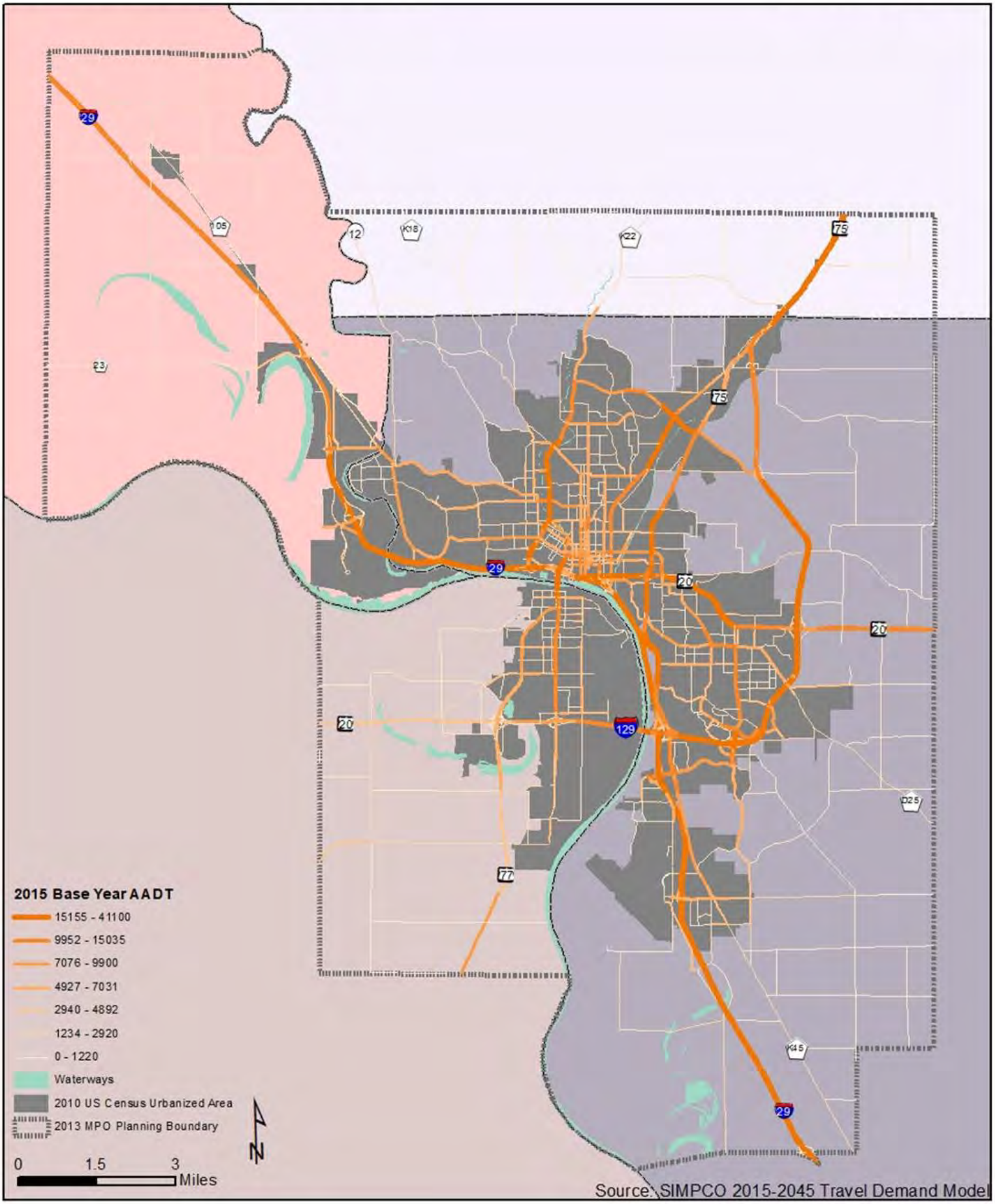


Map 5.2

SIMPCO MPO

Traffic Flow: 2015 Base Year

Iowa Counts: 2015
Nebraska Counts:2016
South Dakota Counts: 2017



Source: SIMPCO 2015-2045 Travel Demand Model

BRIDGES

In addition to the roadways, substantial amounts of traffic cross the inter-state bridges within the SIMPCO MPO planning area. It is important that traffic flows safely and efficiently across these structures. As seen in Table 5.2, these bridges carry substantial amounts of traffic and serve as vital links within the transportation system.

In addition to the main river bridges, there are three other transportation bridge structures of note which are: the Outer Drive/Irving Jensen Jr. Bridge, the newly reconstructed Wesley Way/I-29/US77 interchange bridge, and the 3,970-foot IA 12/Gordon Drive viaduct.

Table 5.3: 2015 AADT for Major Bridges

Major Bridge	Roadway	Waterway	AADT
Siouxland Veterans Memorial Bridge	US 77/Business Highway 20	Missouri River	29,500
Russell E. Christiansen Bridge	I-29	Big Sioux River	33,200
Gordon Drive Viaduct	IA 12/Gordon Drive	Floyd River	23,200
Sergeant Floyd Memorial Bridge	I-129/US 20/US 75	Missouri River	23,600
Military Road Bridge	Military Road	Big Sioux River	8,900

Source: Iowa DOT 2015-2045 Travel Demand Model

CURRENT AND PROPOSED IMPROVEMENTS

U.S HIGHWAY 20 & 75 BYPASS RESURFACE

In 2019, the Iowa DOT completed U.S. Highway 20's four-lane expansion in Woodbury, Ida, and Sac Counties, stretching from Moville, to Early, Iowa. The Iowa DOT has programmed to resurface US Hwy 20 from US Hwy 75/IA 12 interchange in Sioux City to Little Whiskey Creek in 2023. Also, resurfacing of US Hwy 75 bypass from Iowa and Nebraska State boundary to US Hwy 75 & IA 12 interchange in Sioux City began this year. This project was programmed in 2020 to 2024 MPO TIP.

SOUTHBRIDGE ROAD IMPROVEMENTS

Woodbury County, Sioux City and Sergeant Bluff have identified the need for an interchange near mile post 138 on I-29. This proposed interchange, Southbridge Interchange, has been an identified need for over a decade. The recent Woodbury County Envision 2050 plan centers on the proposed Southbridge Interchange that will service the new Southbridge Industrial Park (south of the Sioux Gateway Airport and west of Sergeant Bluff, Iowa). An Interchange Justification Report has been developed for approval by the FHWA.

Bridgeport Improvements

In 2017, Seaboard Triumph Foods opened their meat processing plant at the Bridgeport Area on the south side of Sioux City. The estimated employment numbers 2,200 people and this has resulted in an increase of daily traffic. In addition to this, the truck traffic volume at this location has also increased. Sioux City is making effort to improve traffic flow at the Bridgeport Area. In 2019, a new street from Seaboard Triumph Pkwy to Discover Blvd was completed. The city is committed to making additional improvements at the Bridgeport Area to ensure the smooth flow of traffic.

18th Street Viaduct Construction

The proposed 18th St. Viaduct design will divert motorized traffic over the Union Pacific Railroad rail yard between Hoeven St. and Floyd Blvd. south of 19th St. The 19th St. at-grade crossing and potentially one or two other at-grade crossings are proposed to be eliminated with the construction of the plan. A reconfiguration of truck access to the Cargill processing plant near and at this site will be created as well. This project is integral to the implementation of the Hoeven Valley Transportation Plan.

Pine Street Extension

The City of Dakota City is proposing to extend existing Pine Street from Dakota Avenue to US Highway 77/75. Existing Pine Street is gravel and will be reconstructed as part of this project. Adjacent to the site is the Tyson Fresh Meats Dakota City processing plant, the City of Dakota City, and unincorporated Dakota County. The Pine Street Extension will grant a primary access point to the confirmed JST Global industrial expansion adjacent to Pine Street. JST Global estimates their new development will generate 310-350 trucks per month, 4,030-4,200 annually on Pine Street. The extension of Pine Street to US Highway 77/75 opens up approximately 145 acres of vacant, industrially-planned land for new development.

Gordon Drive Viaduct Replacement

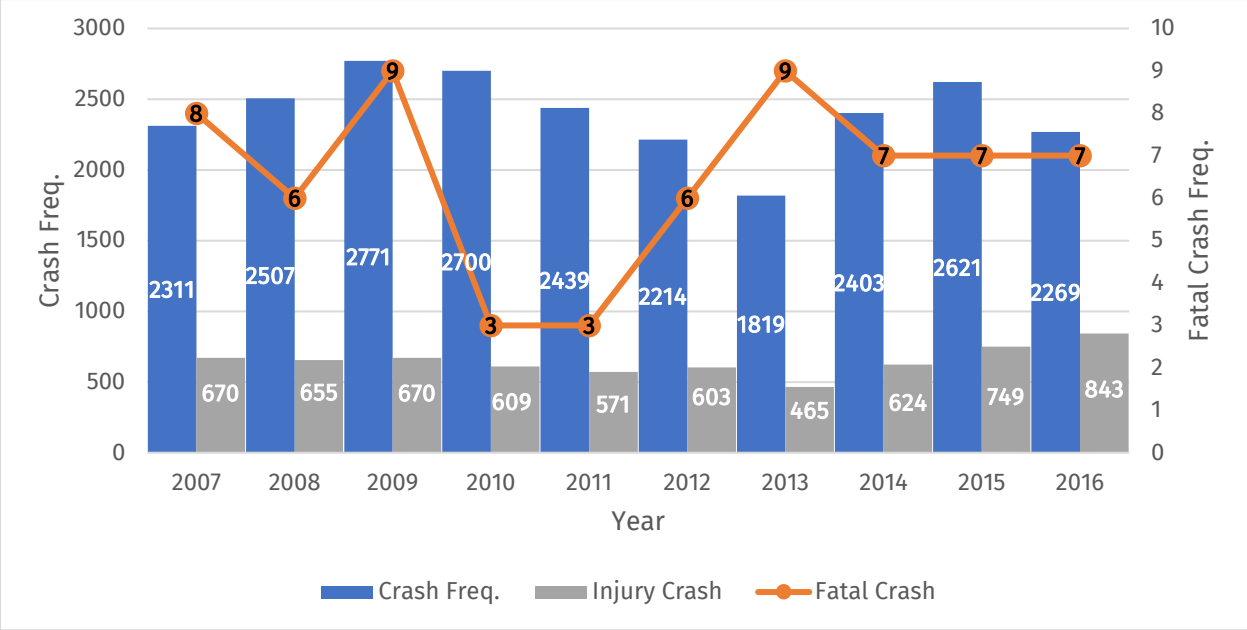
Built in 1934, the Grand Avenue Viaduct (now the Gordon Dr. Viaduct) has been, and still is, an important transportation connection in the metropolitan area. The bridge allows motorists and pedestrians to travel over several railroad crossings, and the new and old Floyd River channels. For 50 years the viaduct has served as a vital east/west connection through Sioux City. While the viaduct underwent significant maintenance and repairs in the last 10 years, the replacement of the bridge continues to be a priority project for the SIMPCO MPO planning area and the Iowa DOT. With the completion of I-29 reconstruction in the near future, the Gordon Dr. Viaduct project will be the next step in improving the downtown transportation network.

SAFETY

CRASHES

SIMPCO MPO obtained crash data from the three state transportation agencies from 2007 to 2016. The graph below shows crash frequency in the MPO from 2007 to 2016. From 2007 to 2016, 37,816 vehicle crashes occurred in the SIMPCO region; out of which, 64.77% were recorded in the MPO area. Vehicle crashes in the MPO area increased steadily from 2007 to 2010 but dropped from 2011 to 2013. From 2014 to 2016 vehicle crashes in the MPO area increased by 12.7%. Approximately 8,664 crash related injuries were recorded in the MPO area from 2007 to 2016. Between these same years, an average of 0.32% of vehicle crashes in the MPO area resulted in a fatality – 75 people died in the MPO area from 2007 to 2016 because of vehicle crashes.

Figure 5.2: Historic Trend of MPO Crashes



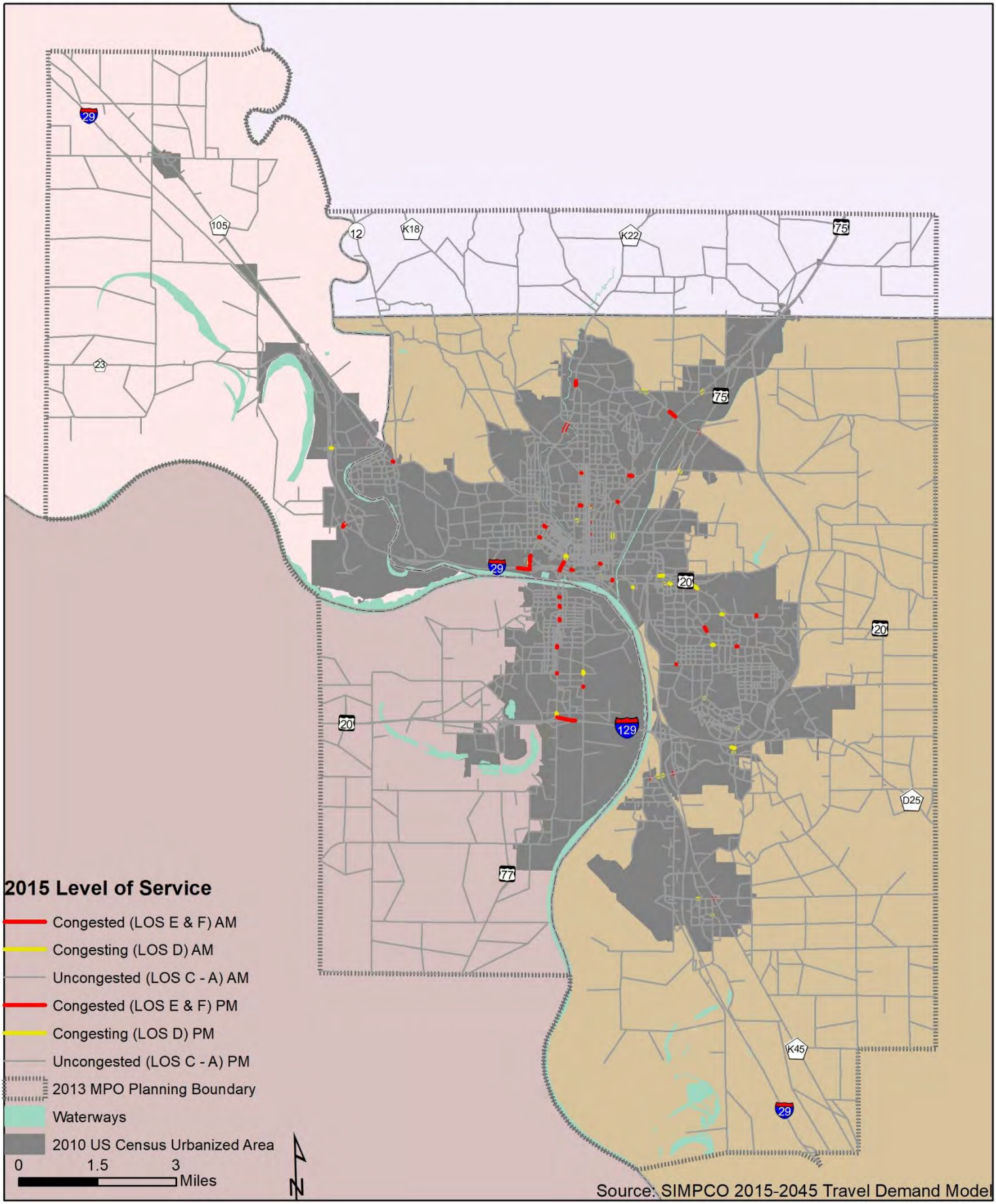
Source: Iowa, Nebraska, and South Dakota DOT

Map 5.3

SIMPCO MPO

Level of Service: 2015 Base Year

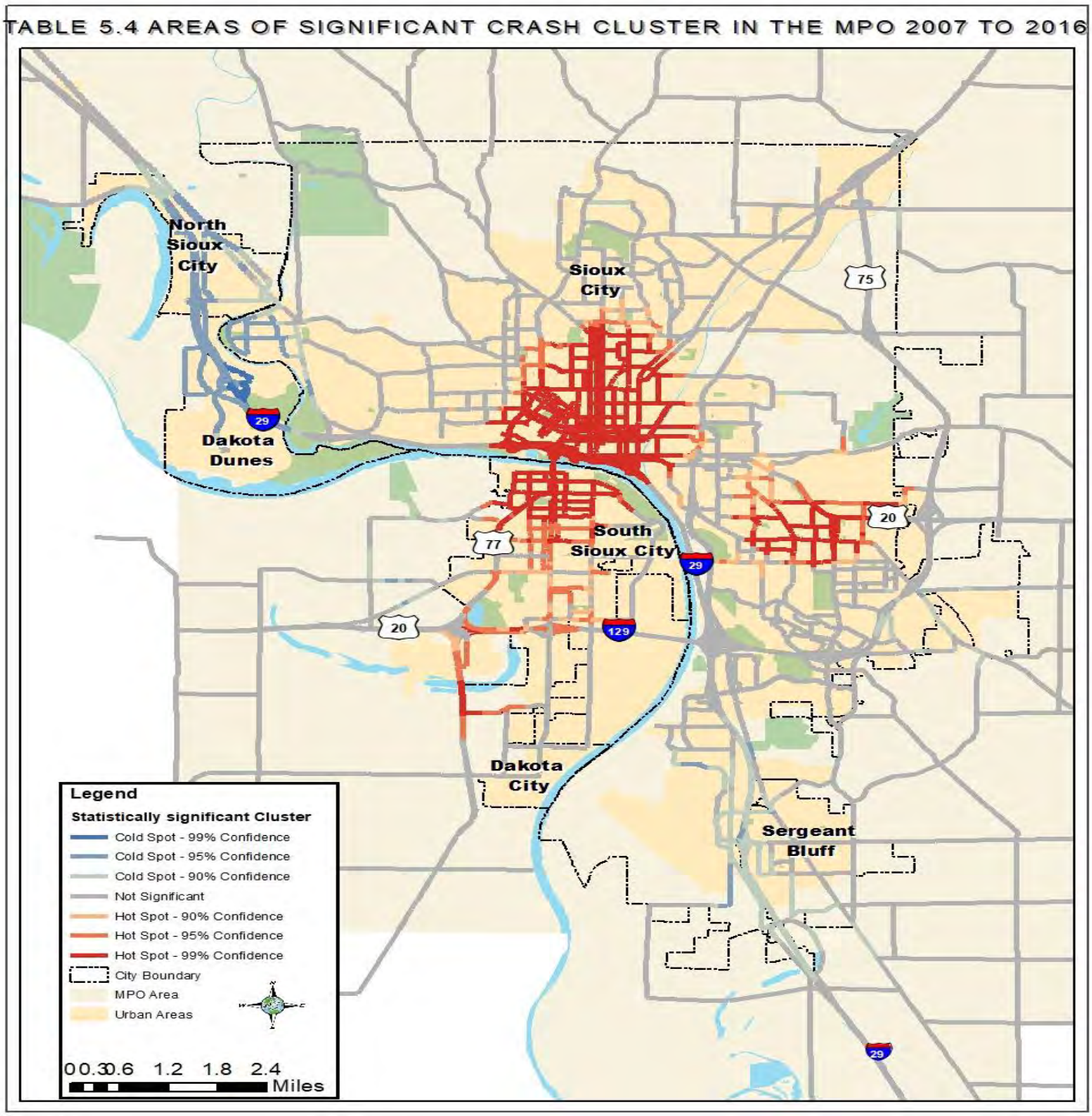
Existing Network



AREAS OF SIGNIFICANT CRASHES IN THE MPO 2007 TO 2016

The Hot Spot tool in ESRI ArcGIS was used to identify statistically significant spatial clusters of high values (hot spots) and low values (cold spots) regarding vehicle crashes in the MPO. Table 5.4 shows that vehicle crashes cluster is intense in the downtown area of Sioux City, Interstate 29, and North of South Sioux City followed by Morningside Area (Sioux City) and Highway 20 in Nebraska.

TABLE 5.4 AREAS OF SIGNIFICANT CRASH CLUSTER IN THE MPO 2007 TO 2016



INCIDENT MANAGEMENT

The Tri-State Incident Management Team (TSIM) is a group that meets monthly to plan for and coordinate responses to roadway incidents that are primarily safety related. This group is comprised of officials from local, regional, and state law enforcement, state transportation departments' safety personnel, county emergency response dispatchers, SIMPCO MPO staff, and others. The incident management group has focused much of their efforts on the I-29 reconstruction work and issues related to staging and detour routes.

In addition to the TSIM, SIMPCO MPO staff consults with the state transportation departments to reducing the number of and severity of crashes on public roadways. In Iowa, the transportation safety division of the DOT is split into two work groups, including the Safety Analysis division and the Safety Programs division. The Safety Analysis division includes crash analysis resources and the Safety Program division offers programs and funding opportunities to implement safety improvements on the road network.

On the Nebraska side, special funds are included in the regular TIP programming for safety improvements. Such work may include signal optimization, upgrading signage to Manual on Uniform Traffic Control Devices (MUTCD) specifications, correcting geometric deficiencies, and others.

South Dakota has teams evaluating intersections with high crash histories. Items considered include signal operation, sight distance, roadway geometry, and road operating speeds. It is anticipated correcting identified deficiencies will aid in safe operation of such intersections.

In addition, the SIMPCO MPO staff aims to coordinate and incorporate the priorities, goals, countermeasures, and projects contained in the Iowa, Nebraska, and South Dakota Strategic Highway Safety Plans which can be found at the following links:

Iowa Comprehensive Highway Safety Plan:
https://iowadot.gov/traffic/pdfs/IowaSHSP.pdf

Nebraska Strategic Highway Safety Plan:
https://dot.nebraska.gov/media/7839/2017-2021-nebraska-strategic-highway-safety-plan.pdf

South Dakota Strategic Highway Safety Plan:
https://dps.sd.gov/resource-library/2017-HSP.pdf-816

TRAVEL DEMAND MODEL

For this plan, the SIMPCO MPO 2045 Forecast Year Travel Demand Model was updated using a standardized approach to travel demand model development outlined in the Iowa Standardized Model Structure (ISMS). The 2045 travel demand model relies heavily on parcel data information from Dakota County - NE, Plymouth County - IA, Union County - SD, and Woodbury County – IA to predict transportation decisions and trip generation in the MPO. In residential areas, the number of housing units from the parcel data was used to determine trip-making potential. In non-residential areas, economic activities were determined by using building area and land use area information obtained from the parcel data. Other data sets used in the 2045 travel demand model include 2010 Census Transportation Planning Products, NPRMDS, school enrollment, airport enplanement data, and many others. The future year travel behavior within the MPO was predicted based on the projections of the above data sets. Projected future socio-economic data development methodology and population, household, and employment change details are presented in Appendix B.

VOLUME TO CAPACITY RATIO, LEVEL OF SERVICE, AND FLOW

The volume to capacity ratio (V/C) is a method used to evaluate congestion and assess how well the transportation network is functioning, and is often converted to and referred to as Level of Service (LOS), which is described below in table 5.4. Roadway capacity coded into the model network is based on a level of service (LOS) E which begins when the V/C ratio is 0.90 or greater. Any identified segments flagged with V/C ratio greater than 0.90 correspond to congestion over LOS E, and are represented on the following LOS maps by a thick red line. Flow, or forecasted traffic trips, is also a variable used to describe changing traffic patterns and will be discussed in the Future Traffic Trends section. This model does not reflect peak hour traffic LOS, only daily traffic LOS, however

Table 5.4: Level of Service

Level of Service		
LOS	**V/C Ratio**	**% of free flow speed**
LOS A (Uncongested)	< .59	90% or greater
LOS B (Uncongested)	.60 - .69	70% to 90%
LOS C (Uncongested)	.70 - .79	50%
LOS D (Congesting)	.80 - .89	40%
LOS E (Congested)	.90 - .99	33%
LOS F (Congested)	> .99	25% or less

Source: SIMPCO 2045 Travel Demand Model

2015 Base Year (Existing)

For the 2015 base year, LOS-related congestion was not a significant issue in the SIMPCO MPO planning area. Only a few short segments amounting to ~1.5 miles of road network were congested, and only a few short segments amounting to ~0.5 miles of road network were congesting (Map 5.4).

With the completion of the I-29 construction in 2020, construction related congestion in the downtown area will be greatly alleviated. City staff and officials are aware Southern Hills Mall and Lakeport Commons area (S Lakeport Rd and Sergeant Rd intersection) has increasing congestion, especially during peak weekend and holiday shopping season. This is currently being monitored and will continue to be in the future, as more commercial development occurs in the Sunnybrook area.

2015 CONGESTED SEGMENTS (Major Corridors)

- US 77 on the Veterans Memorial Bridge from Sioux City's Wesley Way to W 9th St intersection.
- Dakota Avenue and the intersections of E 33rd St and E 29th St.
- I-129 westbound exit ramp at Dakota Ave.
- I-29 at the Hamilton Blvd intersection: westbound I-29 on-ramp and Hamilton Blvd north to Tri View.
- Hamilton Blvd at the intersections of W 7th St, Wesley Way, 36th St, and Outer Dr.
- Outer Dr at Floyd Blvd and at Lewis Blvd/Business 75.
- Morningside Ave at Morningside University, and at the intersection of S. Lakeport St.
- Pierce St at 27th St and at 18th St.
- Jackson St at 18th St, 14th St, and 11th St.
- 2 Rivers Dr and Sioux Point Rd.

2015 CONGESTING SEGMENTS (Major Corridors)

- IA 12/Gordon Dr at the intersections of S Westcott St, Fairmount St, S Martha St, and Stone Ave.
- Off-ramp of US 20/US 75 Bypass to north and south bound S. Lakeport St.
- Off-ramps of I-29 east and west bound at Singing Hills Dr.
- Dakota Ave from I-129 to E 39th St.
- Wesley Way between 3rd and 7th Sts.
- I-29 off ramp at River Dr.

With the completion of the I-29 construction in 2020, construction related congestion in the downtown area will be alleviated. City staff and officials know that the Singing Hills Mall and Lakeport Commons area (S Lakeport Rd and Sergeant Rd intersection) has congestion issues. This is currently being monitored and will continue to be in the future, as more commercial development occurs in the Sunnybrook area.

2020 Current State (Existing)

Between 2015 and 2020, new residential development continued to occur in the Dakota Dunes, SD, Sergeant Bluff, and Whispering Creek in Sioux City, as well as infill in all member agencies. Significant commercial development in the Lakeport Commons, Sunnybrook, and Floyd Boulevard areas occurred, as well as along South Sioux City's US 77 commercial corridor. Significant dining and commercial storefronts in downtown Sioux City have opened, along with hundreds of market rate apartments and condominiums. Industrial and heavy commercial development expanded in the Bridgeport area, most notably with the new Seaboard Triumph pork processing facility, and in the Southbridge area with the CF Industries plant expansion. Traffic in this area increased greatly due to construction workers and the large quantity of materials needed for the construction, and the resulting workforce and heavy truck traffic.

Two new elementary schools were built in Sioux City. The new schools replace and combined older schools, resulting in several elementary schools with enrollments of 500-800 students, up from enrollments of 300-500 students.

For the 2020 current state year, LOS-related congestion is not a significant issue in the SIMPCO MPO planning area. Only a few short segments amounting to ~1.5 miles of road network are congested and only a few short segments amounting to ~0.8 miles of road network were congesting (Map 5.5).

2020 CONGESTED SEGMENTS (New from 2015; Major Corridors Only)

- NB 1-29 exit ramp to Floyd Blvd.
- WB US 20/US 75 Bypass exit to S. Lakeport Rd.
- I-29 between the Hamilton Blvd. Interchange and the northbound exit ramp for Wesley Way.

2020 CONGESTING SEGMENTS (New from 2015; Major Corridors Only)

- No new congesting segments.

2025 Forecast Year (Existing & Committed)

Between 2020 and 2025, additional residential, commercial, and industrial growth is expected to happen in the SIMPCO MPO planning area. However, as calculated by the travel demand model, the current transportation network is capable of handling the added volume from this development. Map 5.6 illustrates new areas of congestion during the 2020-2025 model years.

Due to increased capacity on the newly reconstructed I-29, traffic is expected increase. However, the increased percentage of free flow speed results in a less congested corridor.

Due to new residential development east of the South Sioux City corporate limits and to the Missouri River, congestion becomes a concern for the already congested westbound I-129 Dakota Avenue exit ramp and at that intersection. As development continues to occur in the future, this area will require attention.

Three capacity-affecting projects were added to the model for this band year. They are:

2025 CONGESTED SEGMENTS (New from 2020; Major Corridors Only)

- Virginia St from IA 12/Gordon Dr to I-29 entrance and exit ramps.
- IA 12/Gordon Dr. west of the US 20/US 75 interchange.
- IA 12/Gordon Dr. at the intersections of S Fairmount St and Stone Ave.
- Lewis Blvd and Transit Ave.
- S Lakeport St and Southern Hills Dr.

2025 CONGESTING SEGMENTS

- NB I-29 Exit 1 to 2 Rivers Dr.
- Intersection of IA 12/Riverside Blvd at W 19th St.
- Wesley Way from 7th St to Riverview Dr.
- Intersection of Sergeant Rd and S. Lakeport St.
- Off ramp WB US 20/US 75 Bypass at S Lakeport St. (intersection only)

2035 Forecast Year (Existing, Committed, & Planned)

Between 2025 and 2035, residential, commercial, and industrial growth is expected to continue at a moderate rate. Nonetheless, the congestion issues of the previously mentioned time snapshots are expected to remain, unless addressed otherwise. Map 5.7 illustrates the contested and congesting areas in forecast year 2035.

Six projects were added to the planned project list that have an impact on the travel demand model. They are:

- Southbridge interchange on I-29 (new construction)
- Hoeven Dr from 11th St to 28th St (new construction)
- 142nd St from Hwy 20 to Daniel's Ln (new construction)
- Dixon Path connecting to Golf Rd (new construction)
- Pine St from D Ave to US 77 (new construction)
- Talbot Rd from Military Rd to Memorial Dr (reconstruction from gravel to pavement)
- Pine St from Dakota Ave to D Ave (reconstruction from gravel to pavement)

At this time, the proposed Southbridge interchange is added to the existing/committed road network. This interchange diverts most traffic from the Port Neal interchange and distributes it to this interchange. The I-29 segments north and south of this interchange see a decrease in traffic, which is due to this new access point.

2035 CONGESTED SEGMENTS (New from 2025; Major Corridors Only)

- Wesley Way/US 77 from W 7th St to the intersection of E 9th St/US 77.
- S Lakeport St at the intersection of Sergeant Rd.
- Off ramp WB US 20/US 75 Bypass at S Lakeport St. (intersection and ramp length)
- As well as those 2020 congesting segments.

2035 CONGESTING SEGMENTS (New from 2025; Major Corridors Only)

- Hamilton Blvd at the intersection of W 14th St.
- Sergeant Rd at Lakeport Commons.

2045 Forecast Year (Existing, Committed, & Planned)

Between 2035 and 2045, residential, commercial, and industrial growth is expected to continue at a moderate rate. Nonetheless, the congestion issues of the previously mentioned time snapshots are expected to remain, unless addressed otherwise. Map 5.8 illustrates the contested and congesting areas in forecast year 2045.

Four projects were added to the planned project list that have an impact on the travel demand model. They are:

- 46th St from Buckwalter Dr to Rustin St. (new construction)
- Connect Veteran's Drive to Pine St in Dakota City. (new construction)
- Buckwalter Dr from Hamilton Blvd to Outer Dr. (new – gravel to pavement)
- Garretson Ave from Morningside Ave to IA 12/Gordon Dr. (new – gravel to pavement)

2045 CONGESTED SEGMENTS (New from 2035; Major Corridors Only)

- No new congested segments.

2045 CONGESTING SEGMENTS (New from 2035; Major Corridors Only)

- S Lakeport St overpass of US 20/US 75 Bypass.

Future Traffic Trends

- ***Southbridge Interchange:*** The proposed Southbridge interchange will continue to see traffic increase (~200 trips per day increase between 2035 and 2045) as Southbridge Industrial Park is developed. The segments of interstate around this interchange show a decrease in traffic that is likely due to the new interchange access, reducing trips north and south of it.

- ***18th St. Viaduct:*** The 18th St. Viaduct and the segments of Floyd Blvd. north and south of it see an increase in traffic by ~1,500 trips a day, due to the closing of the at-grade crossings on 19th St. and the increased capacity of this proposed intersection. The viaduct itself, when added to the network in 2025, has an expected flow of 4,167, and in 2045 4,230. 19th St. in 2020 has a flow of 4,530. The smaller flow count on the proposed viaduct, compared to the flow count on the existing 19th St., is likely due to trips being generated to the north crossing of Floyd at 28th St.

- ***Dogwood Trail:*** The 2015-constructed Dogwood Trail in Sergeant Bluff will see increased flow due to increased capacity and new industrial development along the road and in the Southbridge and Port Neal areas to the southwest, and from new residential and commercial development on the south side of Sergeant Bluff.

- ***Lakeport Commons Area:*** From 2015-2045, the Lakeport Commons area shows traffic increases due to increased commercial development in this area and in the Sunnybrook area.

- ***South Sioux City Residential Development:*** The new residential development and roads in South Sioux City, between the east corporate limits and the Missouri River, generates increasing traffic in and around this area due to new construction that was coded in the model for the 2025 through 2035 model years.

- ***South Sioux City and Dakota City Industrial Development:*** The new and existing industrial development on the south side of South Sioux City and in Dakota City, as well as the new residential development and roads in South Sioux City, between the east corporate limits and the Missouri River, generates increasing traffic along I-129 between 2025 and 2045.

- ***I-29 Corridor:*** Overall, the I-29 corridor will have moderate traffic increases each interim year, due to the reconstruction and capacity increase from 4 to 6 lanes.

- ***US20:*** Traffic flow along US20 is projected to increase by ~3-4% each interim year, which is a significant increase. This is likely due to increased capacity east of the SIMPCO MPO planning area that has and will continue to occur throughout the duration of this plan.

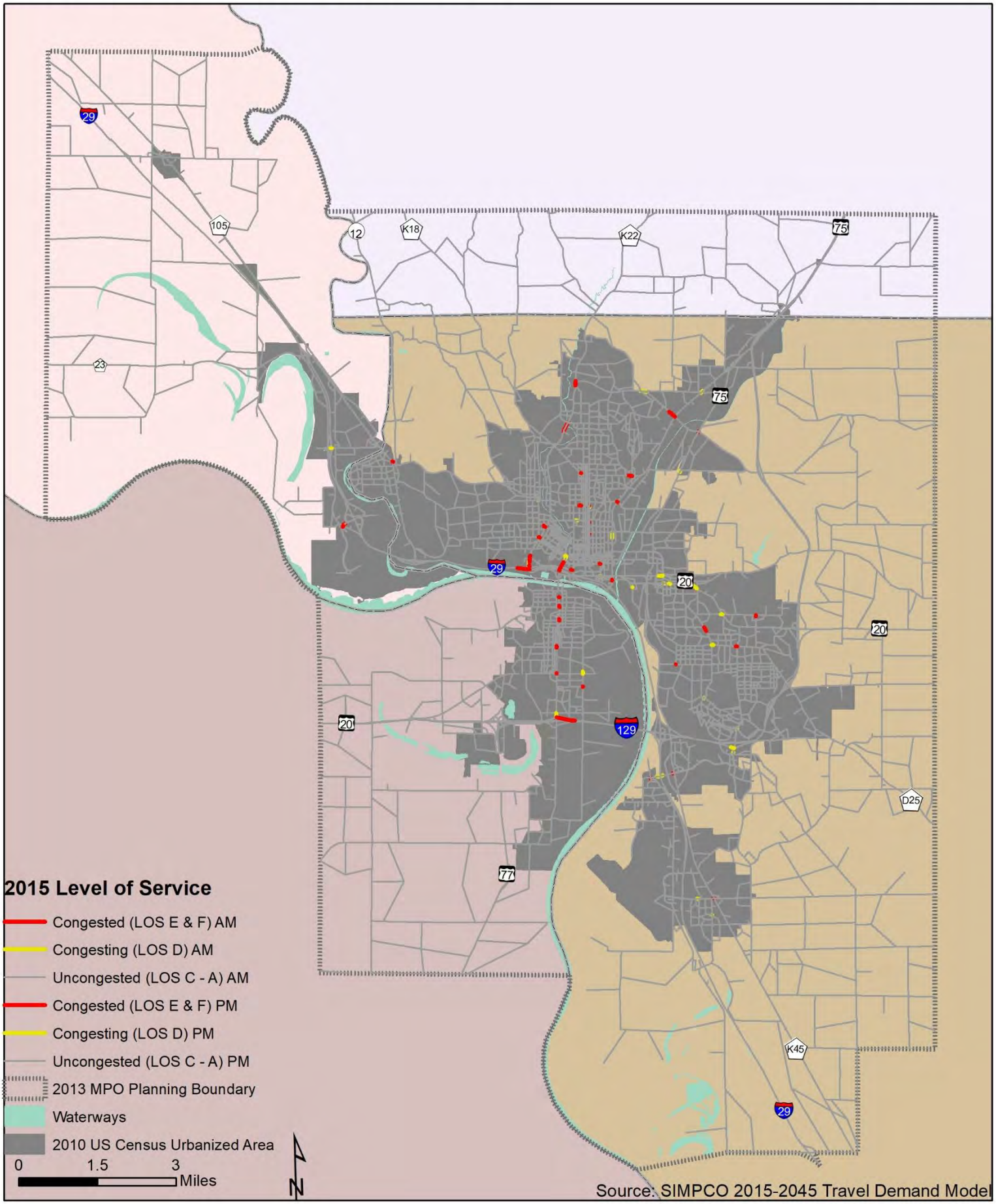
- ***Metropolitan Area Colleges:*** The segments around all of the metropolitan area colleges (Briar Cliff University, Morningside University, Western Iowa Technical Community College, and Northeast Community College) show moderate traffic flow increases due to moderate enrollment increases.

Map 5.4

SIMPCO MPO

Level of Service: 2015 Base Year

Existing Network



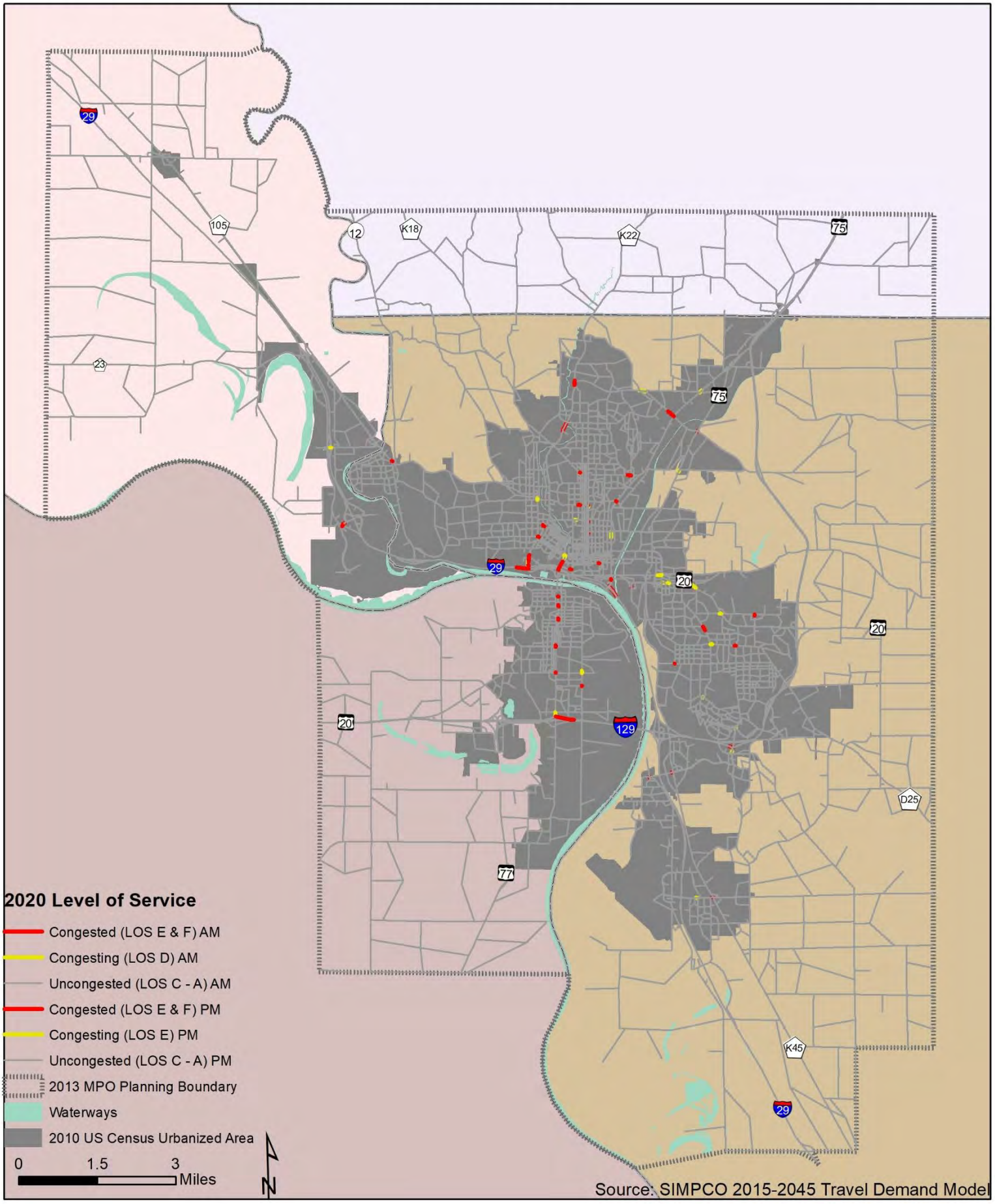
Source: SIMPCO 2015-2045 Travel Demand Model

Map 5.5

SIMPCO MPO

Level of Service: 2020 Current State

Existing Network



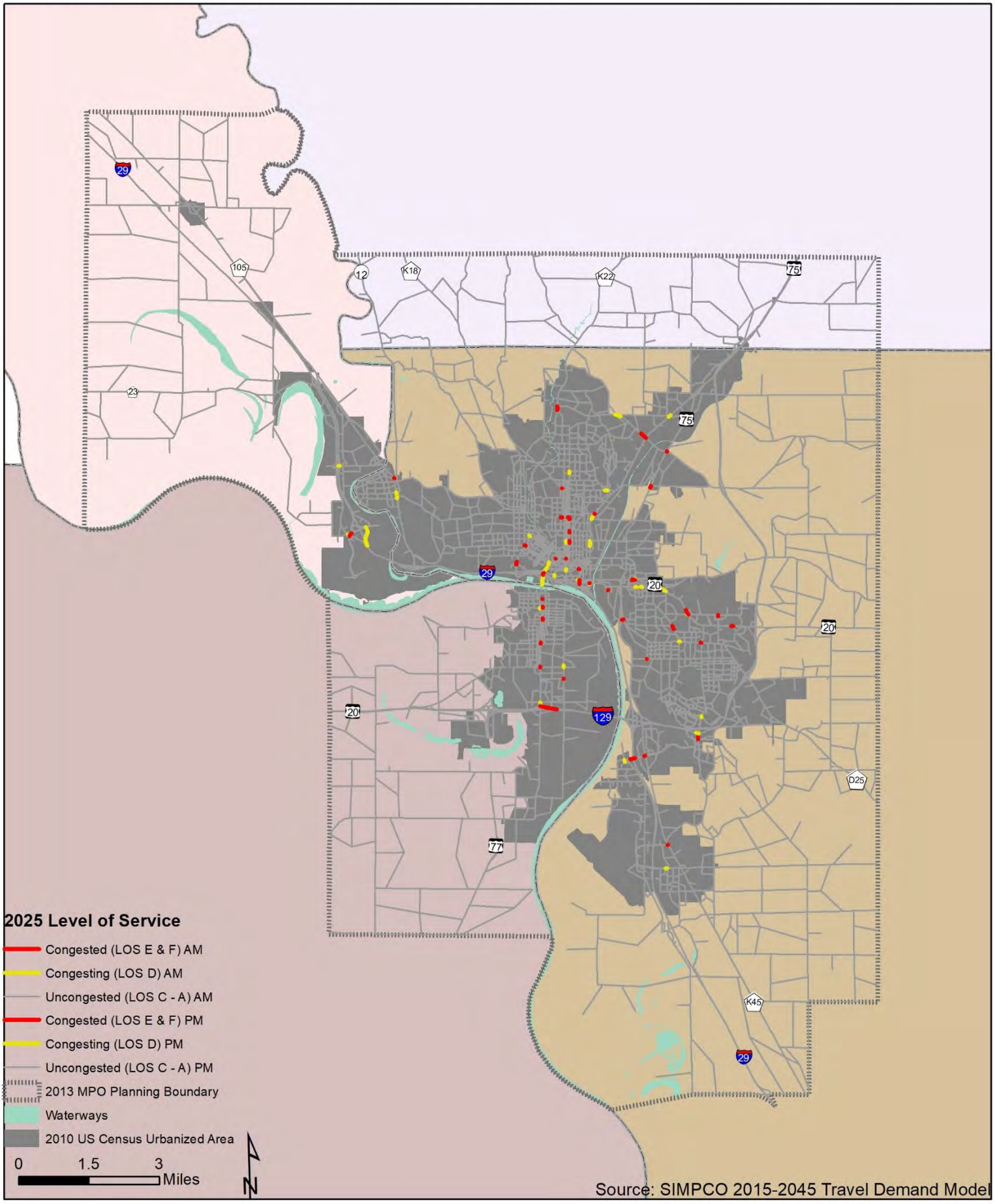
Source: SIMPCO 2015-2045 Travel Demand Model

Map 5.6

SIMPCO MPO

Level of Service: 2025 Forecast Year

Existing & Committed Network



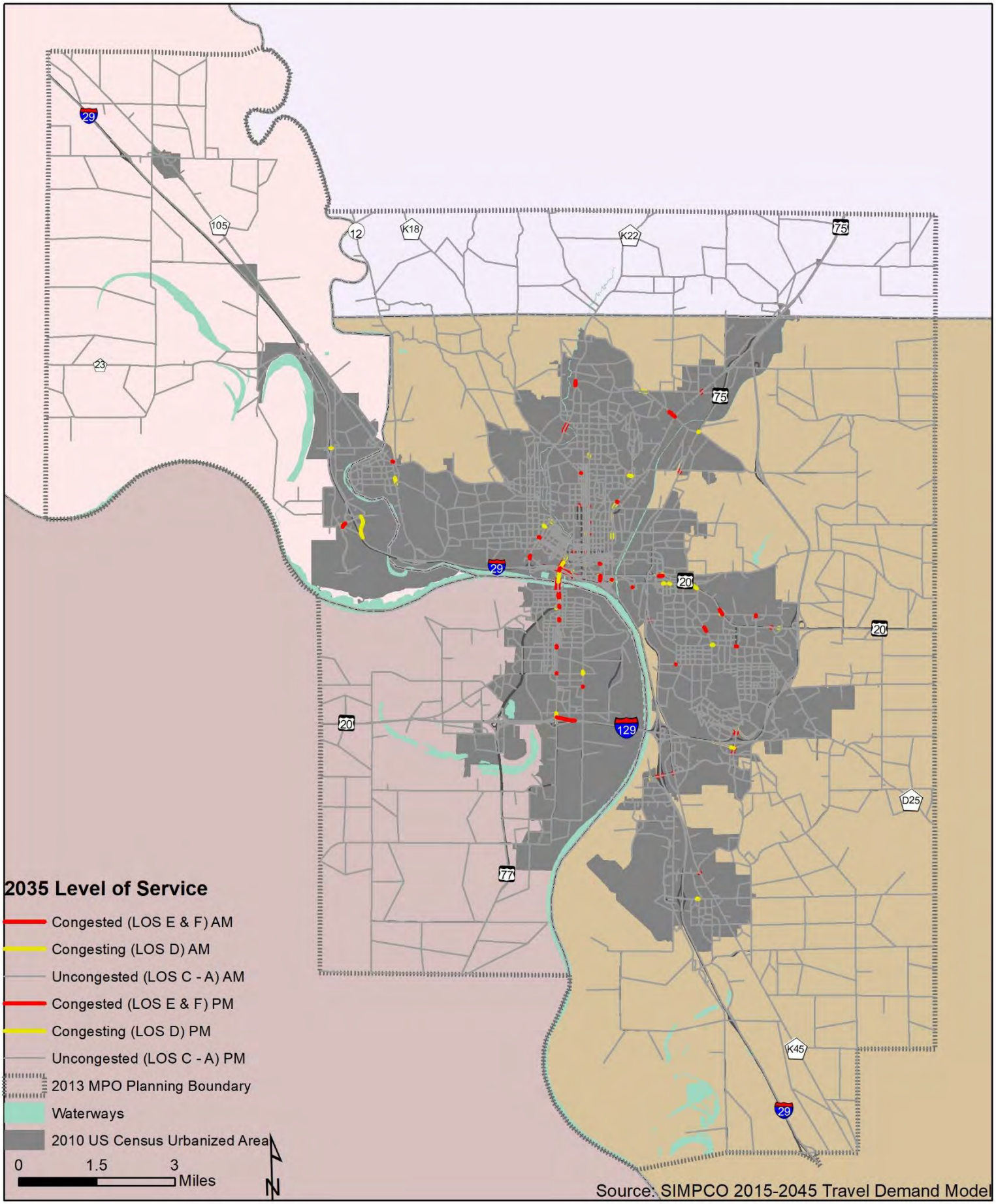
Source: SIMPCO 2015-2045 Travel Demand Model

Map 5.7

SIMPCO MPO

Level of Service: 2035 Forecast Year

Existing & Committed Network

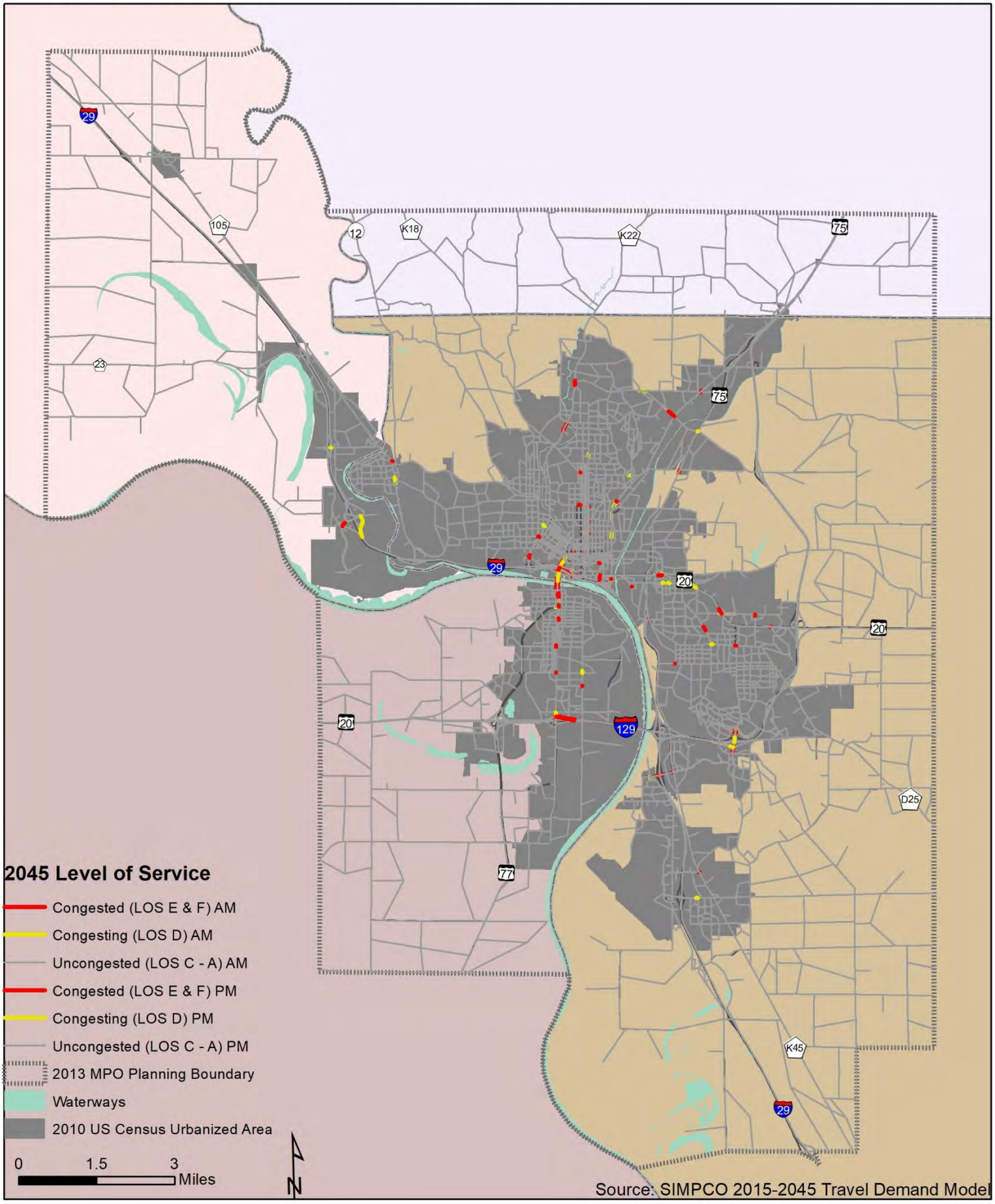


Map 5.8

SIMPCO MPO

Level of Service: 2045 Forecast Year

Existing, Committed, & Planned Network



TRANSPORTATION PROJECTS

FY 2020-2024 TIP WITH 2025-2034 AND 2035-2045

Map 5.9 shows the current FY 2020-2024 Transportation Improvement Program for the SIMPCO MPO Planning Area, as well as the fiscally constrained projects for the 2025-2034 and 2035-2045 band years. Project details are in Chapter 8 and Appendix C. The project selection methodology and fiscally constrained plan can be found in Chapter 8.

ENVIRONMENTAL JUSTICE

The most prominent form of transportation discrimination in the SIMPCO MPO planning area is ignoring the needs of those without access to a private automobile in an auto-dominant transportation system. The limited availability and excessive travel times associated with public transit, coupled with the scarcity of facilities to accommodate pedestrians and cyclists, should be considered an important matter of social equity in determining priority transportation improvements. Many of the SIMPCO MPO 2045 LRTP goals consider these issues, including Accessibility, Connectivity and Compatibility, Livability, And Safety

The environmental justice data have been compared to the trail and transit systems in Chapters 3 and 4, respectively. It is important that disadvantaged populations are accounted for as transportation projects are planned and developed, with attention to how they might use the various modal systems once the projects are complete. Providing transit and trail links between low-income, minority, and age-specific households to existing and future employment areas will be beneficial. Investing in transportation improvements in these areas promotes local investments as well.

It is important that the major projects listed in this chapter (18th Street Viaduct, Southbridge Interchange, and Gordon Drive Viaduct improvements) pay close attention to the environmental justice factors. Many of these projects will/do lead to major employer areas, or may cause major changes in the current transportation system. By taking these environmental justice areas into account, and looking at how all modes of transportation (motorized and non-motorized) are affected by future projects SIMPCO MPO staff and member agency staff can make a more efficient and accessible transportation system for all users. Maps 5.10-5.13 provide staff and decision makers with information on project locations overlaid onto the area's diversity index (described on the map), poverty ratio, populations 65 and older, and populations 18-64.

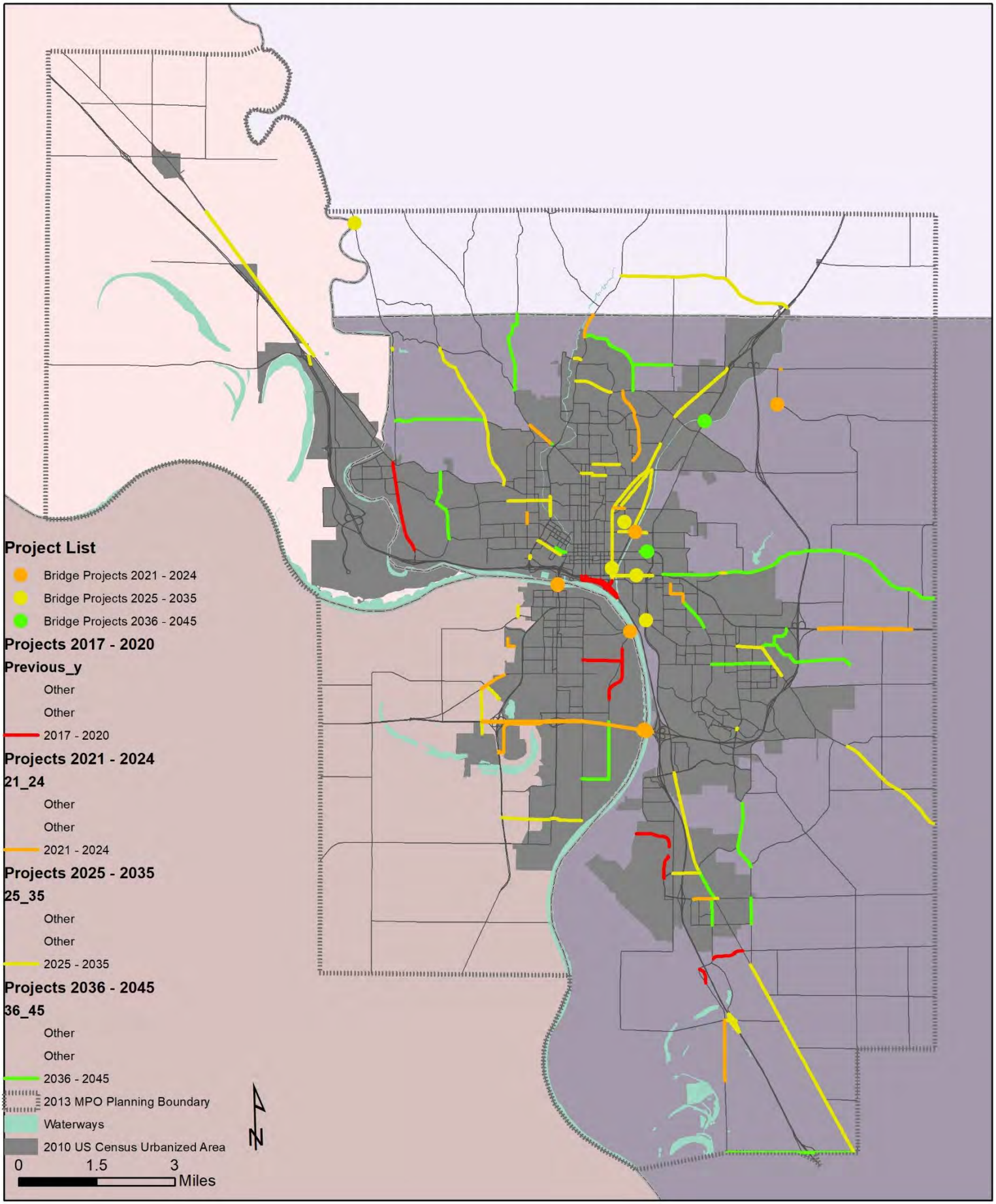
The location of the major projects listed in this chapter are equally distributed across the planning area, providing services to both higher and lower income areas. These projects are not concentrated in one particular area and benefit the planning area as a whole.

Map 5.9

SIMPCO MPO

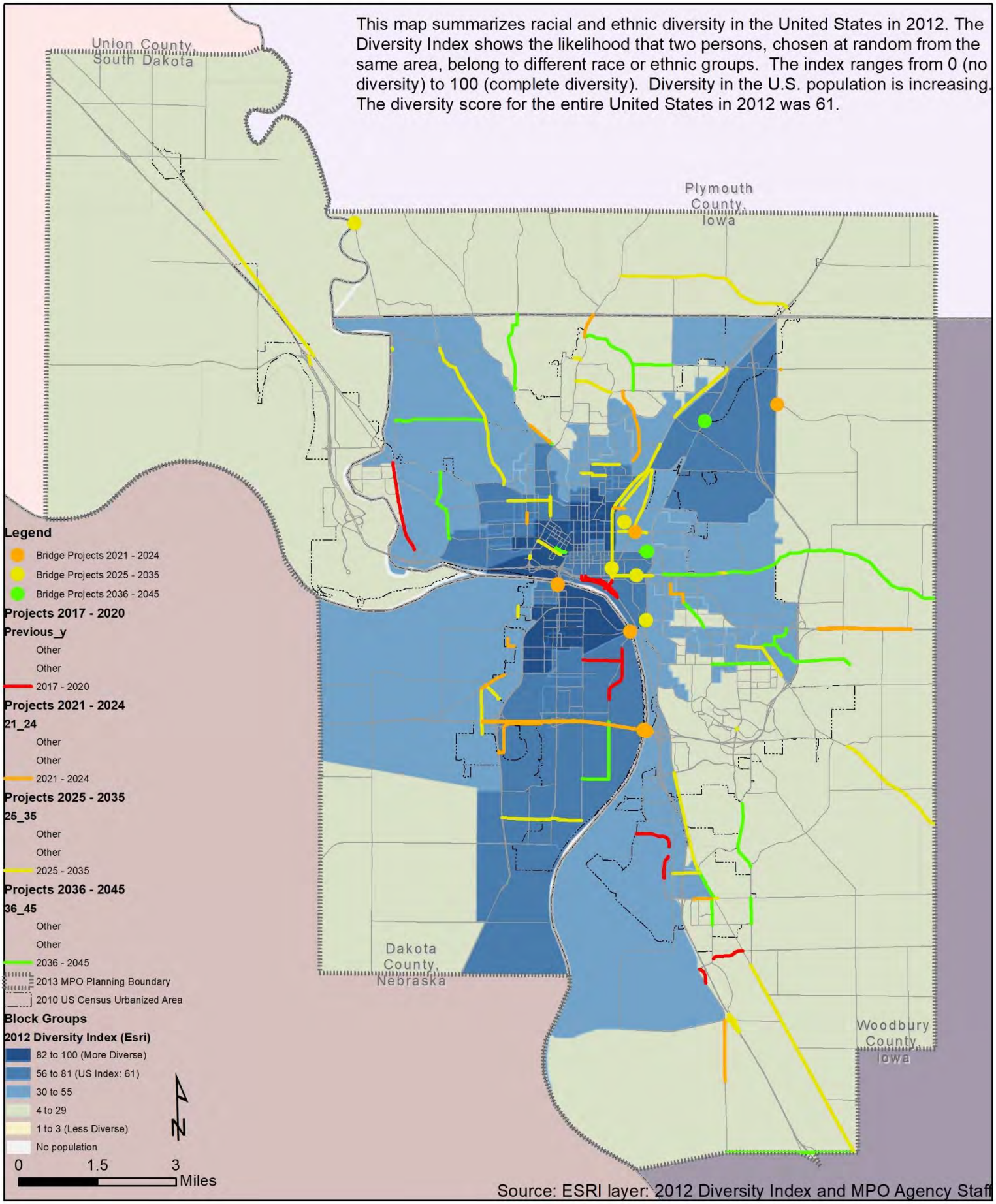
Existing, Committed, & Planned Network

FY 2017-2020 TIP & 2021-2045 Fiscally Constrained Projects



Map 5.10

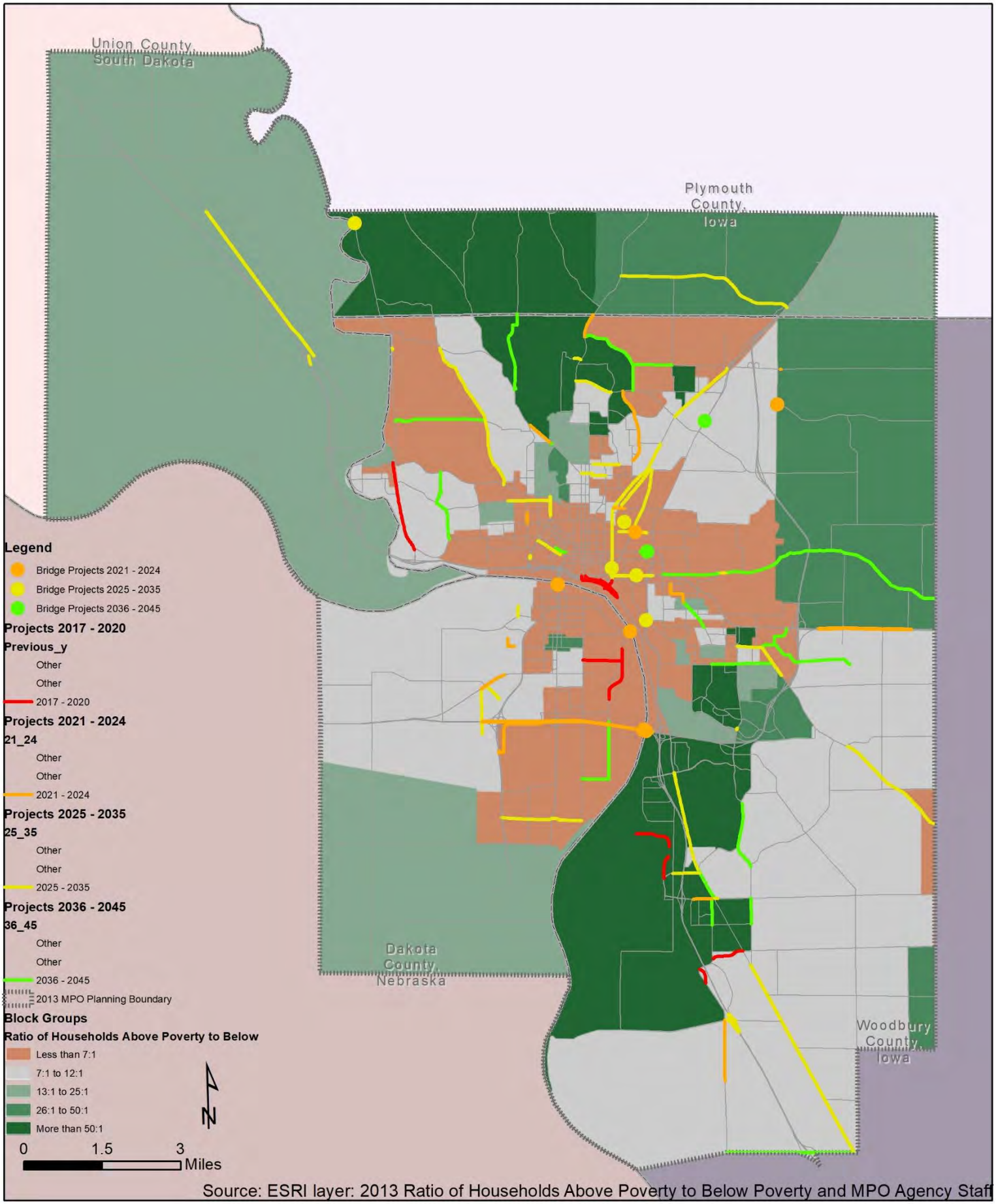
SIMPCO MPO
Projects and Diversity Index



Map 5.11

SIMPCO MPO

Projects and Ratio of Households Above Poverty to Below Poverty

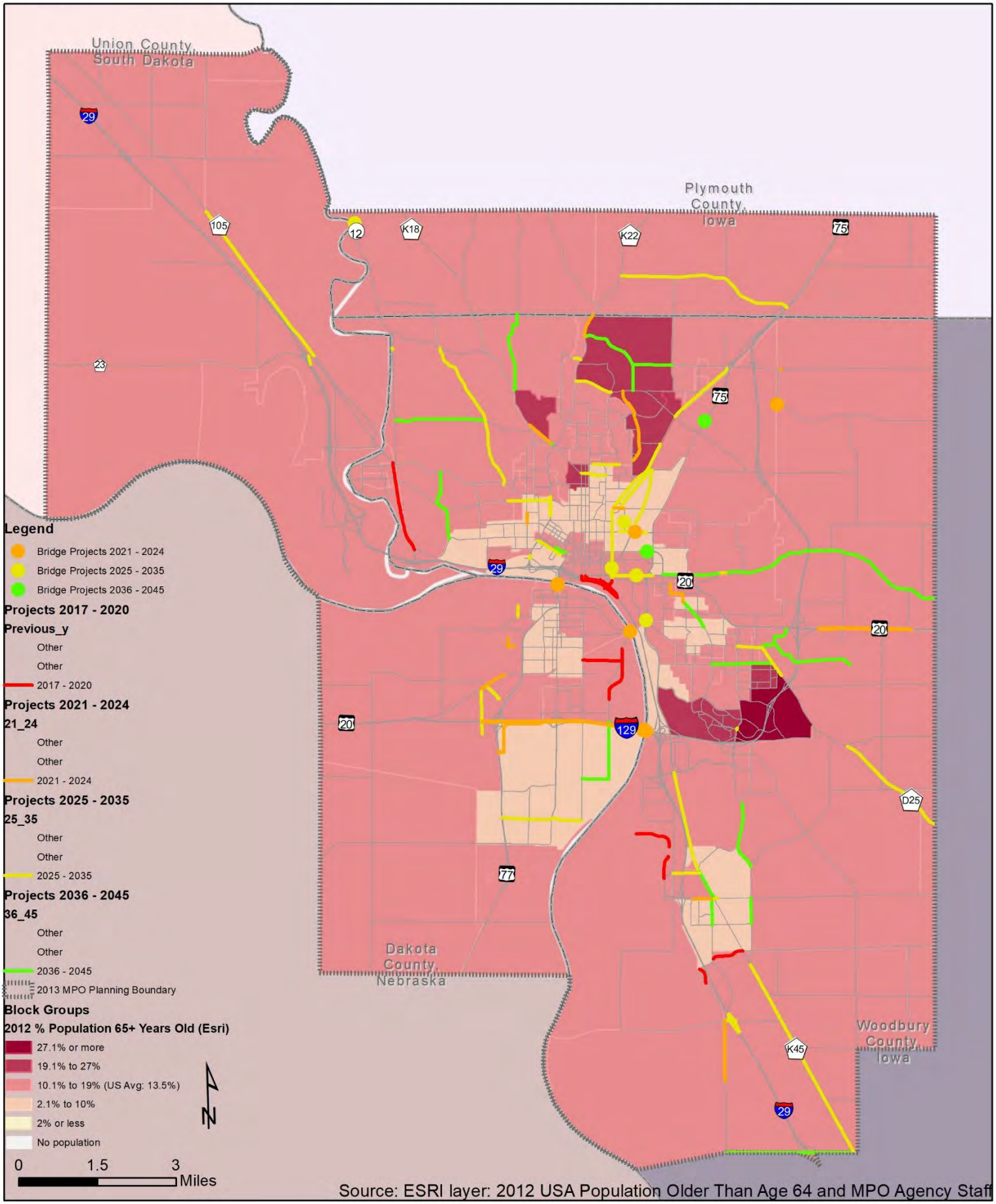


Source: ESRI layer: 2013 Ratio of Households Above Poverty to Below Poverty and MPO Agency Staff

Map 5.12

SIMPCO MPO

Projects and Population 65 Years of Age and Older

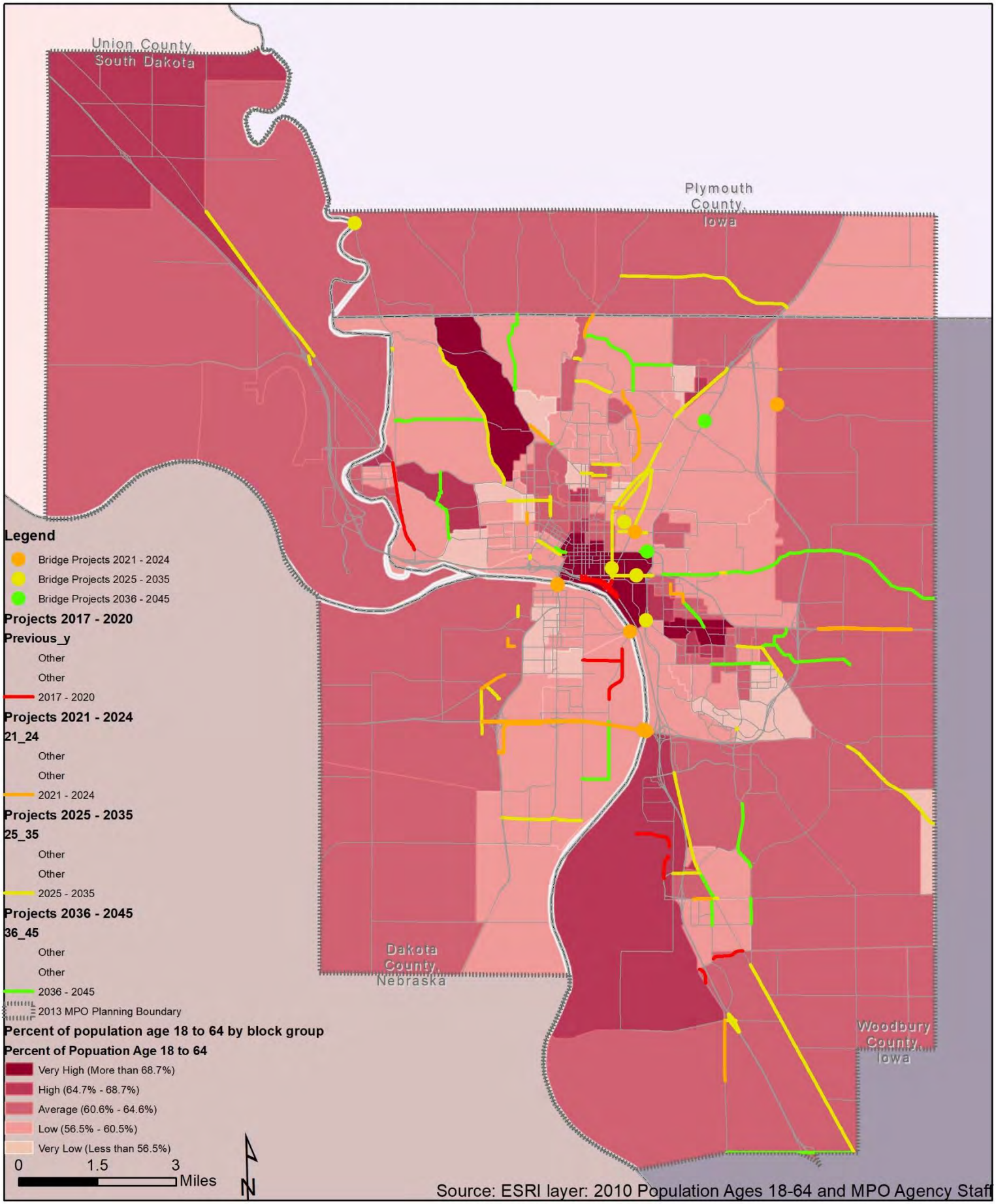


Source: ESRI layer: 2012 USA Population Older Than Age 64 and MPO Agency Staff

Map 5.13

SIMPCO MPO

Projects and Population Ages 18-64



Source: ESRI layer: 2010 Population Ages 18-64 and MPO Agency Staff

RECOMMENDATIONS

The recommended streets and highway projects identified in this plan are a mix of infrastructure rehabilitation, reconstruction, and some select strategic infrastructure addition projects. Examples of major projects include the 18th St. Viaduct project, Southbridge Interchange, and the Gordon Drive Viaduct. Major pavement rehabilitation is planned on several metro area arterials.

A series of parkways through undeveloped areas are planned, should funding become available to open up areas presently lacking transportation links. To facilitate economic development, roadway capacity upgrades will continue in the industrial areas in the southern portion of the SIMPCO MPO planning area. In addition, Hoeven Valley continues to be a priority area for transportation improvements.

The full list of projects is shown in Chapter Eight: Financial Summary. Projects are detailed by funding source, sponsor agency, timeframe, and potential federal funding available (i.e., fiscally constrained vs. illustrative).

CHAPTER CONTENTS

Chapter 6: Intermodal Transportation emphasizes on freight transportation. Throughout the ten sections in this chapter, freight transportation, truck, rail, passenger rail, air and passenger rail, Government air, waterborne freight, intercity bus, intermodal, and a series of short and long- term policy recommendations are discussed.

TRUCK

CURRENT FACILITIES

Interstate 29 is the major transportation route going through SIMPCO's MPO planning area. I-29 provides a north/ south route for automobile, truck, and bus traffic from Sioux City into North and South Dakota, western Iowa, eastern Nebraska, and Missouri. It connects with I-90 to the north at Sioux Falls, I-80, and I-35 at Omaha and Kansas City, respectively. Other interstates that primarily serve the MPO include I-129, US 20, US 75, and US 77. US 75 and US 77 run north/south through Iowa and Nebraska, and US 20 runs east/west across Iowa and Nebraska. Figure 6.1 provides a summary of the major highways in the metropolitan area and regional connections these highways provide.

Figure 6.1: SIMPCO Metropolitan Area Major Arterials and Connected Cities

TRUCK TRAFFIC

The trucking industry is privately owned and operated, therefore, the MPO can only provide a general overview of trucking activity in the region. There are several meat processing plants in vicinity, resulting in a large percentage of truck traffic transporting live animals to be slaughtered and processed. Such trips are approximately 100 miles, traveling from neighboring farms in Iowa, Nebraska, and South Dakota. As with any metropolitan area, the other major freight category includes traffic servicing the consumptive needs of the MPO area itself with commodities such as: foodstuffs, electronics, manufactured furniture, clothing, and other products.

Le Mars, IA, located northeast of Sioux City, is home to Wells Dairy and major dairy products are transported on the primary network throughout the MPO area. These products are transported in all directions of the United States and overseas via airports such as Eppley Airfield in Omaha, NE. Corn, soybeans, fertilizers, and other agricultural commodities, as well as manufactured items, are frequently transported throughout the MPO area.

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 not only for the MPO region but also 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.

Table 6.1: 2018 Domestic Freight Flow (truck and all modes)

Domestic Inbound Freight: Units in thousands of tons				
Rank	**Truck**		**All Modes**	
#1	Cereal Grains	1,740.77	Cereal Grains	1,817.03
#2	Gravel and Crushed Stone	1,237.53	Gravel and Crushed Stone	1,314.49
#3	Other Agricultural Products	813.74	Other Agricultural Products	842.08
#4	NonMetallic Mineral Products	737.26	NonMetallic Mineral Products	758.49
#5	Other Prepared Foodstuffs, Fats and Oils	644.89	Other Prepared Foodstuffs, Fats and Oils	701.31

Domestic Outbound Freight: Units in thousands of tons				
Rank	**Truck**		**All Modes**	
#1	Cereal Grains	2,042.01	Cereal Grains	2,219.97
#2	Other Prepared Foodstuffs, Fats and Oils	770.07	Other Prepared Foodstuffs, Fats and Oils	1,240.21
#3	Other Chemical Products	674.29	Animal Feed and Products of Animal Origin	727.61
#4	Animal Feed and Products of Animal Origin	595.43	Other Chemical Products	679.02
#5	NonMetallic Mineral Products	568.34	NonMetallic Mineral Products	610.36

Source: Iowa DOT

Map 6.1 is a representation of trucking throughout the SIMPCO MPO. The truck annual average daily traffic (AADT) is represented by increasing thickness of line representing increasing AADT. The truck routes throughout the MPO area have a high AADT of just over 6,000 interstates, highways, and major arterials.

Map 6.1

SIMPCO MPO
Truck AADT

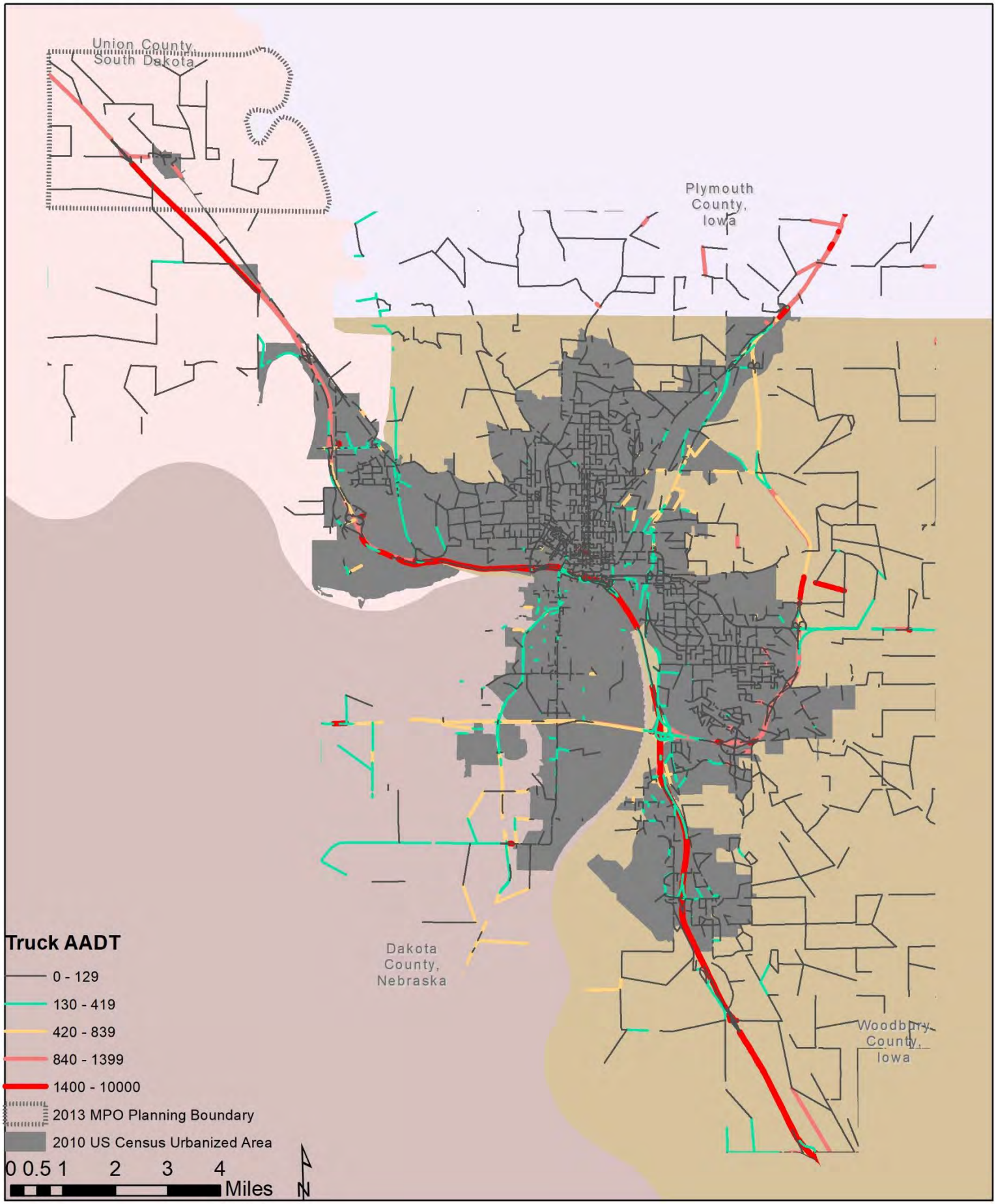


Table 6.2: Yearly comparisons of Total Domestic Freight Flow

Total Domestic Freight, All Modes: Units in thousands of tons											
Top Commodity Groups in 2007				Top Commodity Groups in 2018				Top Commodity Groups in 2040			
	Commodity				Commodity				Commodity		
#1	Cereal Grains	3,714		#1	Cereal Grains	4,037		#1	Cereal Grains	4,684	
#2	Other Prepared Foodstuffs, Fats and Oils	1,575		#2	Other Prepared Foodstuffs, Fats and Oils	1,942		#2	Other Prepared Foodstuffs, Fats and Oils	2,675	
#3	Gravel and Curshed Stone	1,549		#3	Gravel and Curshed Stone	1,655		#3	Other Chemical Products	2,148	
#4	NonMatallic Mineral Products	1,195		#4	NonMatallic Mineral Products	1,369		#4	Gravel and Curshed Stone	1,867	
#5	Animal Feed and Products of Animal Origin	1,123		#5	Animal Feed and Products of Animal Origin	1,341		#5	Animal Feed and Products of Animal Origin	1,775	
#6	Other Agricultural Products	842		#6	Other Chemical Products	1,197		#6	Other Agricultural Products	1,758	
#7	Fertilizers	770		#7	Other Agricultural Products	1,147		#7	NonMatallic Mineral Products	1,717	
#8	Other Chemical Products	722		#8	Fertilizers	666		#8	Waste and Scrap	753	
#9	Natural Sands	516		#9	Natural Sands	581		#9	Natural Sands	709	
#10	Coal	392		#10	Waste and Scrap	503		#10	Live Animals and Fish	540	

INRIX traffic data and Iowa DOT traffic counts were used to identify highway freight bottlenecks. INRIX has a Bottleneck Ranking tool that uses recorded speeds, acquired by tracking cell phone and global positioning systems data, to determine if a section of roadway is indeed a bottleneck. Bottleneck conditions are determined by comparing the current reported speed to the reference speed for each segment of road. Reference speed values are provided for each segment and represent the 85th percentile observed speed for all time periods with a maximum value of 65 mph. If the reported speed falls below 60 percent of the reference, the road segment is flagged as a potential bottleneck. If the reported speed stays below 60 percent for five minutes, the segment is confirmed as a bottleneck location.

Locations were considered freight bottlenecks if they were identified by INRIX and also had at least 30 percent truck traffic or 5,000 trucks per day. There are two locations identified within the MPO area: I-29 N/S @ I-129/U.S. 20/U.S. 75/exit 144 and I-29 N/S @ Old Iowa 75/Industrial Rd/exit 143. Including a total of 3-4 locations identified in Woodbury County: I-29 N/S @ I-129/U.S. 20/U.S. 75/exit 144, I-29 N/S @ Old Iowa 75/Industrial Rd/exit 143, I-29 N/S @ exit 134, and I-29 N/S @ Iowa 141/exit 127. More in depth information about bottleneck locations can be found in the State Freight Plan on pages 123-127.

CHALLENGES

Based on FHWA estimates, Iowa's transportation system facilitated the movement of approximately 1.1 billion tons of freight with an estimated value exceeding $563 billion to, from, and within the state in 2012. The State Freight Plan indicates that a total value of goods imported into and exported out of Iowa is expected to grow from $468 billion in 2012 to $715 billion (a growth of 52.6 percent) in 2040. Freight that has both an origin and destination in the state is expected to grow by 27.8 percent in weight and 30.5 percent in value from 2012 to 2040. A total of 48.9 million tons worth $32 billion is projected to travel to, from, and within the Sioux City region by 2045. Highway freight is expected to comprise a slightly smaller share of overall value, from 77 percent in 2014 to 73 percent in 2045.

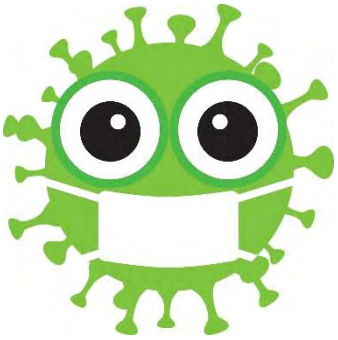
CF Industries which began in fall 2013, required more than 5,300 construction workers to complete, and has increase the amount of truck traffic significantly. The industrial site completed expansion in 2016, and is one of the country's largest agricultural nitrogen plants.

Dealing with the manufacturing and distribution of nitrogen and nitrogen fertilizer, the company expects to use both rail and truck as primary transportation methods for their finished product.

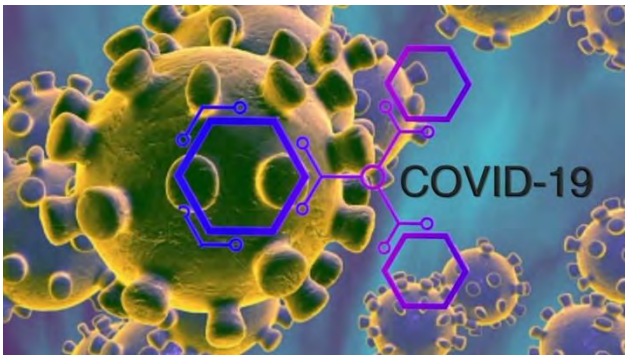
CF Industries has created the trucking capacity to be within 30,000 trucks per year. This expected increase is likely to have a direct impact on the traffic of the current infrastructure.

The completion of the Seaboard/Triumph pork processing facility in 2017, is also expected to increase the amount of truck traffic to the region. The plant has the capacity to slaughter 10,500 to 12,000 hogs per day and currently employs 1,800 workers.

Many of the SIMPCO region's roads, bridges, railways, barge terminals, and other infrastructure critical to the movement of freight are in need of significant structural improvements. In a study done by Transportation for America in 2013, Iowa's bridges ranked the third-worst nationally in terms of the overall percentage of structurally deficient bridges. However, major roads used to transport freight have improved greatly in the SIMPCO MPO in the last 20 years.



In 2020 there was a pandemic due to COVID-19 virus which has impacted transportation in many forms. Rural transit ridership has fallen 85-90%, with a similar decrease for the metro transit ridership. Statewide traffic data has shown a significant reduction in travel of 47%. The impact to air travel has been similar to what is seen in transit, and there is an ongoing issues with freight movement that has been exacerbated by the current situation (higher demand than ability to move supply).

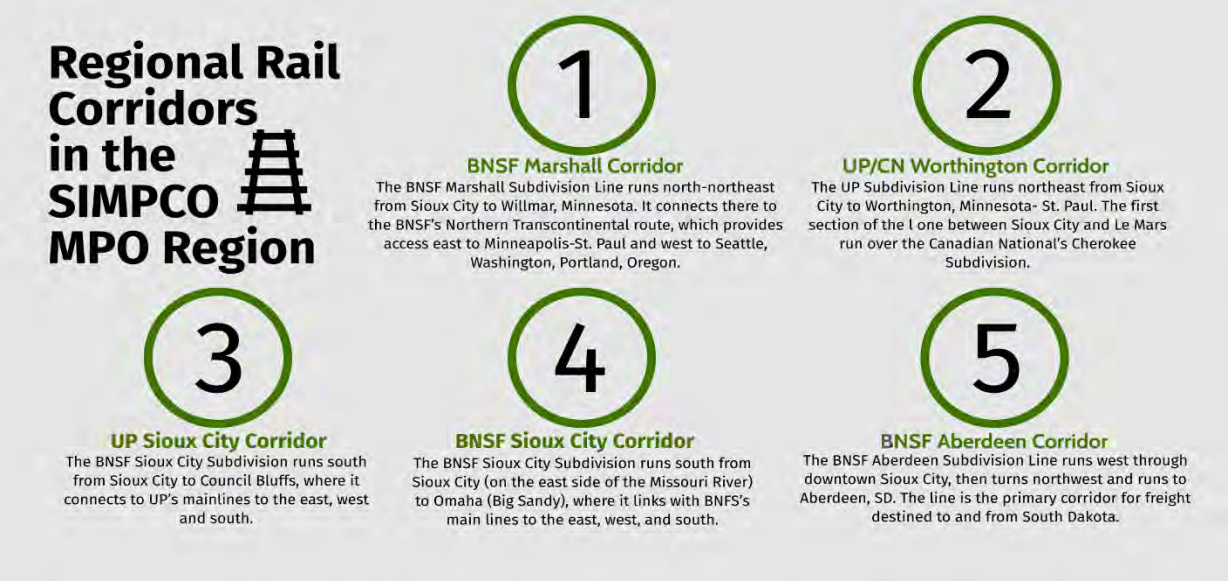


The Iowa DOT has provided traffic volume changes since March 13, 2020. Since March 13, the peak of US/IA highway decrease in travel has reached 47%. From March 13th to September 17th 2020 interstate has seen a decrease of -24%, US/IA Highways -18%, secondary roads -12%, City street -18%, and all sites -21%.

RAIL

CURRENT FACILITIES

The railroads are a major part of the economic activity in the SIMPCO MPO region (see map 6.2). It is served by four railroads; Burlington Northern Santa Fe (BNSF), Union Pacific (UP), Canadian National (CN), and the Dakota and Iowa Railroad (DAIR). There is also a light density line, the Nebraska Northeastern (NENE) serving South Sioux City, used primarily to haul grain products and interchange with class ones, particularly the BNSF and DAIR. The railroads use five regional rail corridors:



There is overlap that occurs in two areas, the Downtown Junction and the Hoeven Valley Corridor. The Downtown Junction is west of the Floyd River in area bounded by 3rd St./Hoeven Drive, Floyd Blvd. and IA 12/Gordon Drive. East of the Junction are three major rail bridges crossing over the Floyd River. The Hoeven Valley Corridor runs between Downtown Junction and 46th St, a distance of about 4.6 miles. A total of 59 public at-grade railroad crossings are located within Sioux City. About 30 of these crossings are on the BNSF, 23 are on the UP, and 6 are on the CN. Some of the crossings indicated for each railroad are duplicates. For instance, the UP and CN cross 18th Street and utilize the same signals. There are also instances where the same railroad has multiple crossings at the same location.

ECONOMIC IMPACT

Economic activity within the Sioux City region and trade with its partners generated 38 million tons of freight movement valued at $20 billion in 2014. Rail freight accounted for about a quarter of both tonnage and value. Economic growth within the Sioux City region and increasing trade with its partners is forecast to ***generate 49 million tons of freight in 2045*** (an increase of 28 percent) ***valued at $32 billion*** (an increase of 61 percent). Rail freight is expected to comprise a smaller share of tonnage and a higher share of value by 2045. However, it is still expected to grow by 5 percent (0.2 percent annually).

Shippers and receivers expect that the demand for rail service will remain strong, but not grow significantly due to capacity restrictions on the major rail corridors that run through the Sioux City region. However, the projected decline in the volume of coal shipments may give Sioux City region shippers and receivers space to increase their rail shipments of field crops and processed grains, aggregates, animal feed, and other commodities.

The State Freight Plan noted that Iowa's top five commodities by volume are cereal grains, gravel, animal feed, coal, and other agricultural products. These commodities are typically high-weight, low-value bulk shipments, which are well suited for rail transportation. In addition, the majority of Iowa's power source is generated from coal (nearly 60 percent in 2014), though that has been declining since 2000 as wind energy gains traction statewide. Both of these power sources would also benefit from rail transportation, both for bulk coal and large equipment, such as wind turbines.

Given the strong market for freight and goods movement, most stakeholders expect rail freight volumes to increase over the coming years. For many livestock processors and by-products companies, there is a strong demand for product in Mexico, China, and other Asian markets. ***To meet domestic U.S. demand, some animal products are imported to Sioux City from European countries, including Denmark, Poland, and Spain. Major agricultural products processed in Sioux City, such as soybean meal, are shipped from Sioux City to Mexico, Saudi Arabia, and parts of Asia.*** Local companies utilize rail intermodal service available in Omaha and Chicago to access ports on the east and west coasts for export, and vice versa for imports of consumer goods and intermediates such as animal products. Because of the strong business climate in Sioux City, none of the shipping and receiving stakeholders reported any imminent plans to relocate outside of the region. By contrast, there appear to be opportunities for business to expand in or relocate to the Bridgeport area as well as the Southbridge Business Park, both of which are rail-served areas near the Sioux Gateway Airport and Interstate 29. For example, Seaboard Triumph Foods opened a brand new hog processing facility in Bridgeport West Industrial Park in September 2017, after the stakeholder outreach was completed. The facility is situated off South Patton Street, which is already a dense industrial and manufacturing district.

In July 2009, the City of Sioux City developed the *Rail Freight Movement and Economic Development Analysis*. Phase I of the plan gives a detailed look at the inventory and operations of rail in the Sioux City metropolitan area. In August 2018, Phase II of the study identifies issues improvements and gives detailed recommendations identified improvements that fall into four following categories:

- At-grade rail/highway crossing improvements
- Rail-highway grade separations
- Downtown junction improvements
- Viaduct and bridge-clearance improvements

CHALLENGES

The most frequently cited concern was the blockage of intersections at several busy grade crossings throughout Sioux City, with the BNSF's Aberdeen Subdivision along the southern edge of downtown being a top concern. Although train traffic along this route is modest, on the order of 4 to 5 trains operate daily by BNSF and DAIR, trains must move very slowly as they proceed through the downtown rail junction. These delays are extended when DAIR switches 100 car unit trains of aggregates to the L.G. Everist facility that is located immediately east of the downtown junction. In addition, a challenge for the BNSF RR is the low under-clearance for the mainline track under the Gordon Drive Viaduct. Also in the Bridgeport area, UP's daily train, referred to locally as the "cow", often gets backed up along South Patton Street, blocking grade crossings and entrances to businesses on the west side of the street. Some of these crossings lack lights and gates, which pose additional safety concerns for motorists.

Currently, there is a quiet zone designation Pearl Street, Pierce Street, and Nebraska Street, which are the three west-most crossings along the corridor. The remaining crossings include Jackson Street, Virginia Street, Court Street, and Iowa Street, which have been proposed as quiet zone crossings, but are not yet part of the quiet zone. Only by establishing a quiet zone along the entire corridor will it be possible to eliminate noise from train horns along this corridor.

The railroads are primarily focused on maintenance and safety upgrades to preserve current operations. Historically, the City has expressed a preference for lights and gates in most cases. Part of this preference is due to the Iowa Department of Transportation's (DOT) Section 130 grade crossing improvement funding program. This program enables the City to receive funding for safety improvements without requiring substantial local or private (e.g. railroad) contributions. For example, UP expressed continued support to close its crossings at 11th Street and 28th Street along the ***Hoeven Valley Corridor***, a project that has been in development for several years and is now awaiting funding.

Sioux City Subdivision

The local rail industry's transport of Bakken crude oil through the SIMPCO MPO planning area has created recent safety concerns. Bakken crude oil is an especially explosive and flammable oil taken from the Bakken shale formation, located in Canada, Montana, and North Dakota. There have been several explosive rail incidents in the US and Canada involving Bakken crude oil. Efforts to improve safety standards have been pursued at the federal level, but local planning efforts are required to ensure that a swift and effective response is ready in case an incident occurs. Several planning methods can help ensure an improved response to any rail incident. The existing Local Emergency Planning Committee (LEPC) should continue to work toward improved communication between emergency responders, law enforcement, planning staff, and department of transportation/roads personnel. The LEPC should address how to respond to a rail incident within the planning area. In addition, local first responders should be trained in Transportation Community Awareness and Emergency First Response (TRANSCAER). This training will prepare first responders to act appropriately when faced with an incident involving hazardous materials. Furthermore, incident management exercises can help to prepare first responders to act and identify areas for improvement within the incident planning and response process.

Map 6.3: Bakken Crude Oil Rail Routes through Iowa. *Source: Iowa DOT.*

LOCAL EMERGENCY PLANNING COMMITTEE LEPC ...safety in knowledge®

TRANSCAER®

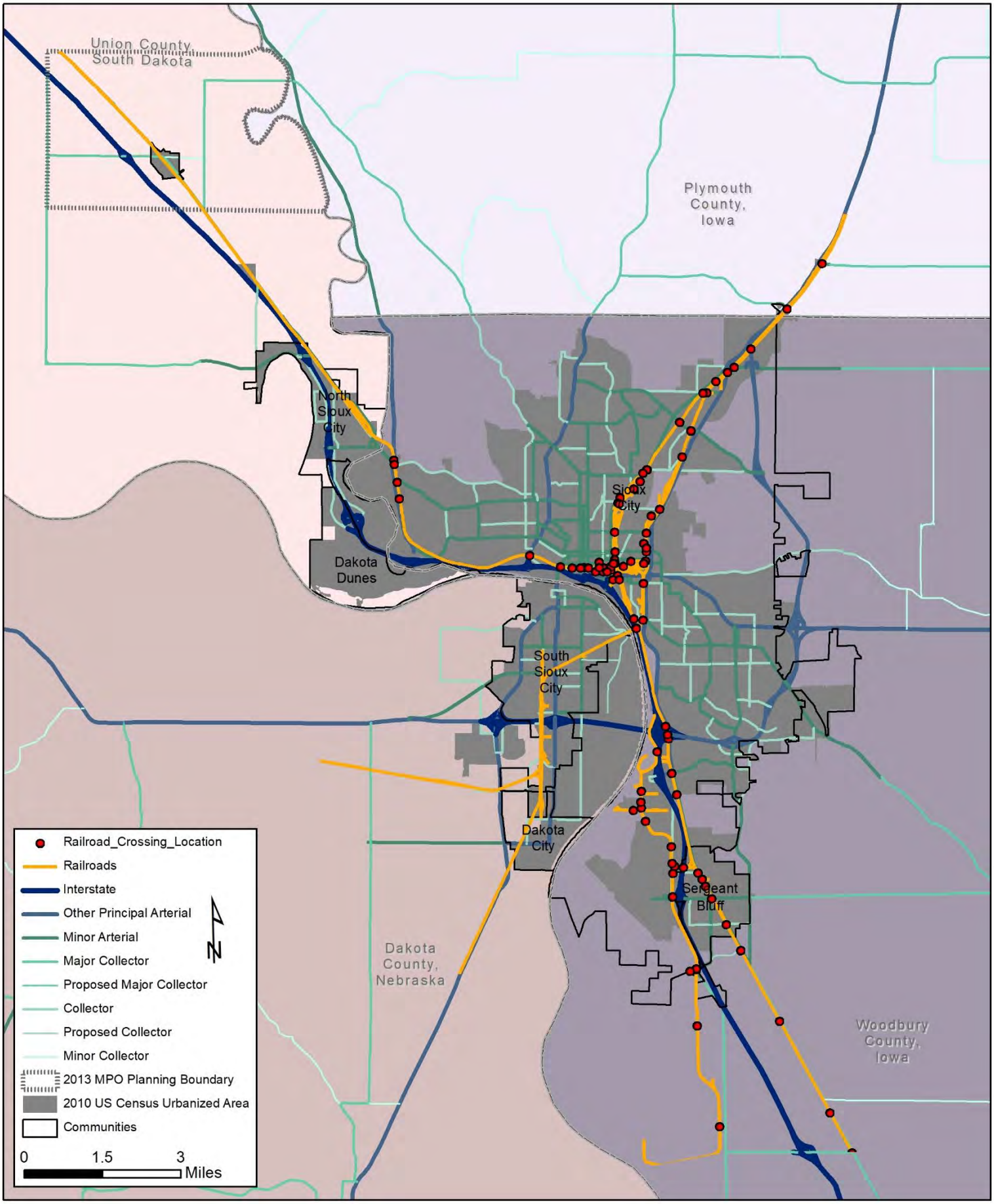
PIPELINES

The SIMPCO MPO planning area has a large quantity of pipelines carrying various products. At this time, the MPO does not have involvement with pipeline planning, challenges, and implications. For a map of these pipelines visit the National Pipeline Mapping System.

Map 6.2

SIMPCO MPO

Rail



PASSENGER RAIL

CURRENT FACILITIES

There is no passenger rail service in the metropolitan area, and it is unlikely that it will develop over the planning horizon, barring a major shift of transportation priorities at the national level. The closest passenger service is the current AMTRAK California Zephyr, which passes through Omaha and Lincoln, NE in route to Emeryville, CA (San Francisco Bay Area) and Chicago, IL. Should there be a shift of national priorities, the most likely and economic route would be a connection between Sioux Falls, SD and Kansas City, MO via Sioux City, IA and Omaha, NE. Such a service would most economically use short self-propelled units commonly called Diesel Multiple Units (DMU) or in the future Fuel Cell Multiple Units if they become available. The routing would hypothetically use the BNSF alignment between Sioux Falls and Sioux City and the UP from Sioux City to Omaha and Kansas City.

AIR

CURRENT FACILITIES

The main air terminal for the SIMPCO MPO region is the Sioux Gateway Airport/Colonel Bud Day Field, located on the southern edge of Sioux City to the west of Sergeant Bluff (see Map 6.3). The airport is owned by the city of Sioux City and is governed by a Board of Trustees that reports to the City Council, while the day-to-day operation of the airport is undertaken by a professional airport director hired by the City Council. The Iowa Aviation System Plan identifies the Sioux Gateway Airport as a Commercial Service airport. Commercial Service airports support scheduled airline service and have the infrastructure and services available to support a full range of general aviation activity. American Airlines, the airport's only commercial carrier, normally offers three daily flights to Chicago and one each day to Dallas.

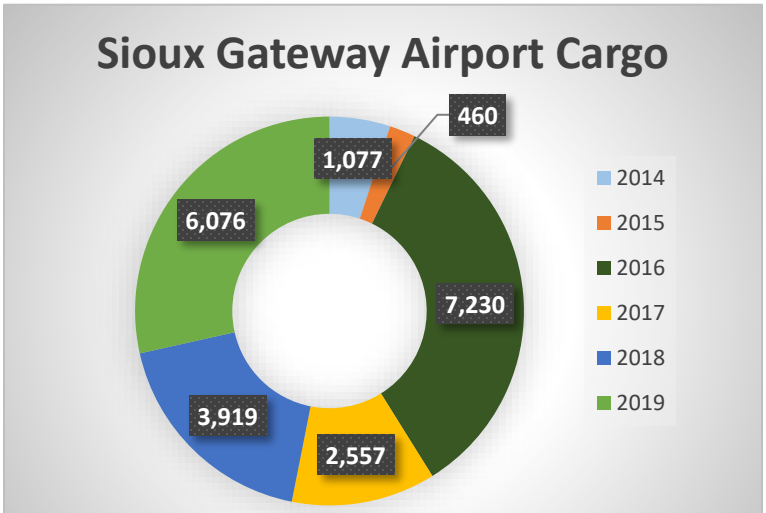


Figure 6.1: Total Annual Air Cargo Enplaned and Deplaned through Sioux Gateway Airport. *Source: Sioux Gateway Airport*

The current $24 Million project (with the Federal Aviation Administration funding 90 percent of the project) to implement a secondary runway replacement is expected be complete by July 2020. The new runway is officially known as the 17/35 runway, and intersects the airport's main runway. In all, the south 4,500 feet of the existing runway will be reconstructed, as well as construction of the new 1,000-foot extension of Runway 35 and Taxiway C to the south. Other elements include demolition of the north 1,200 feet of Runway 17 and Taxiway C,

construction of a new connector taxiway at the end of the new Runway 17, reconstruction of a portion of Taxiway D, and the demolition of Taxiway B.

There is no dedicated cargo carrier (such as FedEx, UPS, Emery, Airbourne etc.) serving Sioux Gateway Airport, in part due to proximity of Omaha's Eppley Field and Sioux Falls' Joe Foss Field, which are served by major air cargo companies, the cargo passing through Sioux Gateway Airport is handled by the passenger airline, American Airlines. Figure 6.1 shows the total yearly amounts of air cargo through Sioux Gateway Airport Cargo.

PASSENGER AIR

CURRENT FACILITIES

Sioux Gateway Airport is classified as a non-hub commercial service airport. There are presently three daily flights to Chicago and one flight each day to Dallas, TX. All are through American Airlines, and connect to Chicago O'Hare International Airport and Dallas/Fort Worth International Airport. Previously, the major airline that serviced the Sioux Gateway airport was Delta; however, they were replaced in 2012. Figure 6.3 (page 6-9) illustrates the annual number of passenger enplanements, or the number of passengers boarding aircraft at Sioux Gateway Airport, since 2008. The large number of service in 2008 is due to having a second carrier, Frontier Airlines, which served Sioux Gateway airport from October 2007 to May 2008. In 2013 Frontier chose to service the Sioux Gateway airport again, however, they were purchased by another company and pulled within a year from many small airports. Frontier only continued their services in large cities.

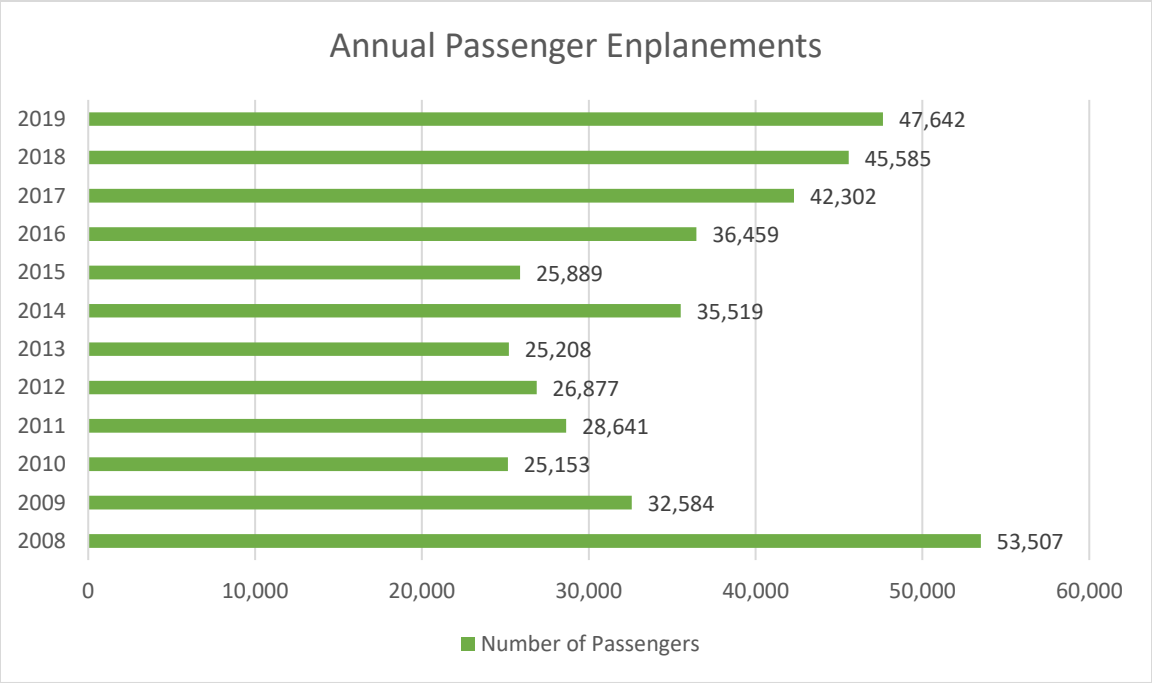
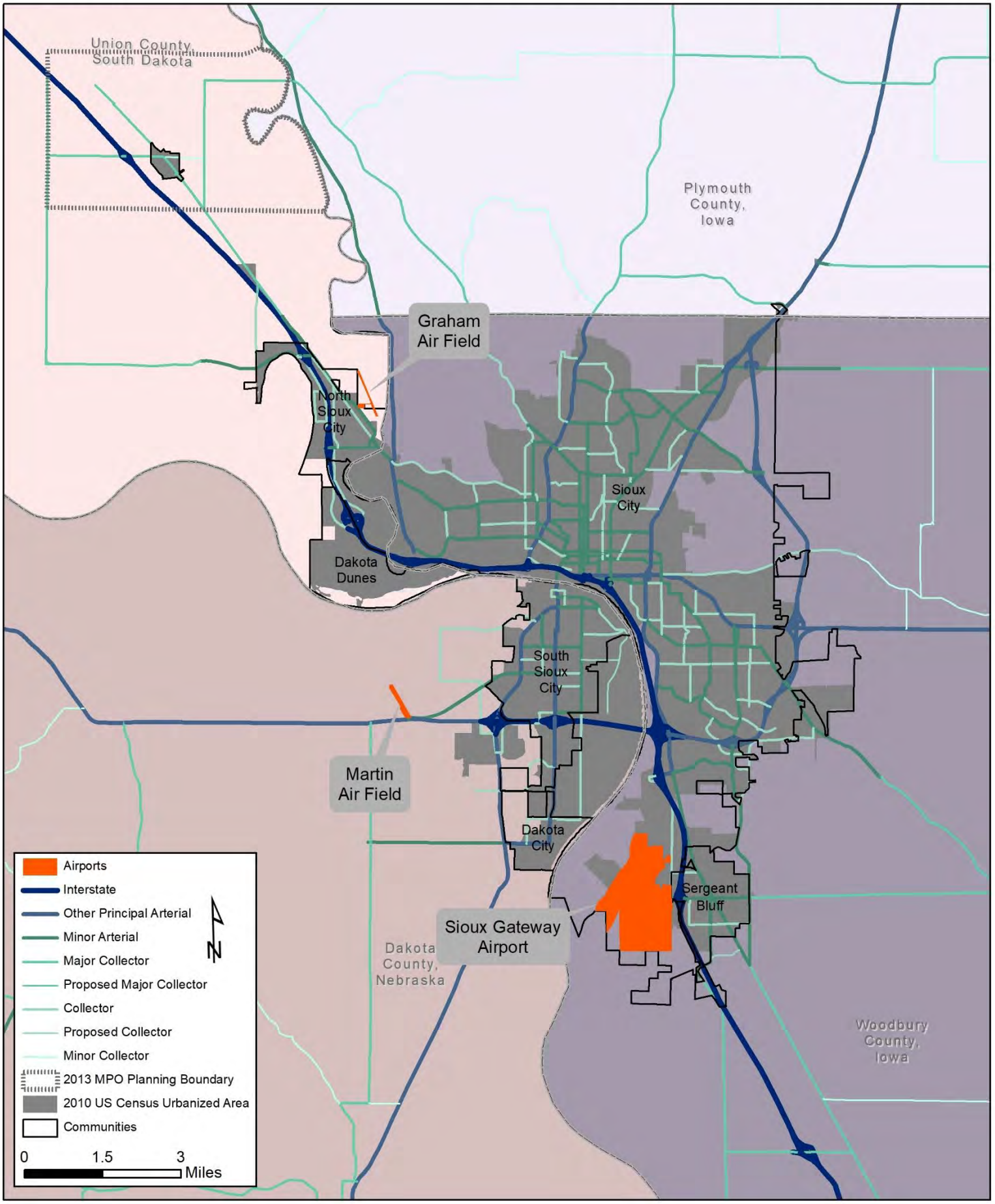


Figure 6.3: Total Annual Passenger Enplanements at Sioux Gateway Airport.
Source: Sioux Gateway Airport

Map 6.3

SIMPCO MPO Airports

There are 3 airports in the MPO Planning Boundary:
Sioux City Gateway Airport, Martin Air Field, and Graham Air Field



The Sioux Gateway Airport loses market share of counties and communities on the periphery of this service area to Omaha and Sioux Falls. In order to capture market share, the airport must provide a comparable level of service and fare rate to its competitors to the north and south, or at least competitive enough to deter the potential passengers from driving extra miles. Recent improvements to the terminal facility include a complete rehab of the terminal including restaurant, waiting area, restrooms, ticket counters, and baggage claim areas. A new canopy was installed at the front entry for passenger loading and unloading.

In the past, Sioux Gateway Airport participated in the US DOT's Essential Air Service (EAS) program and received funds in order to remain commercial airline services. The federal assistance helps subsidize airline operation costs which helps maintain competitive fares for commercial flights. The program subsidized the Sioux Gateway Airport's existing American Airlines service to ensure competitive rates. In 2011, United Airlines out-bid American Airlines' proposed annual federal subsidy bid. American Airlines then decided not to subsidize and instead continue their services without subsidizing. They have since kept their original scheduled flights and added two more daily flights.

Service area of Sioux Gateway Airport encompasses

309,739

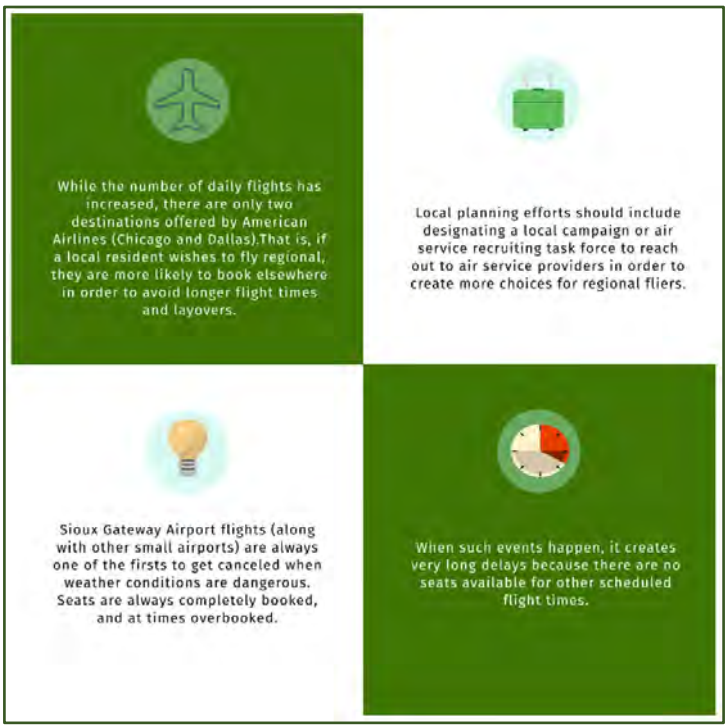
People and parts Of 17 counties

Due to the COVID-19 pandemic, American Airlines halted service to the Sioux City Gateway Airport in October 2020. The Airport Board of Directors stated that they will look into the use of Essential Air Service Program once again to continue flights out of Sioux City. In September 2020, Sioux City Council approved the terminal lease for SkyWest airlines which would allow United Airlines to begin a roundtrip flight out of Sioux City to Denver starting in mid-October. ***There are two privately owned airports are located within the metropolitan area*** for local commuters and owners of small aircraft. North Sioux City is home to Graham Field Airport, which is located one mile north of the city and boasts two concrete and turf runways. Martin's Field is located three miles southwest of South Sioux City and has two asphalt runways.

AIR AND PASSENGER

CHALLENGES

The Siouxland Gateway Airport currently lacks an all-cargo carrier. The airport's service area is large enough to support such a carrier and would benefit from such services. However, it is a challenge to attract an all-cargo carrier given the nearby competition in Omaha and Sioux Falls which currently provide air cargo carriers. The Sioux Gateway Master Plan notes many companies are utilizing just-in-time freight practices, which in most instances are better accommodated by air freight than by truck.



In early 2013 frontier chose to provide their low fare services at the Sioux Gateway Airport, many local residents purchased flights but were disappointed when Frontier announced an early seasonal discontinuation on October 24, 2013 just months before the holidays. Frontier offered three flights per week, with departures to Denver International Airport, and return flights to Sioux City on Sundays, Tuesdays and Thursdays additional to American Airlines' two daily flights. In 2020, American Airlines halted service due to the COVID-19 pandemic creating low demand and the expiration of the Coronavirus Aid, Relief, and Economic Security (CARES) Act. Contingency planning should be used in order to plan and prepare for an unexpected change in the amount of local air service. Such changes may include an air carrier deciding to no longer service the MPO area or the loss of EAS funding. Contingency planning can prepare locals for these changes and have a plan in place to fill loss of service.

WATERBORNE FREIGHT

CURRENT FACILITIES

Sioux City is the northernmost navigable point on the Missouri River for barge traffic. This is due to the dam crossings on the Missouri River north of Sioux City, which have no locks allowing boat passage. The Sioux City region is the head of a nine-foot-deep, 735-mile navigational channel. This channel stretches down to the Missouri River's confluence with the Mississippi River, north of St. Louis. During non-drought years, the metropolitan area takes advantage of its position on the river as a port for barge freight. For the past several years drought

conditions in much of the upstream areas of the Missouri River have hampered barge navigation. In 2013, the portion of the Missouri River stretching from Kansas City, MO to Sioux City, IA was designated by the US Transportation Secretary as Marine Highway M-29. This designation may prove important for waterborne freight transportation within the SIMPCO MPO area. The designation makes port facilities along the route eligible to apply for federal funds. These federal funds can be used to improve or expand existing waterborne freight infrastructure. The SIMPCO MPO should communicate with existing port facilities to determine if a desired project may qualify for federal assistance.

After an 11-year period of no barge activity, in 2014 the Missouri River brought in a shipping barge into Sioux City. The barge was contracted by CF Industries to haul heavy equipment to its expanding Port Neal complex. It's the first craft of its kind to ship to the Sioux City area since 2003. Figure 6.4 provides yearly totals from 1991. According to figures released by the Army Corps of Engineers, there was no barge traffic to Sioux City in 2001, 2003-2008 or from 2008-2019. This lack of traffic was due, in part, to vessel draft restrictions put into place because of drought conditions. ***In 2011, the Missouri River flooded*** due to a record snowfall in the Rocky Mountains of Montana and Wyoming along with near-record spring rainfall in central and eastern Montana. All six major dams along the Missouri River released record amounts of water to prevent overflow which led to flooding threatening several towns and cities along the river from Montana to Missouri. Since then, there has been flooding almost yearly leaving water levels too high for barge traffic.

In 2019, the Missouri River Basin experienced more historic flooding. The year had the second highest runoff recorded, with the flooding in 2011 being the highest runoff recorded in 122 years. The 2019 flood was triggered by a bomb cyclone, a historic storm of great intensity combined with frozen soil which failed to absorb runoff and led to unprecedented runoff to local streams and rivers, including the Missouri River. Water levels remained high for the remainder of 2019 due to wet weather conditions and oversaturated soils. It is anticipated that flooding will continue into 2020 because repairs to the lower basin levee system have been nearly impossible with the continued flooding events.
Although just south of the MPO boundary, in 2020 NEW Cooperative, Inc started working on the development of a barge port two miles west of Blencoe in Monona, County. Once completed, this facility would become the northernmost port on the Missouri River between St. Louis and Sioux City.

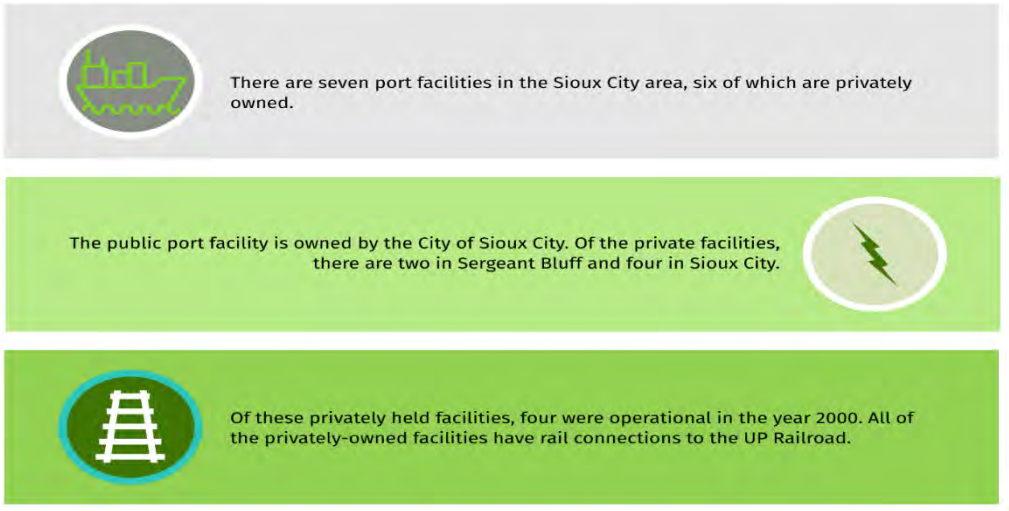
Figure 6.4: Yearly Barge Traffic, in Thousands of Short Tons

Year	Total	Year	Total	Year	Total	Year	Total	Year	Total
1991	202	1997	309	2003	0	2009	0	2015	0
1992	218	1998	249	2004	0	2010	0	2016	0
1993	231	1999	234	2005	0	2011	0	2017	0
1994	263	2000	300	2006	0	2012	0	2018	0
1995	165	2001	0	2007	0	2013	0	2019	0
1996	257	2002	125	2008	0	2014	0		

Source: U.S. Army Corps of Engineers

CHALLENGES

From 1988 to 2007, a string of droughts contributed to a drop in the river's water level, making it difficult to navigate. During the same period, environmental groups successfully fought the Army Corps of Engineers to release less water from its reservoirs into the river in order to protect native wildlife. In 2011, one of the largest floods occurred leaving water leaves too high for barge traffic. In 2019, the river experienced historic flooding due to a weather condition known as a "bomb cyclone". Flooding events such as in 2011 and 2019 make navigation difficult on the Missouri River. ***The loss of navigation has affected the Siouxland businesses that rely on barge transportation to deliver products like fertilizer, steel and asphalt, forcing them to divert more shipments to more-costly rail and truck.*** Rates for hauling such shipments up the river is about half the cost of transporting the material by rail. Resulting in higher than normal costs to purchase such materials.



INTERCITY BUS

CURRENT FACILITIES

The metropolitan area is presently served by one intercity bus line, Jefferson Lines, which provides service to Omaha, Sioux Falls, and other destinations to the north and south. The Sioux City terminal for Jefferson Lines is the MLK Jr. Transportation Center in downtown Sioux City, which provides automobile and bike parking as well as taxi access. The MLK Jr. Transportation Center is also the focal point of SCTS.

INTERMODAL

CURRENT FACILITIES

FHWA maintains a nationwide list of intermodal connectors, of which the SIMPCO MPO has two. The Big Soo Terminal is a port terminal serving as a connector between the barge docks and I-29. The other intermodal connector is a truck/pipeline terminal that serves as a connector between the terminal and US 75. As stated above, the principal passenger intermodal connecting facility is the MLK Jr. Transportation Center downtown where intercity, taxi and city transit as well as pick up/drop off service is available. A multi-level parking ramp is located immediately above the transfer center.

RECOMMENDATIONS

Planning for intermodal cooperation occupies problematic territory for local governments and MPO's, as the primary participants in passenger and cargo transport are private firms such as airlines and barge, truck, and railroad companies. In addition, with the exception of the airport and the MLK Jr. Transportation Center, all of the existing and potential intermodal facilities mentioned in this chapter are privately owned. Under these circumstances it is difficult to compel specific actions, but broad recommendations are listed:

5-Year

- From an Intermodal Advisory Committee to study the freight industry in the tristate area and how it affects and is affected by the associated transportation system.
- Invite intermodal representatives (both passenger and freight) to be a consultant in the MPO process. Representative could serve in an advisory capacity to the Transportation Technical Committee.
- Establish contingency planning for the sudden removal of airline services for the region
- Develop response, recovery and resiliency efforts and plans for intermodal transportation related to the pandemic and other significant events.

25-Year

- Strongly consider and implement recommended projects listed in the City of Sioux City Rail Freight Movement and Economic Development Analysis
- Expand quiet zones in the Sioux City Leeds and Riverside neighborhoods.
- Monitor national developments in intermodal transport for passengers and freight and seek to act quickly on opportunities as they present themselves.
- Continue communication with various airlines and seek to act quickly on opportunities that will encourage residents to fly with Sioux Gateway Airport.

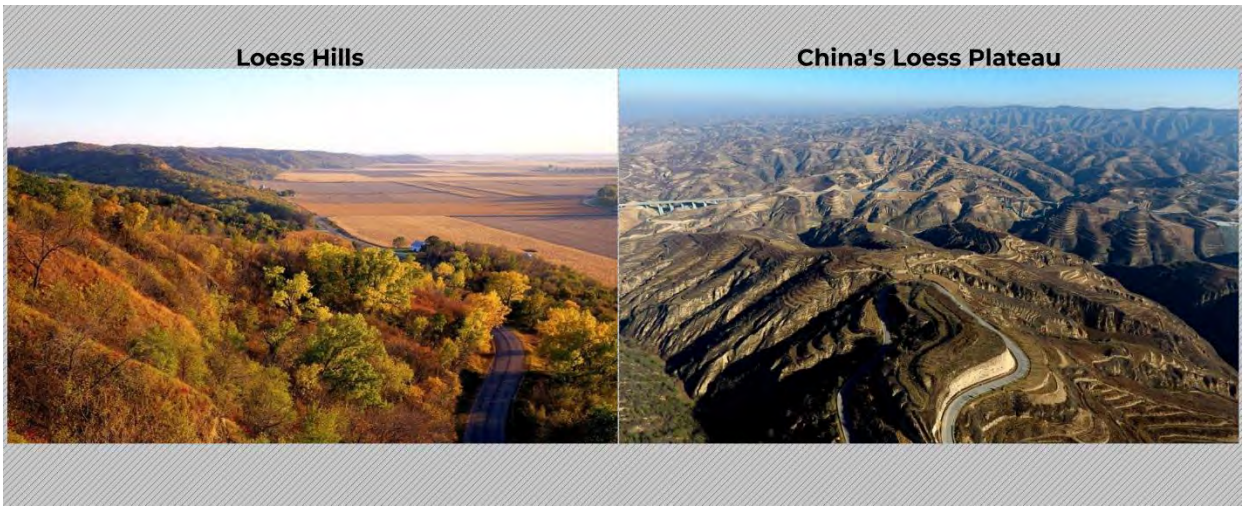
CHAPTER CONTENTS

Chapter 7: Environmental Impacts discusses the natural environment of the SIMPCO MPO planning area. It includes key geomorphological features, habitats, land cover and land uses, and the impacts that the transportation system has on these phenomena. It discusses potential alternative fueling systems, recent natural disasters, and provides recommendations for future work to reduce anthropogenic effects to the natural environment.

KEY GEOMORPHOLOGICAL FEATURES

The SIMPCO MPO planning area sits the confluence of the Missouri, Big Sioux, and Floyd Rivers. In addition to these three major tributaries, Perry and Bacon Creeks both drain into the Missouri River in the same vicinity (Map 7.1). The hydrology of these five waterways varies greatly, due to diverse channelization and flood control projects.

While the area's waterways are significant, the SIMPCO MPO planning area's location within the Loess Hills is truly its defining feature. This area's Loess Hills formation is one of only two Loess, or windblown sediment, land formations in the world, the other located in China's Loess Plateau in the upper and middle Yellow River area. The Loess Hills National Scenic Byway runs through the MPO planning area, connecting state highways and county roads in Plymouth and Woodbury to the rest of the byways south of these two counties. This conservation effort has brought attention to the Loess Hills formation in the area.



ENVIRONMENTAL ISSUES

FLOODING

Flooding is the most significant environmental issue that the SIMPCO MPO planning area experiences. This area was chosen for settlement because of its ease of access to the rivers. While this was the crux of the area's development, it has also been a great detriment. Major and historic flooding has occurred on all five waterways since the start of urban development. Map 7.2 shows the FEMA 100-year flood floodplains with this plan's programmed and planned projects.

In the spring of 2011, historic snowfall and rains in the headwaters of the Missouri River led to historic flooding that filled many of the reservoirs north of Sioux City. The US Army Corp of Engineers' controlled flooding from Garrison Dam in North Dakota to the confluence of the Mississippi River in St. Louis, MO, through the summer months. Many agricultural and residential areas were damaged or destroyed by this flood, and I29 was closed from Nebraska City, NE, to Rock Port, MO.

In the spring of 2014, the Big Sioux River flooded to more than a foot above the 1969 record flood height. This flooding significantly affected North Sioux City, Dakota Dunes, CID, and Union County, SD, Sioux City, and Plymouth County, IA. A portion of I29 near the mouth of the Big Sioux River was closed for ~24 hours during the crest, and traffic was redirected onto Nebraska Highway 12 during this time.

Most recently, in 2019, the Missouri River Basin experienced more historic flooding. Data recorded in the last 122 years shows the 2011 flood remains the highest runoff year with 2019 as second. The 2019 flood was triggered by a bomb cyclone. The bomb cyclone that struck over large parts of Iowa, Nebraska and South Dakota that day dumped several inches of rain. Warming temperatures quickly melted the many inches of snow still on the ground. All that water rushed across the still-frozen ground into ice-covered streams and rivers, sending torrents of water, ice chunks and debris downstream, flooding towns and damaging or washing out dozens of roads and bridges. When the water receded, counties were left to contend with millions of dollars of damage to roads and bridges that would take months to repair. It was the beginning of a year in which water played a major role.

Cold, rainy weather throughout May prevented soil from heating up and drying, keeping many farmers out of soggy fields until well past the normal planting time. Planting for many farmers stretched into June, increasing the likelihood of reduced yields caused by a shorter growing season.

Hundreds of acres never were planted. Even if crops were planted on time, frequent rains in October delayed harvest because of muddy fields and crops too wet to pick.

Missouri River high water levels seen 2019.

Chris Larsen Park in Sioux City, IA on May 31, 2019.

Water levels close to Tyson Events Center.

Frequent heavy rains fell across portions of Nebraska, the Dakotas and Montana throughout the summer, leading to near-record amounts of runoff into the Missouri River in the basin above Sioux City and filling the river's six reservoirs. Still coping with all the runoff from the March bomb cyclone, the U.S. Army Corps of Engineers, which manages the river and reservoir system, spent the entire spring, summer and fall trying to evacuate the second-highest amount of runoff in 121 years of record-keeping.

Water levels remained high for the remainder of 2019 due to wet weather conditions and oversaturated soils. High water remained a factor into because repairs to the lower basin levee system have been nearly impossible with the continued flooding events.

Threatened and Endangered Species

The SIMPCO MPO planning area houses important habitat for the following threatened and endangered species listed below. Many of these are associated with the Missouri River, are thus monitored by the US Fish and Wildlife Service, as well as the Missouri River Recovery Program. All threatened and endangered species and their habitats are inventoried and assessed during the NEPA process.

Threatened and Endangered Species

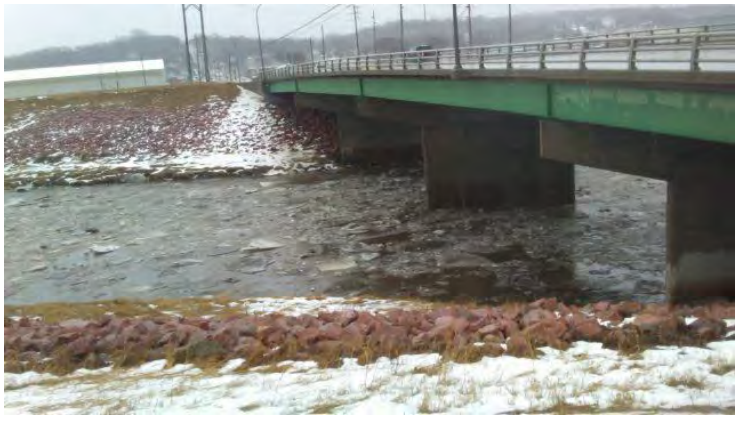
- Least Tern
- Piping Plover
- Pallid Sturgeon
- Prickly Pear Cactus
- Prairie Bush Clover
- Northern Long-Eared Bat
- Western Prairie Fringed Orchid

Impaired Waters

The Big Sioux River is on Iowa's impaired waters list due to pollution from human and animal waste that has infiltrated the surface water. This waste could be from automobiles, winter salt application to roads, wastewater treatment centers, industrial plants, agricultural chemicals (fertilizers, pesticides, herbicides), failing septic systems, and runoff carrying livestock and wildlife waste. To repair this damage, the watershed remediation of the pollution needs to occur. To mitigate this damage, the environmental impacts of transportation projects to the project's location should be as minimal as possible.

Waterways and Bridges

There are numerous bridge structures in the SIMPCO MPO planning area due to its hydrologic features and varied terrain; 43 of these bridges span waterways that have tendencies to flood on a regular basis (Map 7.1). This impacts the transportation system, as bridges are more expensive to construct than a transportation project that does not require bridges.

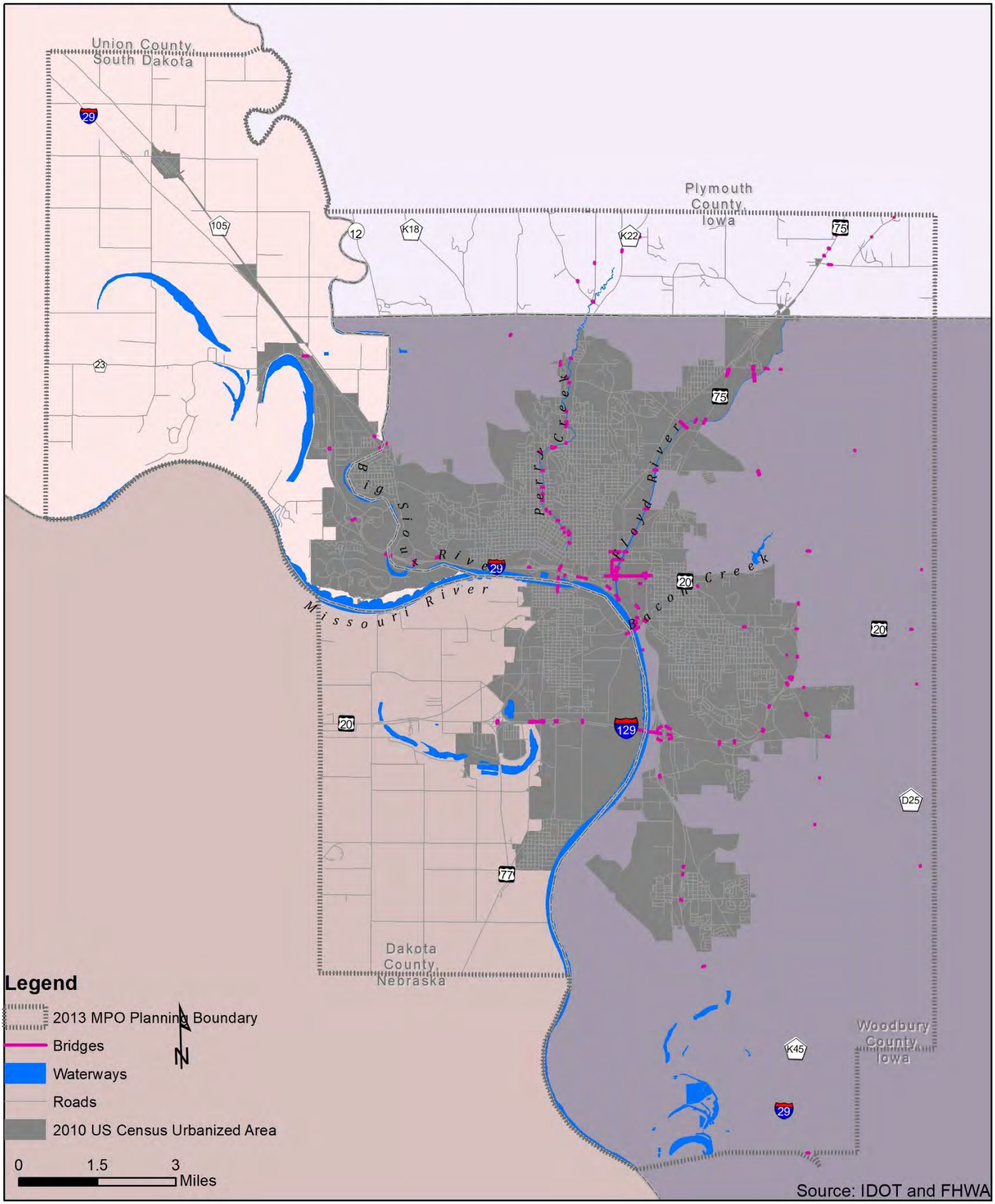


Floyd River in Sioux City, IA

Map 7.1

SIMPCO MPO

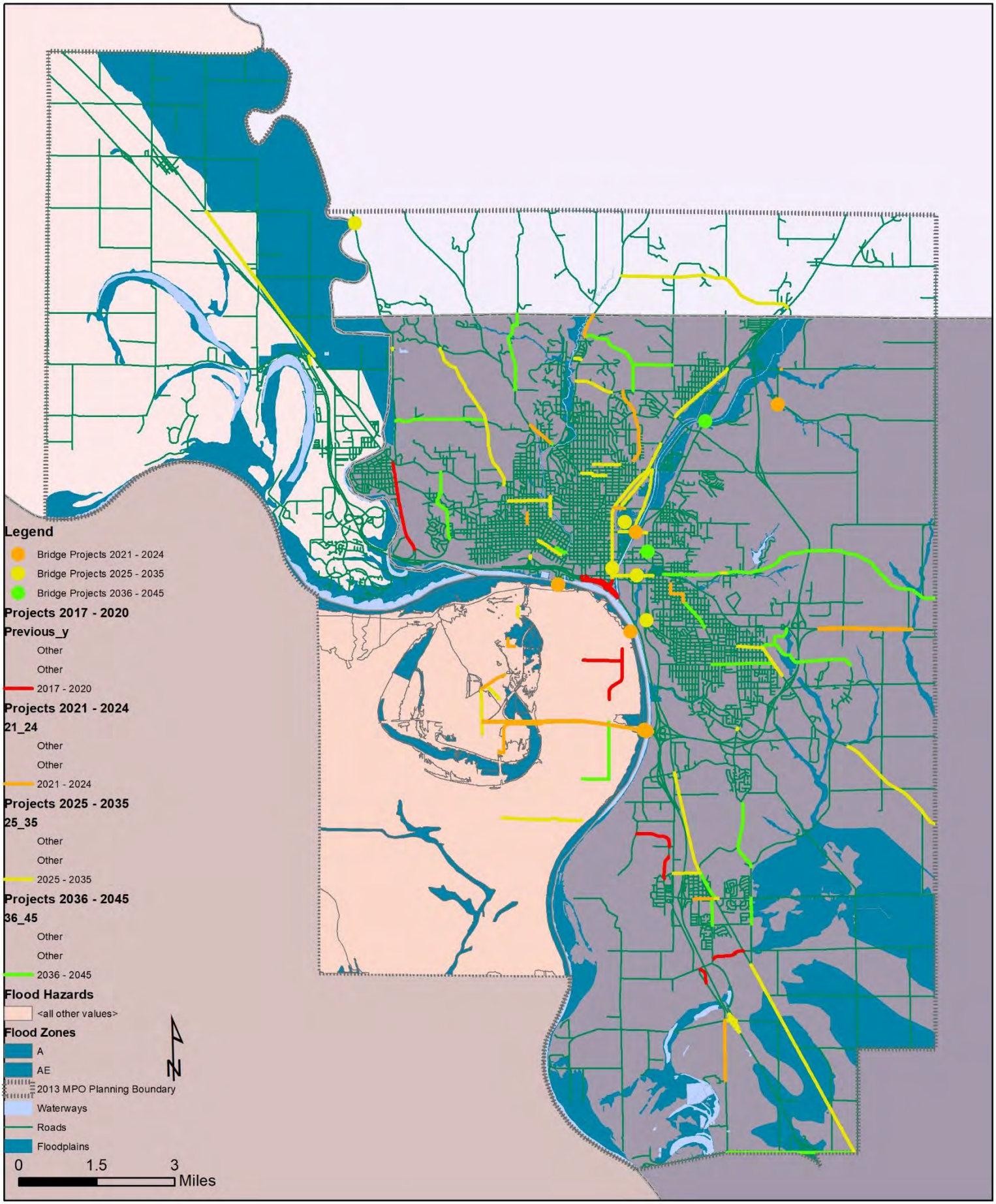
Waterways and Bridge Structures



Map 7.2

SIMPCO MPO

Floodplains and Projects



ALTERNATIVE FUELING SYSTEMS

AUTONOMOUS VEHICLES

Autonomous vehicles, or self-driving cars, are a future technology that is being rapidly developed. These vehicles have the potential to reduce crashes and fatalities since the vast majority of crashes are caused by human error. They could change the way transit and taxi services are provided to the public. Additionally, they could eliminate transportation barriers for those unable to drive or operate vehicles on their own. The City of South Sioux City is discussing the possibilities of implanting automated busses. While it is still unclear when this technology will be readily available and to what extent it will impact the transportation system, policy should be designed to take advantage of the vehicles' potential while promoting the goals outlined in this plan.

ELECTRIC VEHICLES

The city of South Sioux City has begun utilizing electric vehicles for staff cars. The new electric cars are an effort by the City to go green and encourage the greater Siouxland area to do the same. There are currently 4 electric fueling stations in South Sioux City. In addition to these fueling stations, there are two centrally located in Sioux City (Map 7.3).

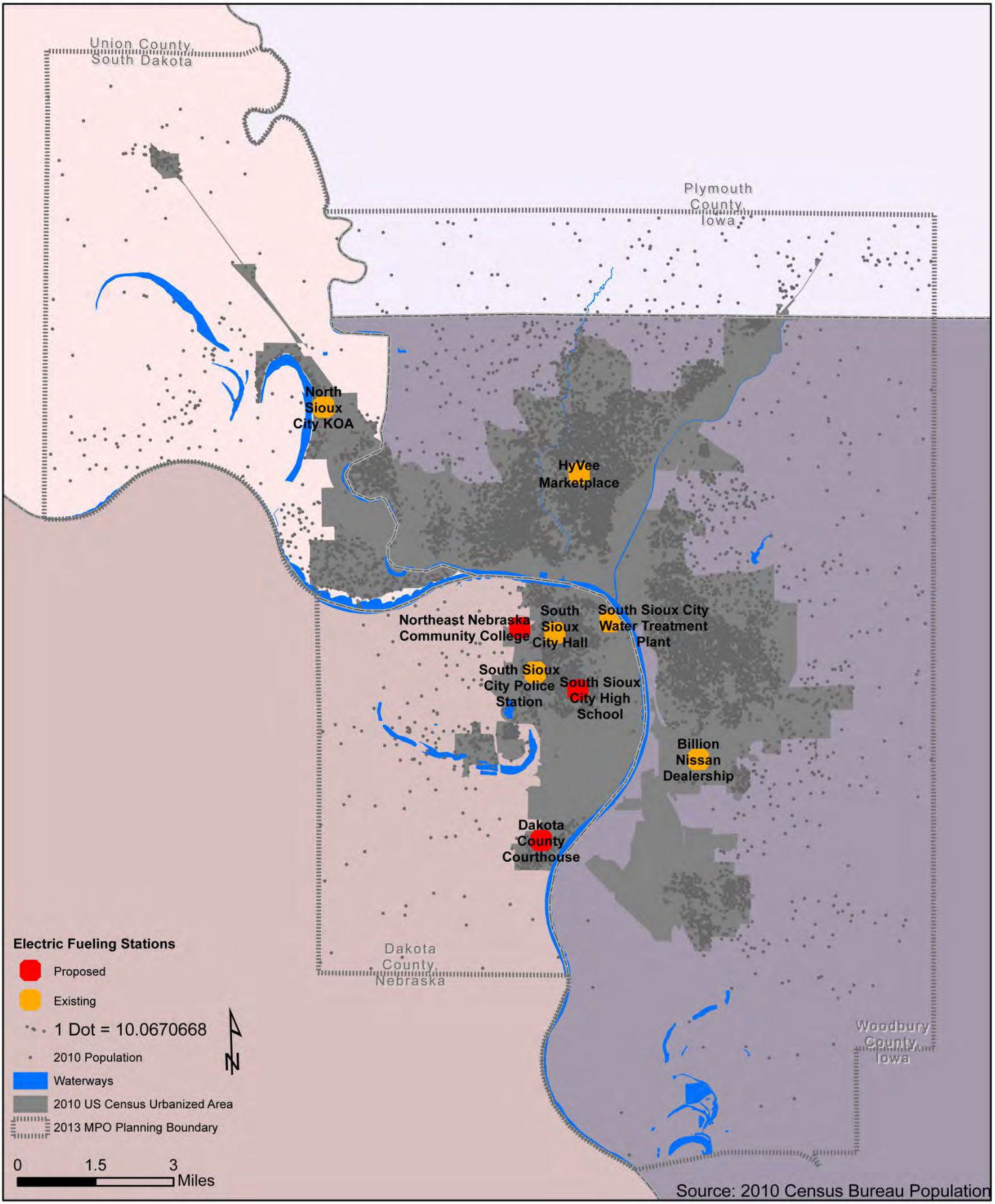
The SIMPCO MPO sees this as a great contribution towards reducing the environmental impacts of day-to-day motorist travel. By using less petroleum-based fuel and more electricity based fuel, which has the potential to come from wind or solar energy, the electric fueling system allows for reduction in greenhouse gas production.

To alleviate range anxiety when driving electric vehicles, MidAmerican Energy Company has initiated an Electric Vehicle Charging Network Program to incentivize businesses and non-residential community partners to serve as host sites for electric vehicle fast-charging stations. Proposed site locations are scattered across the state of Iowa and include potential siting in Sioux City.

Map 7.3

SIMPCO MPO

Existing and Proposed Electric Fueling Stations



COMPRESSED NATURAL GAS

While there has been some discussion of the conversion of older busses to electric-powered or the addition of new electric busses to the Sioux City Transit System fleet, their staff feels that a compressed natural gas (CNG) fueling system has the most potential as an alternative fueling system. This would allow for current busses to be retrofitted from diesel fuel technology to CNG technology.

Because of the increase in availability of natural gas due to fracking, natural gas has become an economically viable alternative fueling system. Cheaper fuel and the ability to retrofit busses make CNG economically viable. While using less petroleum is good, it is important to note that fracking's environmental consequences are great, and it has contributed to the contamination of groundwater and destruction of habitat in the US and other counties. Furthermore, it must be noted that while CNG produces less carbon dioxide, non-methane volatile organic compounds, and nitrogen oxides, it emits unburned methane, which is 30 times more potent than carbon dioxide as a heat-trapping gas, and therefore has the potential to contribute to climate change significantly more than traditional diesel fuel.

HYBRID ELECTRIC TRANSIT BUS

The Sioux City Transit System is in the process of applying for a grant for a new hybrid electric bus. A hybrid electric bus combines a conventional internal combustion engine propulsion system with an electric propulsion system. In a series hybrid bus, the internal combustion engine (ICE) is connected to an electric generator which converts the energy produced by the ICE into electric power. This electricity powers a motor which turns the wheels of the vehicle. The generator also recharges a battery pack which provides supplemental power to the motor. Since the ICE is not connected to the wheels, it can operate at an optimum rate and can even be switched off for short periods of time for a temporary all-electric operation of the bus.

Hybrid buses are estimated to cut emissions by as much as 75 percent when compared to conventional diesel buses. The emissions reductions are a function of the electric drive, ultra-low-sulfur diesel (ULSD) fuel use in conjunction with particulate trap technology and improved fuel economy from the hybrid system.

LAND USE AND LAND COVER CONVERSION

Map 7.4 shows the current land covers from the 2011 National Land Cover Dataset. Land covers of identified tracts of land to be converted to land uses that have been identified by staff persons from each jurisdiction are shown.

AIR QUALITY MONITORING

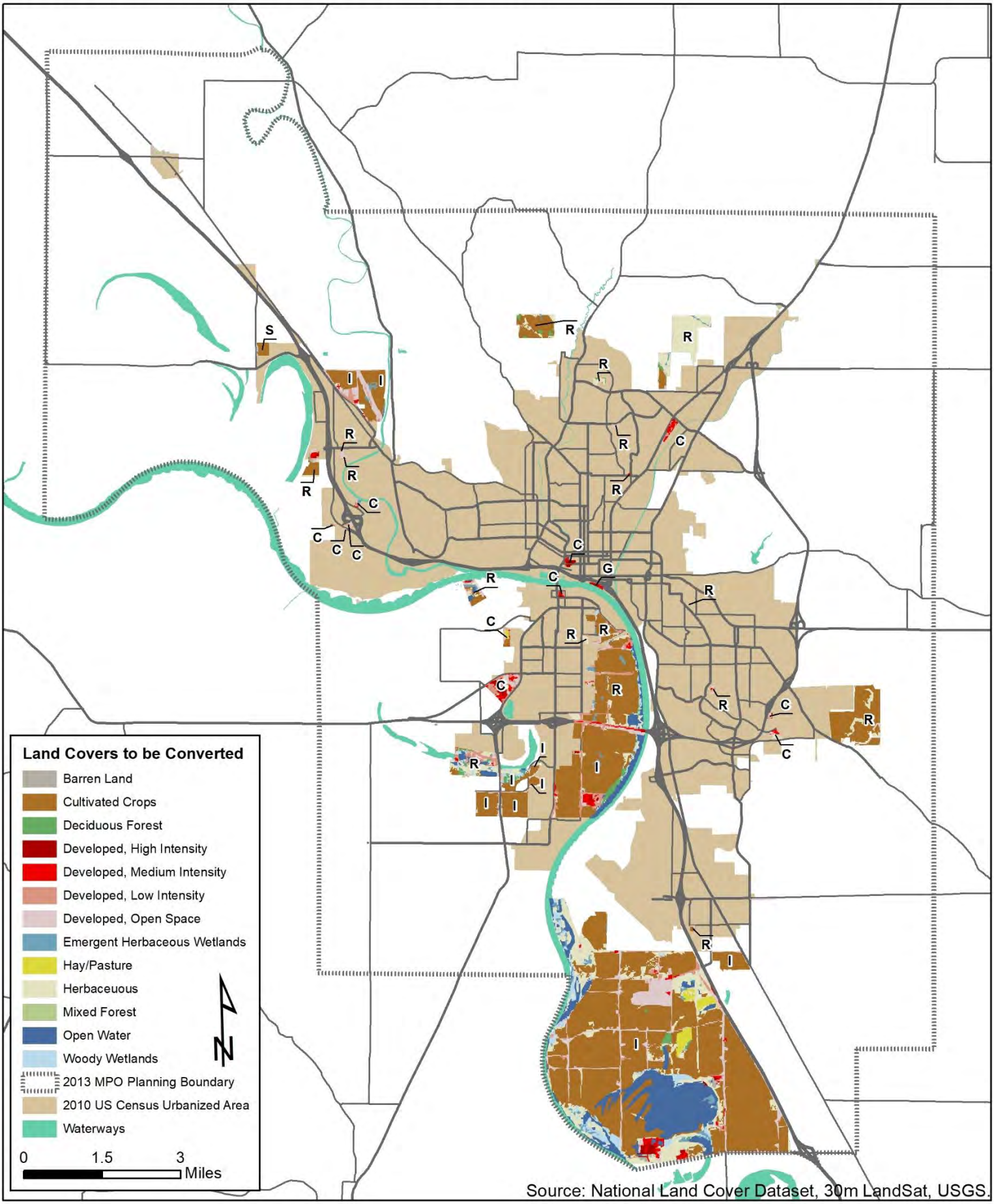
Air quality has an important influence on human health and environmental wellness. For this reason, Iowa's and South Dakota's Departments of Natural Resources and Nebraska's Department of Environmental Quality monitor air quality for their portions of the SIMPCO MPO planning area (Map 7.5). The SIMPCO MPO planning area is currently in attainment with federal air quality requirements, and has never been in non-attainment status. However, a continued effort to improve air quality must be given in order to keep pace with increasingly strict federal air quality regulations.

Map 7.4

SIMPCO MPO

Land Covers of To-Be-Developed Parcels

R=Residential
C=Commercial
I=Industrial
S=School
G=Green space

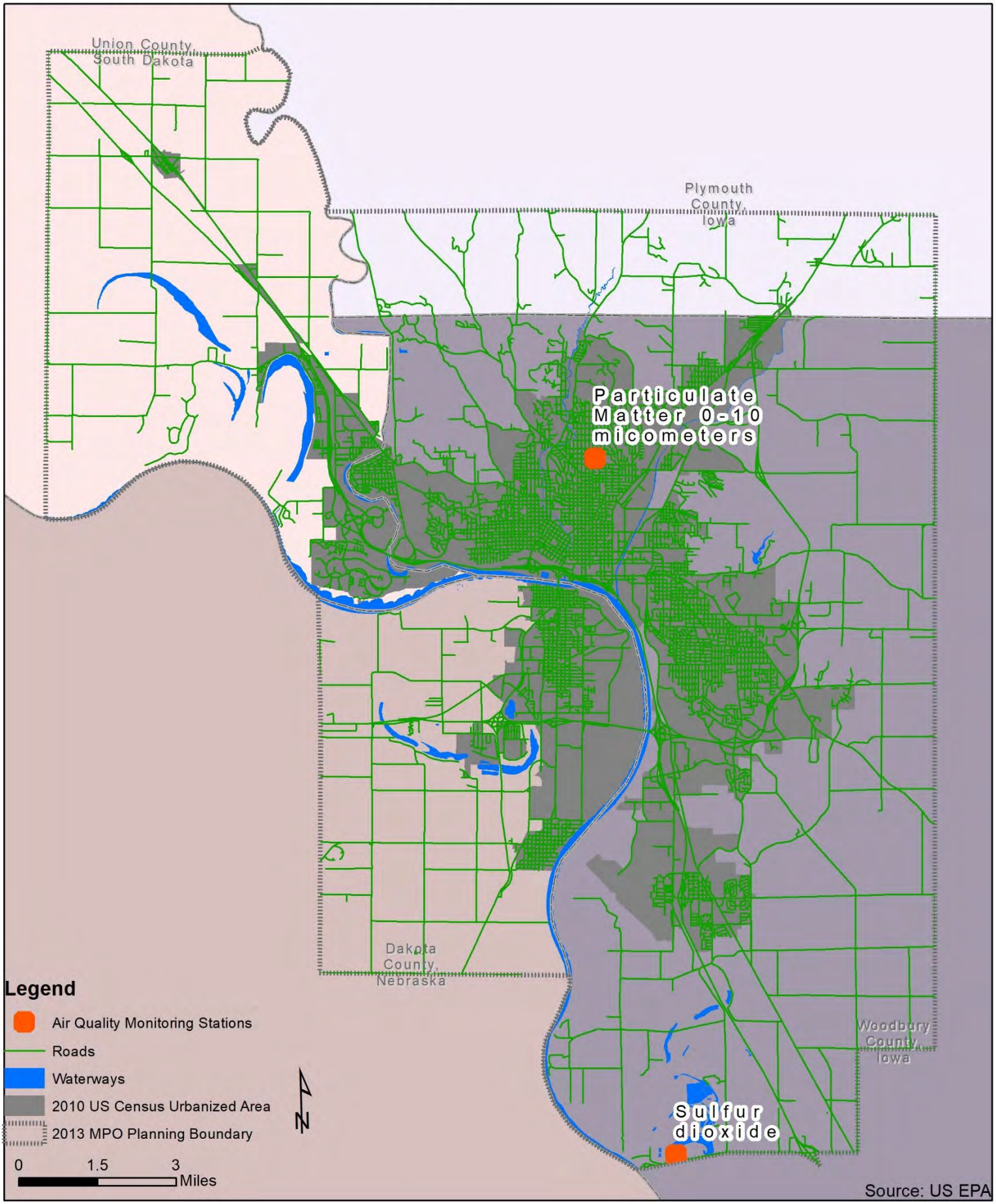


Source: National Land Cover Dataset, 30m LandSat, USGS.

Map 7.5

SIMPCO MPO

Air Quality Monitoring Stations



PROJECTS AND ENVIRONMENTALLY SENSITIVE AREAS

When looking at the environmental impacts of maintaining and improving the metro transportation network, it is beneficial to determine what environmentally sensitive areas may be affected by planned or proposed projects. For this plan, environmentally sensitive areas include the Loess Hills land formation, state parks/preserves, wildlife management areas, and federally designated wetlands (Map 7.6). Cultural and historical resources are not addressed directly in this plan, as their geographic location information is not available to the public, for protection reasons. However, notification of the development of this plan and opportunity to comment was provided to state cultural resource agencies as a part of the SIMPCO 2018 Public Participation Plan, and all funded projects will go through NEPA protocols and review.

Due to Sioux City's location on the Loess Hills land formation, many of the projects in this plan will affect, in some capacity, the area's Loess Hills. Currently, there is no protection plan for this land formation, other than near the Loess Hills National Scenic Byway. Conserving historical land formations and natural resources such as the Loess Hills should be a priority for any community.

Mitigation of negative effects is important. Potential environmental impacts mitigation activities include:

Wetlands and Water Resources

- Avoid transportation improvements that cross or 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.

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.
- Alert drivers to possible presence of wildlife.
- Provide buffer strips along streams and rivers.
- Maintain natural lighting to the extent possible

Parks and Recreational Lands

- Avoid new construction around parks and recreational 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.
- Reduce vehicle speeds and volumes near parks and recreational areas.
- Replace park/open space acreage taken.

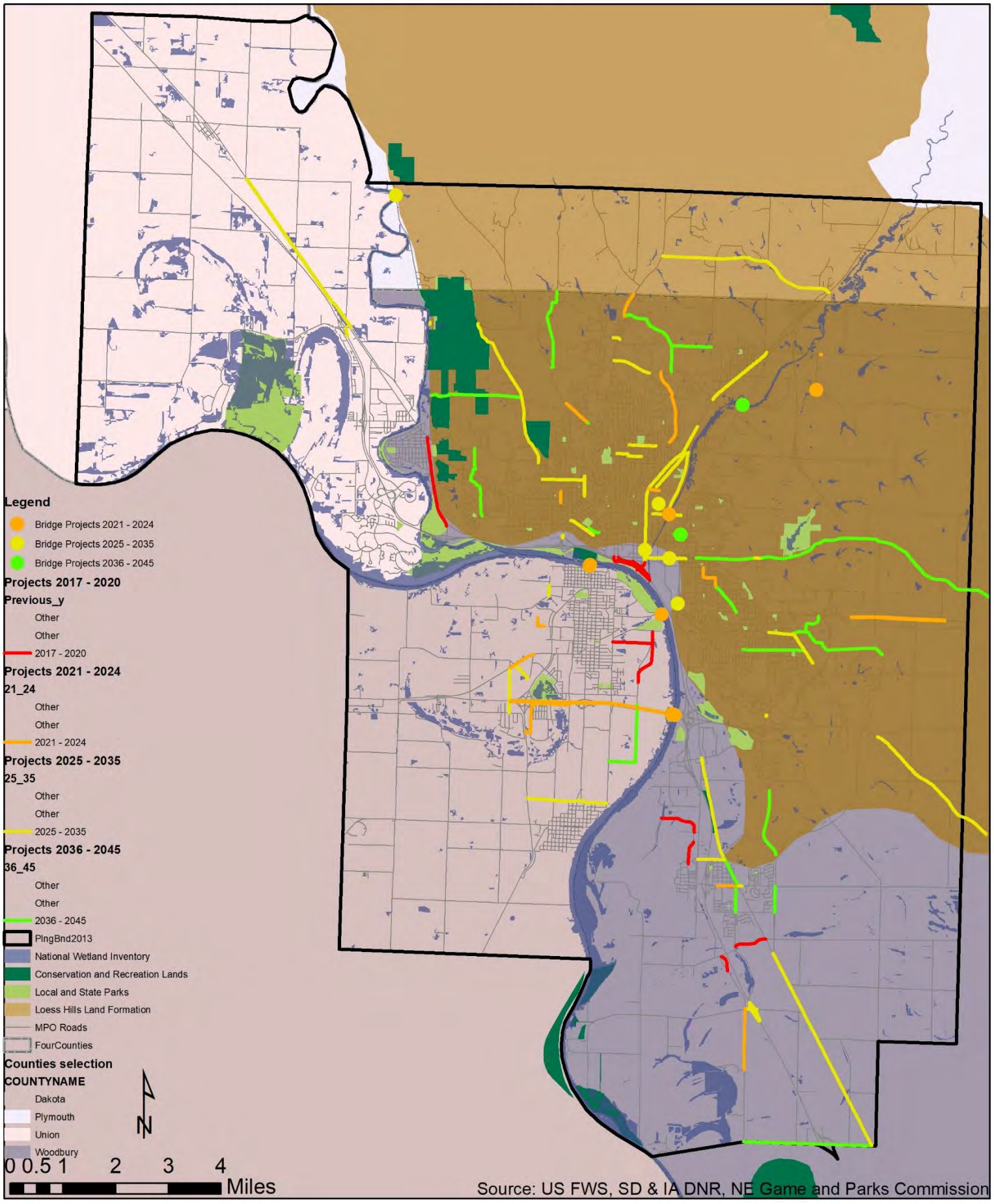
Cultural Resources

- Avoid construction around areas of cultural significance.
- Takes steps to minimize harm and compensate for impacts.
- Include buffers and/or berms in project plans.
- Conduct archeological surveys if unable to avoid the area

Map 7.6

SIMPCO MPO

Environmentally Sensitive Areas and Projects



RECOMMENDATIONS

Continue to assess alternative transportation options for public transit and city/county fleets. This includes the consideration of electric or hybrid busses and fleet vehicles reducing environmental impacts in the MPO. In addition, encourage the use of electric vehicles throughout the metro area by increasing the number of electric charging stations available to the public.

The MPO staff should continue to collaborate with the newly formed SIMPCO Water Resource Committee as well as the following organizations listed below to improve environmental stewardship. The intent to collaborate with one another is to review and analyze future projects in the MPO planning area. Members of these groups includes MPO staff and any staff, volunteers, or board and club members from the list below.

In addition, it is recommended that the Engineer and Public Works departments of member agencies consult with local environmental experts, in addition to state departments of natural resource and the U.S. Environmental Protection Agency, to determine if their proposed transportation projects will create heightened impacts to the ecosystems, habitat, and land formations in the region.

- SIMPCO Water Resource Committee
- Sioux City Environmental Advisory Board
- Woodbury County Conversation
- Plymouth County Conservation
- Sierra Club Northwest Iowa
- Keep Northeast Nebraska Beautiful
- Dakota County Soil and Water Conservation District
- Union County Conservation District

CHAPTER CONTENTS

This Long-Range Transportation Plan (LRTP) chapter is developed to identify projects on a 25-year horizon. The first four years of the LRTP are currently programmed in the Transportation Improvement Program (TIP), as shown in Table 8.5. These projects have been voted on by the MPO Policy Board and programmed out until 2024. Tables 8.8 to 8.13, list projects in the outer year bands, 2025– 2045, of the LRTP, each of these different time bands demonstrates fiscal constraint.

The 2045 LRTP outlines the different funding sources and expected amounts available to fund the transportation projects included in this chapter. For the MPO to ensure that the 2045 LRTP is financially constrained, future funding has been estimated by projecting historical funding. Note that the MPO does not know how the current pandemic (COVID-19) will affect future funding flow. The MPO will, however, amend the 2045 LRTP accordingly should future funding flow to the MPO change dramatically because of the COVID-19 pandemic. ***The MPO assumed throughout this chapter that the restructured transportation programs would continue to be the available funding sources in the foreseeable future.*** Also, the MPO assumes that base year revenues and expenditure are in 2020 dollars. Future year revenue, expenditure, and project cost are projected with the MPO Policy Board agreed-upon inflation rate based on the historical consumer price index. The MPO is projecting average growth rate in transportation program revenue at 3% and average project inflation at 4%. The MPOs assumption is that over the Transportation Plan's 25 year planning horizon, existing revenue sources will keep pace with inflation or close to it.

FEDERAL FUNDING

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP)

FAST Act continues the Highway Safety Improvement Program (HSIP) to achieve a significant reduction in traffic fatalities and severe injuries on all public roads, including roads on tribal lands. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focus on performance. HSIP funds are available to state departments of transportation.

National Highway Performance Program (NHPP)

The purpose of the National Highway Performance Program is to provide support for the condition and performance of the National Highway System (NHS). It provides support for the construction of new facilities on the NHS. Also, it ensures that investments of federal-aid funds are directed to support progress toward the achievement of performance targets established in a State's asset management plan for the NHS. NHPP funds are available to state departments of transportation.

Surface Transportation Block Grant (STBG)

The Surface Transportation Block Grant provides flexible funding that may be used by States and localities. STBG funds help preserve and improve the conditions and performance on any federal-aid highway, bridge, and tunnel projects on any public road, pedestrian and bicycle infrastructure, and transit capital projects. The eligibilities for STBG funds include:

- Advanced truck stop electrifications systems
- High accident/high congestion intersections
- Environmental restoration and pollution reduction
- Control of noxious weeds, and noxious aquatic weeds
- Establishment of native species

Funds are distributed based on the following: State's lane miles and total vehicle-miles traveled on the federal-aid highway and estimated contributions to the Highway Trust Fund. STBG funds are available to cities, counties, and MPOs. ***The previous transportation bill - MAP-21, did not re-establish the Highway Bridge Program (HBP), which provided funding for bridge reconstruction or rehabilitation projects.*** However, such projects are eligible for STBG funding. Often referred to as the STBG-HBP program. Iowa, South Dakota, and Nebraska have implemented a Swap program that allows MPOs, at their discretion, to swap targeted federal STBG funding for state dollars.

Congestion Mitigation and Air Quality Improvement (CMAQ)

FAST Act continues the CMAQ program. CMAQ funds public transit improvements, travel demand management strategies, traffic improvements, and public fleet conversions to cleaner fuel. The funds are distributed based on a formula that considers an area's population by county and the severity of its air quality problems within the non-attainment or maintenance areas. If there is not a non-attainment area within the state, the state can utilize the money for projects that reduce emissions, such as the Iowa Clean Air Attainment Program (ICAAP). CMAQ funds are available to cities, counties, and MPOs.

Metropolitan Planning Program

Metropolitan Planning Program provides funding to support transportation planning efforts in urban areas with a population of 50,000 or more. FHWA distributes the funds to the various MPOs through the State DOTs.

FTA Section 5307, 5339, 5310, and 5311 Programs

The Federal Transit Administration (FTA) administers funds to state and local governments for the operation of and capital assistance for public transit activities. The section below elaborates on the existing transit funding sources available for Sioux City Transit System (SCTS).

FTA 5339 capital funds are discretionary funds and are for special projects. The annual amount of funding under this program varies from year to year. Section 5339 funds bus acquisition for fleet/service expansion, bus replacement, and bus-related facilities such as maintenance facilities, transfer facilities, terminals, computers, garage equipment, bus rebuilds, and passenger shelters.

Section 5310 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. This program now includes the former New Freedom (5317) program. Eligible activities under this program include grants for services for individuals with disabilities that went above and beyond ADA's requirement. Projects selected for funding must be included in a locally developed, coordinated public transit-human services transportation plan.

Section 5311 funds provide formula funding to states to support public transportation in areas less than 50,000 populations. It is apportioned in proportion to each state's non-urbanized population. Funds may be used for capital, operating, state administration, and project administration expenses. Section 5311(f) sets aside a minimum of 15 percent of each year's non-urbanized formula funds allocated to Iowa under the 5311 program to support intercity bus service in rural and small urban areas. FTA program funds are available to transit providers.

Transportation Alternatives Program (TAP)

The Transportation Alternatives Program (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 mainly in the right-of-way of former Interstate System routes or other divided highways. Iowa TAP Flex is a portion of Iowa's state TAP fund that is set aside for either TAP or STBG projects; it is up to the MPO whether it will go towards TAP or STBG. TAP funds are available to cities, counties, and MPOs.

Demonstration Funding (DEMO)

This funding comprises different programs and sources. DEMO is a discretionary funding program administered by FHWA through various offices. Special congressional directions or legislative acts appropriate DEMO funding.

Build Grant

The Better Utilizing Investments to Leverage Development (BUILD) grant – previously known as Transportation Investment Generating Economic Recovery (TIGER) is a competitive, federal grant program that has been renewed each year since its start in 2009. Funds are given based on a transportation project's ability to create improvements in the areas of safety, economic competitiveness, and state of good repair, quality of life, and environmental sustainability. BUILD funds are available to cities, counties, and MPOs.

Federal Recreational Trails Program

This program provides federal funding for both motorized and non-motorized trail projects and funded through a takedown from Iowa's TAP funding. The decision to participate in this program is made annually by the Iowa Transportation Commission.

Other Federal Dollars

Other Federal programs include Projects of National and Regional Significance program, The Recreational Trails Program, Transportation, Community, System Preservation Program, and the Community Development Block Grant Program (CDBG – Nebraska only).

State Funding

Road Use Tax

Iowa, Nebraska, and South Dakota use this funding to support transportation improvements throughout the entire state. Part of the money maintained by Iowa, Nebraska, and South Dakota is used for ongoing maintenance and operations of the transportation system and to support intra-city bus system improvements and new highway construction.

Gas Tax

The gas tax is used by Iowa, Nebraska, and South Dakota to fund road projects. A portion of this revenue is distributed to local governments within the state for spending. These funds assist local governments within the SIMPCO planning area to pay for road and bridge maintenance and construction.

Transit Funding

Iowa DOT, NDOT, and SD DOT provide funds for capital and operating assistance to local public transit operations. In FY 2019, Iowa DOT provided $350,800 to SCTS for operating funds. The amount of operating funds has increased over the last ten years. Iowa DOT also participates by providing matching funds for programs partially funded by FTA. Iowa DOT will typically provide up to 50% of the non-federal share of capital grants. This funding comes from the Road Use Tax.

Primary Road Fund (PRF)

The Iowa Transportation Commission program PRF for use on any federal functionally classified primary road. The PRF is the major source of funding appropriated by the legislature on an annual basis for the Iowa DOT's operations budget. For FY 2020, approximately $353 million was appropriated from the Primary Road Fund for the Iowa DOT operations budget.

Transportation Innovation Act Economic Opportunity Program

The NDOT's rapid response Economic Opportunity Program helps attract and sustain economic growth across the State by making local grants for strategic transportation improvements that better connect businesses to Nebraska's statewide, multi-modal transportation network.

Iowa State Recreational Trails Program

Established to fund public recreational trails. This program requires a minimum of 25% match. The matching fund may include grants from other state agencies and donated labor, materials, equipment, and services from a third party (in-kind). Proposed projects must be part of a local, area-wide, regional, or statewide trail plan.

Other State Funding

Other state funding programs include Aviation Programs, Revitalize Iowa's Sound Economy, Economic Opportunity Program, Rail Programs, Recreational Trails Program, and Safety Programs. These funding sources could fund projects listed in the 2045 LRTP.

Local Funding

General Fund

The general fund of the local city or county is the primary source of operation and maintenance funds. Money for capital investments on streets and highways may also come from the sale of bonds.

Transit Funding

The city of Sioux City is the single largest source of local funds for SCTS, providing approximately $2.9 million to SCT in 2019. South Sioux City provided $66,315 to SCTs in FY 2019. SCTS uses funds from both cities as matching funds for capital and operating-assistance programs partially funded by FTA. This fund comes from the General Fund. Fare-box collection also assists with capital and operating funds.

Other Local Resources

Other Local funding resources the MPO expects to fund the projects listed in the 2045 LRTP include property taxes, fares or user fees, and special taxes and assessments.

FUNDING THE 2045 LRTP

As mentioned previously, the MPO is required to ensure that the 2045 LRTP is fiscally constrained. In developing a fiscally constrained plan, it is necessary to forecast the transportation revenue from 2021 to 2045. Each of the categories of transportation revenues for the SIMPCO MPO has been analyzed based on the FY 2015 – FY 2020 funding flow. For planning purposes, SIMPCO MPO has broken down the planning period for the 2045 LRTP into 2021 to 2024, 2025 to 2035 and 2036 to 2045.

SIOUX CITY TRANSIT SYSTEM (SCTS)

Federal dollars utilized by SCTS include Section 5307, 5310, 5311, and 5339. Table 8.1 shows the estimated future federal funding for SCTS. The various federal funding was projected at a three percent inflation rate, using a five-year average from 2014 to 2019. From the table, Section 5339 and 5307 over the planning horizon (2036 to 2045) is a little over 36.6 million. Section 5307 and 5339 funding levels are challenging to predict and can easily be above or below the stated values. The MPO expects that Section 5339 will provide funding for any significant new transit improvements, initiatives, or other future capital requirements. Section 5339 funds fill whatever gaps remain after accounting for formula 5307.

Table 8.1: Projected Federal Funding for Sioux City Transit

Programs	2021 to 2024	2025 to 2035	2036 to 2045
Section 5307 Operating	$5,901,981.03	$16,230,447.82	$14,754,952.57
Section 5309 Capital	$879,744.29	$2,419,296.79	$2,199,360.72
Section 5310	$177,398.96	$487,847.14	$443,497.40
Section 5316 JARC	$12,131.34	$33,361.19	$30,328.35
Section 5317 New Freedom	$5,069.66	$13,941.57	$12,674.15
Section 5339 Capital	$14,163,247.09	$38,948,929.51	$35,408,117.73
Section 5307 Capital	$477,405.00	$1,312,863.75	$1,193,512.50
Total	$21,616,977.37	$59,446,687.76	$54,042,443.42

Table 8.2A shows the historical and estimated future expenditure and revenue for SCTS. The 2019 financial information obtained from SCTS formed the basis for predicting future income and spending. The future revenue and expenditure except for FTA funding for capital expenditure were projected at a three percent inflation rate. SCTS has a goal to replace all their diesel buses with electric by 2045. Also, SCTS has a goal of building a new transit maintenance and storage facility by 2023. The capital expenditure (Other than buses) for the fiscal year 2021 to 2024 includes the cost of building this facility. (Table 8.2B) Section 5339 funding from FTA will cover 85 percent of the total costs of these projects. The remaining 15 percent will come from the funding provided by local governments within the MPO.

Table 8.2A: Historical and Estimated Future Expenditure and Revenue for SCTS

ITEMS	2019	2021 to 2024	2025 to 2035	2036 to 2045
Total Operating Expenditure	$ 5,366,211.00	$ 22,108,789.32	$ 60,799,173.63	$ 55,271,973.30
Total Capital Expenditure (other than buses)	$ 124,730.00	$ 10,027,858.60	$ 1,413,190.90	$ 1,284,719.00
Total Capital Expenditure (Buses purchases)	$ 2,005,095.00	$ 2,583,240.00	$ 7,103,910.00	$ 9,041,340.00
Total Expenditure	$ 7,496,036.00	$ 34,719,887.92	$ 69,316,271.53	$ 65,598,032.30
IDOT Operating Subsidies	$ 350,800.00	$ 1,445,296.00	$ 3,974,564.00	$ 3,613,240.00
FTA Operating Subsidies	$ 1,659,807.00	$ 6,838,404.84	$ 18,805,613.31	$ 17,096,012.10
FTA funding for Capital Expenditure	$ 1,687,587.00	$ 9,743,091.00	$ 6,038,323.50	$ 7,685,139.00
Local Government funding (Sioux City and S. Sioux City)	$ 3,014,590.00	$ 14,386,744.80	$ 34,155,304.70	$ 31,050,277.00
Total Operating Revenue	$ 944,107.00	$ 3,889,720.84	$ 10,696,732.31	$ 9,724,302.10
Total Revenue	$ 7,656,891.00	$ 36,303,257.48	$ 73,670,537.82	$ 69,168,970.20
Balance	$ 160,855.00	$ 1,583,369.56	$ 4,354,266.29	$ 3,570,937.90

Table 8.2B: Breakdown of Transit Capital Expenditure

Time Band	Project Discription	YOE Cost
2021 - 2024		
	Storage/Maintenance Facility	$ 9,513,971
	Vehicle Replacement/Expansion - 4 Buses	$ 2,195,754
Total Expenditure		**$ 11,709,725**
2024 - 2035		
	Vehicle Replacement/Expansion - 11 Buses	$ 6,038,324
Total Expenditure		**$ 6,038,324**
2036-2045		
	Vehicle Replacement/Expansion - 14 Buses	$ 7,685,139
Total Expenditure		**$ 7,685,139**
Grand Total		**$ 25,433,188.00**

Forecasting Local Revenue and Expenditure on Transportation

The local funding sources for transportation improvement include the Road Use Tax Fund (RUTF), Property Taxes, General Obligation Bonds, and Local Option Sales Tax (LOST). The City Street Financial Report issued by Iowa DOT was used to determine the baseline of local revenues available for transportation for cities within the Iowa side of the MPO. For cities within Nebraska and South Dakota portion of the MPO, estimated operation and maintenance cost from the respective DOTs was used to determine the baseline local funding available for transportation improvements.

The table below shows the historical and projected local non-federal aid revenues and operation and maintenance cost. Revenue, operation, and maintenance costs were forecasted at a three percent inflation rate annually, using 2019 figures. The identified balance will go towards other local projects, debt payments, and local matches for state and federal funding.

Table 8.3: Projected local non-federal aid revenues and operation and maintenance cost

Year	Total Non-Federal Aid Revenues	City Operations	City Maintenance	Balance
2020	$ 49,878,579.00	$ 434,226.37	$ 4,025,430.55	$ 45,418,922.08
2021 to 2024	$ 51,112,743.90	$ 434,226.37	$16,101,722.20	$ 34,576,795.33
2025 to 2035	$ 204,450,975.60	$ 1,736,905.48	$44,279,736.05	$ 158,434,334.07
2036 to 2045	$ 562,240,182.90	$ 4,776,490.07	$40,254,305.50	$ 517,209,387.33

Forecasting Federal and State Transportation Fund

The projection of federal and state transportation funds was based on historical funding figures from 2015 to 2020. Each of the funding programs presented in the table below was projected at a three percent inflation rate per year, using a five-year average from 2015 to 2020. From Table 8.4 Iowa NHPP, PRF, and STBG-HBP share of the total federal and state funding from 2015 to 2024 are high compared to that of the future year. This trend is because the base-year figure used to forecast 2025 to 2045 funding did not include monies for I-29 reconstruction. The rationale is that until now, I-29 has not seen significant improvements since it was built in the 1950s. As such, SIMPCO MPO does not expect another significant reconstruction project on I-29 within the next 25 years of the 2045 LRTP.

Table 8.4: Historical and Projected Federal and State Funding by Program

Funding Program	2015 to 2020*	2021 to 2024	2025 to 2035	2036 to 2045
NHPP & PRF-IA*	$ 145,807,000.00	$ 100,120,806.67	$ 26,179,853.33	$ 23,799,866.67
NHPP-NE	$ 14,500,000.00	$ 29,870,000.00	$ 82,142,500.00	$ 74,675,000.00
NHPP - SD	$ 3,856,600.00	$ 5,296,397.33	$ 14,565,092.67	$ 13,240,993.33
STBG-IA	$ 14,298,349.00	$ 9,818,199.65	$ 27,000,049.03	$ 24,545,499.12
STBG-HBP-IA*	$ 77,392,000.00	$ 142,479,488.00	$ 65,990,452.00	$ 59,991,320.00
STBG-NE	$ -	$ 4,861,106.92	$ 13,368,044.03	$ 12,152,767.30
HSIP - SD	$ 7,808,000.00	$ 8,042,240.00	$ 22,116,160.00	$ 20,105,600.00
IA TAP & Flex	$ 1,345,874.00	$ 924,166.81	$ 2,541,458.74	$ 2,310,417.03
TAP-NE	$ 938,883.00	$ 1,289,399.32	$ 3,545,848.13	$ 3,223,498.30
TAP-SD	$ 219,000.00	$ 902,280.00	$ 2,481,270.00	$ 2,255,700.00
CMAQ - IA	$ 20,000.00	$ 82,400.00	$ 226,600.00	$ 206,000.00
CMAQ-NE	$ 20,000.00	$ 41,200.00	$ 113,300.00	$ 103,000.00
PL (IA, NE, SD)	$ 1,355,500.00	$ 1,103,610.67	$ 3,034,929.33	$ 2,759,026.67
Total	$ 265,007,823.00	$ 301,412,405.38	$ 253,903,609.79	$ 230,821,463.45

* Funding programs for cities within Iowa side of the MPO includes I-29 reconstruction project. Funding for I-29 reconstruction were not considered in forecast funding from 2025 to 2045
*STBG-HBP-IA: Sum of funding for city bridge and bridges manged by the IA DOT

TRANSPORTATION PROJECTS 2021 – 2045

Tables 8.5 to 8.13 is a listing of the proposed transportation projects under the following time band, 2021 to 2024, 2025 to 2035 and 2036 to 2045. The tables show funding sources for each of the projects and a balance indicating that the 2045 LRTP is fiscally constrained – see Table 8.14 for a summary of the expected revenue and total cost of the programmed and proposed project for each of the time band. All projects reflect Year of Expenditure (YOE) dollars. In essence, each jurisdiction was advised by the MPO to assume at least a four percent annual inflation rate on all projects.

The MPO realizes that needs may change over time. The first four years of the 2045 LRTP include projects of top priority, listed in the MPO's 2021 to 2024 TIP.
MPO's current needs reflected in the prioritized proposed project done by members formed the basis for allocating available future funding. Proposed projects for which the MPO could not allocate federal funding to, are grouped under the illustrative project list (see Appendix C). Project sponsors may locally fund or seek federal aid for these projects in the future. Federal assistance may come from an application to a discretionary federal transportation program, such as BUILD.

Typically, the project's funding comprises 80% federal funding and 20% local match allocation. However, this percentage could vary based on the funding source and the project sponsoring agency- some jurisdictions provided a higher local match. MPOs can allocate Iowa TAP flex to either TAP or STBG projects. As such, the MPO decided to firstly allocate estimated future Iowa TAP Flex dollars to proposed TAP projects, after which the MPO disbursed the remaining dollars to STBG projects. The Iowa DOT award STBG-HBP funding to specific city bridge projects across the state based on a priority system. SIMPCO MPO assumed that city bridge projects in the table below would have 80% federal funding, up to the $1 million federal-aid obligation limitation imposed on STBG-HBP funding. SIMPCO MPO estimated that at least 5% of the future revenue would fund unforeseen transportation projects relating to preservation, maintenance, and replacing the existing roadways.

Table 8.5: PROGRAMMED CITY & COUNTY'S ROAD & BRIDGE PROJECTS 2021 – 2024

Sponsor	Project Title	Project Description	Pgmd Amnts in $1000's								
			Cost Est.	HSIP-NE	STBG/SWAP - IA *	City Bridge STBG-HBP	STBG-SD	TAP-IA*	PL	FM	Local
SIMPCO	Planning-IA	SIMPCO: MPO Planning	1,084.0	-	-	-	-	-	568.9	-	515.1
SIMPCO	Planning - NE	SIMPCO: MPO Planning	299.5	-	-	-	-	-	258.5	-	110.0
SIMPCO	Planning - SD	SIMPCO: MPO Planning	276.9	-	-	-	-	-	226.8	-	50.1
Sergeant Bluff	First Street Reconstruction	On First Street, from Port Neal Road to C Street	2,000.0	-	1,400.0	-	-	-	-	-	600.0
Sergeant Bluff	The Loess Hills Scenic Trail	The Loess Hills Scenic Trail (Phase 1), Sergeant Bluff, from Barker Park to South Ridge Road	1,240.3	-	-	-	-	325.0	-	-	915.3
Sioux City	Stone Park Boulevard Reconstruction	On Stone Park Blvd, from West Clifton St to Idlewood Avenue	1,610.0	-	1,288.0	-	-	-	-	-	322.0
Sioux City	Dodge Ave Reconstruction	On Dodge Ave, from South Rustin St to South Cecelia St	1,300.0	-	1,040.0	-	-	-	-	-	260.0
Sioux City	Hamilton Blvd Reconstruction	On Hamilton Blvd, from Buckwalter Drive to Sioux City city limits	1,215.0	-	972.0	-	-	-	-	-	243.0
Sioux City	South Cecelia Reconstruction	On South Cecelia St, from Dodge Ave to Morningside	850.0	-	117.0	-	-	-	-	-	733.0
Sioux City	South Rustin Street Reconstruction	On South Rustin Street, from Leech Avenue to Dodge Avenue	1,759.0	-	1,407.0	-	-	-	-	-	352.0
Sioux City	Rebecca Street Reconstruction	On Rebecca Street, from West 16th Street to Villa Avenue	1,539.0	-	1,158.0	-	-	-	-	-	381.0
Sioux City	South Fairmount	On South Fairmount St, From Transit Avenue to Vine Ave	2,756.0	-	1,824.0	-	-	-	-	-	932.0
Sioux City	Big Sioux/Highway 12 Trail	on Big Sioux/Highway 12 Trail, from Big sioux River to Highway 12	600.0	-	-	-	-	300.0	-	-	300.0
S. Sioux City		Placeholder for future safety projects that will be identified in the future	75.0	60.0	-	-	-	-	-	-	15.0
Woodbury Co.	Bridge E-6 Replacement	On D 12, Over CREEK, from Barker Avenue E 0.05 miles in Sectiion 7 T89N R46W	450.0	-	-	450.0	-	-	-	-	-
Woodbury Co.	Port Neal Road Improvement	On K25, from Relocated Port Neal Road South 1.8 Miles to Gelita Plant Entrance, Sec 7 and 18 T87 R47	2,887.0	-	2,125.0	-	-	-	-	762.0	-
Union co.	Various location in the Mitchell	County Pavement Marking	3,601.0	-	-	-	892.0	-	-	-	2,709.0
		Total Project Cost	23,543	60.00	11,331.00	450.00	892.00	625.00	1,054.21	762.00	8,437.40
		Projected Available Funding		144.20	12,034.46	11,298.69	2,694.48	831.91	1,103.61	762.00	8,437.40
		Balance		84.20	703.46	10,848.69	1,802.48	206.91	49.40	-	-

* STBG/SWAP-IA: Aded FA funding for S. Fairmount to the forecasted amount. Since this project was rolled over from 2020 to 2021. Added the TAP flex dollars to this balance because, the MPO allocated TAP flex dollars towards STBG projects. The MPO allocated just 4.5 dollars in TAP flex monies to TAP projects from 2021 to 2024

Table 8.6: PROGRAMMED CITY'S TRAIL PROJECTS 2021 – 2024

			Pgm Amnts in $1000's		
Sponsor	**Project Title**	**Project Description**	**Cost Est.**	**TAP-IA***	**Local**
Sergeant Bluff	The Loess Hills Scenic Trail	The Loess Hills Scenic Trail (Phase 1), Sergeant Bluff, from Barker Park to South Ridge Road	1,240.3	325.0	915.3
Sioux City	Big Sioux/Highway 12 Trail	on Big Sioux/Highway 12 Trail, from Big sioux River to Highway 12	600.0	300.0	300.0
		Total Project Cost	1,840.3	625.0	1,215.3
		Projected Available Funding		831.9	1,215.3
		Balance		206.9	-
*TAP-IA: Added FA funding for Big Sioux R/Highway 12 trail project to the forecasted values, since the project has been rolled over from 2020 to 2021. The MPO allocated only 4.5 dollars in TAP flext monies to TAP projects in 2023.					

Table 8.7: PROGRAMMED DOT'S PROJECTS 2021 – 2024

				Pgmd Amnts in $1,000's					
Sponsor	**Project Title**	**Project Description**	**Cost Est.**	**NHPP&PRF - IA**	**NHPP-SD**	**NHPP-NE**	**HSIP-SD**	**STBG-SD**	**State**
IA DOT		I-129: MISSOURI RIVER IN SIOUX CITY	4,970	4,970.0	-	-	-	-	-
IA DOT		I-29: RECONSTRUCTION IN SIOUX CITY	209	209.0	-	-	-	-	-
IA DOT		US20: US 75/IA 12 INTERCHANGE IN	302	302.0	-	-	-	-	-
IA DOT		I-29: I-129 INTERCHANGE IN SIOUX CITY	1,492	1,492.0	-	-	-	-	-
IA DOT		I-29: UP RR 1.9 MI S OF US 75 (NB/SB)	540	540.0	-	-	-	-	-
IA DOT		I-29: 8TH ST 2.0 MI S OF US 20 (NB/SB)	480	480.0	-	-	-	-	-
IA DOT		US77: MISSOURI RIVER IN SIOUX CITY (STATE SHARE)	144	144.0	-	-	-	-	-
IA DOT		I-29: MONONA CO TO S OF SERGEANT BLUFF INTERCHANGE (SB)	2,842	2557.8	-	-	-	-	284.2
IA DOT		I-129: MISSOURI RIVER IN SIOUX CITY (STATE SHARE)	150	150.0	-	-	-	-	-
IA DOT		US20: US 75/IA 12 IN SIOUX CITY TO LITTLE WHISKEY CR (EB & WB)	12,554	10,043.2	-	-	-	-	2,510.8
IA DOT		US20: SERGEANT RD 2.1 MI W OF IA 12 (EB & WB)	1,000	1,000.0	-	-	-	-	-
IA DOT		US20: PROPOSED RD 0.5 MI W OF IA 12 (EB & WB)	700	700.0	-	-	-	-	-
NDOT	Missouri River Bridge	Missouri River Bridge, South Sioux City, Bridge deck overlay	6,134	-	-	6,134.0	-	-	-
NDOT	South Sioux City Bridges	South Sioux City Bridges - 5 bridges on I-129 at three locations	13,450	-	-	10,700.0	-	-	2,750.0
SDDOT	I-29- Mitchell Region	Crossroad Improvements: I-90 - Sioux Falls Areas, 1-29-Mitchell Region	2,700	-	2,438.0	-	-	-	262.0
SDDOT	I-29N	I29N - Strs 1.6 of the North Sioux City Interch (Exit 1): Elk Point Interch; 0.2 N of the Elk Point Interch over RR	1,732	-	1,576.0	-	-	-	156.0
SDDOT	Mitchell Region	Durable Pavement Marking	3,232	-	-	-	3,232.0	-	-
SDDOT	Mitchell Region	Interstate Median Protection for Mitchell Region	1,051	-	-	-	946.0	-	105.0
SDDOT	Mitchell Region	High Friction Surface Treatment	2,717	-	-	-	2,445.0	-	272.0
SDDOT	Mitchell Region	Rumble stripes and High Grade Polymer Pavement Markings	883	-	-	-	315.2	-	567.8
SDDOT	Mitchell Region	Corridor Signing, PE	1,104	-	-	-	1,104.0	-	-
SDDOT	Mitchell Region	2023 Regionwide Approach Slab Repair	1,104	-	-	-	-	905.0	199.0
SDDOT	Mitchell Region	Intersection Improvements	169	-	152.0	-	-	-	17.0
		Total Project Cost	59,659	22,588.0	4,166.0	16,834.0	8,042.2	905.0	7,123.8
		Projected Available Funding		100,120.8	5,296.4	29,870.0	8,042.2	2,694.5	7,123.8
		Balance		77,532.8	1,130.4	13,036.0	-	1,789.5	-

Table 8.8: PROPOSED CITY & COUNTY'S ROAD& BRIDGE

			Amnts in $1000's							
Sponsor	**Project Title**	**Project Description**	**Cost Est.**	**STBG-IA ***	**STBG-NE**	**City Bridge (STBG-**	**TAP-IA ***	**PL**	**TAP-NE**	**Local**
Sergeant Bluff	1st Street	From east of South Lewis Blvd intersection east to the intersection of Old Lakeport Road	2,762.0	1,930.0	-	-	-	-	-	832.0
Sergeant Bluff	8th Street	From intersection of Harbor Drive east to UPRR at South Lewis Blvd	1,500.0	1,000.0	-	-	-	-	-	500.0
Sergeant Bluff	S. Lewis Blvd	From intersection of South Ridge Road north to North City Limits; Widen at West Ridge Road 300 feet each way	2,262.0	1,582.0	-	-	-	-	-	680.0
Sergeant Bluff	Loess Hills Connector Trail	From First Street and Baker Drive north through Baker Park east to Old Lakeport Road and north to Ridge Road	1,000.0	-	-	-	600.0	-	-	400.0
Sioux City	18th Street Viaduct	Floyd Blvd to Steuben Street	18,937.2	1,000.0	-	1,000.0	-	-	-	16,937.2
Sioux City	Hamilton Blvd	Intersection Triview and Hamilton	1,350.0	1,080.0	-	-	-	-	-	270.0
Sioux City	Lakeport Road	Intersection Lakeport and Sergeant Road	2,800.0	1,500.0	-	-	-	-	-	1,300.0
Sioux City	W 19th Street	Hamilton Blvd to Helmer St	907.7	726.2	-	-	-	-	-	181.5
Sioux City	S. Lewis Blvd	Singing Hills to City Limits	4,153.5	1,000.0	-	-	-	-	-	3,153.5
Sioux City	Hamilton Blvd	W 15th to W 20th	1,920.0	1,298.6	-	-	-	-	-	621.4
Sioux City	11th Street	Cargill Entrance to Missouri Valley Steel Entrance	4,495.0	1,000.0	-	-	-	-	-	3,495.0
Sioux City	11th Street Over Floyd River (#010540)	Bridge Deck	2,605.0	-	-	1,000.0	-	-	-	1,605.0
Sioux City	Correctionville Road (#504670)	Culvert Replacement	429.0	-	-	343.2	-	-	-	85.8
Sioux City	Stueben Street over Drainage Ditch (#010870)	Bridge Replacement: Between 11th St. and 18th St.	5,224.5	-	-	1,000.0	-	-	-	4,224.5
Sioux City	Dakota Dunes Ped Bridge	Pedestrian Bridge that will expand the Big Sioux River from Riverside Park to Dakota Dunes.	2,000.0	-	-	-	300.0	-	-	1,700.0
Sioux City	Pedestrian Bridge	Signature pedestrian bridge that will expand across the Missouri River from Chris Larsen Park to Scenic Park	11,000.0	-	-	-	300.0	-	-	10,700.0
Sioux City	Loess Hills Connector Trail	City of Sioux City Portion	2,550.0	-	-	-	300.0	-	-	2,250.0
Sioux City	PlyWood Trail	City of Sioux City Portion	1,225.0	-	-	-	200.0	-	-	1,025.0
Sioux City	Floyd Blvd Connector	4th St to Riverfront Trail	700.0	-	-	-	100.0	-	-	600.0
Sioux City	Hoeven Drive	11th Street to 28th Street	10,566.4	2,010.0	-	-	-	-	-	8,556.4
Sioux City	Hawkeye Drive	18th Street to 28th Street	6,785.0	1,000.0	-	-	-	-	-	5,785.0
Sioux City	Gordon Drive	Stormwater Infrastructure	20,000.0	1,500.0	-	-	-	-	-	18,500.0
Sioux City	South Cecelia St.	Dodge Avenue to Morningside Ave	1,725.0	1,400.0	-	-	-	-	-	325.0
Sioux City	Dace Ave over Floyd R (#010470)	Bridge Deck	2,340.0	-	-	1,000.0	-	-	-	1,340.0
Sioux City	6th St. Bridge over Floyd R. (#010530)	Bridge Deck	2,390.0	-	-	1,000.0	-	-	-	1,390.0
Sioux City	4th St. Bridge over Floyd R (#010500)	Bridge Deck	2,500.0	-	-	1,000.0	-	-	-	1,500.0
Sioux City	4th St. Bridge over Railroad (#010491)	Overlay	1,350.0	-	-	1,000.0	-	-	-	350.0
Sioux City	Floyd Blvd Bridge over 3rd St and railroad (#010821)	Overlay	2,500.0	-	-	1,000.0	-	-	-	1,500.0
Sioux City	28th St Bridge over Floyd R. (#010611)	Overlay	1,045.0	-	-	1,000.0	-	-	-	45.0
Sioux City	Martha St. Bridge (#504300)	Bridge Replacement	500.0	-	-	500.0	-	-	-	-

Sioux City	Larsen Park Road (#010475)	Bridge Deck	350.0	-	-	350.0	-	-	-	-
Sioux City	West St. Bridge over Hanford Creek (#010730)	Bridge Replacement	950.0	-	-	950.0	-	-	-	-
S. Sioux City	E. 25th Street	G Street to Riverview Drive.	847.5	-	678.0	-	-	-	-	169.5
S. Sioux City	W. 29th Street	From Daniel's Lane to Lake Avenue	784.5	-	627.6	-	-	-	-	156.9
Dakota City	Pine Street	From Dakota Avenue to Highway 77	3,949.5	-	3,159.6	-	-	-	-	789.9
S. Sioux City	Atokad Drive	From West 39th Street to Highway 77	2,072.2	-	1,657.8	-	-	-	-	414.4
S. Sioux City	142nd Street	From Hwy 20, starting at Lite Form and back to Old Hwy 20	912.0	-	729.6	-	-	-	-	182.4
S. Sioux City	Dixon Path	Connecting Dixon Path to Golf Road	1,777.3	-	1,421.8	-	-	-	-	355.5
S. Sioux City	Lake Avenue	From Old Highway 20 to Old Saw Mill Road	1,812.0	-	1,449.6	-	-	-	-	362.4
S. Sioux City	New Street	Extending Commerce Way and connecting to West 21st Street	413.4	-	330.7	-	-	-	-	82.7
S. Sioux City	Veterans Trails	From Foundry Rd to 39th and C St	672.0	-	-	-	-	-	537.6	134.4
Plymouth Co.	County RD C-80	From K-22 east 3.425 mi. to Hwy 75	3,400.0	2,380.0	-	-	-	-	-	1,020.0
Woodbury Co.	South Bridge Interchange	Southridge Interchange on I-29	18,385.0	3,943.0	-	-	-	-	-	14,442.0
Woodbury Co.	Old Hwy 75	Old Hwy 75: SCL Sgt Bluff to 260th Street Intersection	2,322.0	1,850.0	-	-	-	-	-	464.0
Woodbury Co.	Old Hwy 141	Old Hwy 141-SCL Sioux limits to MPO boundary	1,551.00	1,240.00	-	-	-	-	-	311.00
Union Co.	CR #1B	4.5 miles south of Jefferson SD to I-29 Exit 4	2,200.0	-	-	-	-	-	-	2,200.0
SIMPCO	Planning - IA		2,155.4	-	-	-	-	1,650.1	-	505.3
SIMPCO	Planning - SD		666.3	-	-	-	-	538.6	-	127.7
SIMPCO	Planning - NE		741.9	-	-	-	-	611.5	-	130.4
		Total Project Cost	161920.7	27,439.80	10,054.66	11,143.20	1,800.00	2,800.16	537.60	111,700.87
		Projected Available Funding		27,741.50	13,368.04	31,071.39	1,800.00	3,034.93	3,545.85	111,700.87
		Balance		301.70	3,313.39	19,928.19	0.00	-	3,008.25	-

Table 8.9: PROPOSED CITY'S TRAIL PROJECTS 2025 – 2035

			Amnts in $1000's			
Sponsor	**Project Title**	**Project Description**	**Cost Est.**	**TAP-IA ***	**TAP-NE**	**Local**
Sergeant Bluff	Loess Hills Connector Trail	From First Street and Baker Drive north through Baker Park east to Old Lakeport Road and north to Ridge Road	1,000.0	600.0	-	400.0
Sioux City	Dakota Dunes Ped Bridge	Pedestrian Bridge that will expand the Big Sioux River from Riverside Park to Dakota Dunes.	2,000.0	300.0	-	1,700.0
Sioux City	Pedestrian Bridge	Signature pedestrian bridge that will expand across the Missouri River from Chris Larsen Park to Scenic Park	11,000.0	300.0	-	10,700.0
Sioux City	Loess Hills Connector Trail	City of Sioux City Portion	2,550.0	300.0	-	2,250.0
Sioux City	PlyWood Trail	City of Sioux City Portion	1,225.0	200.0	-	1,025.0
Sioux City	Floyd Blvd Connector	4th St to Riverfront Trail	700.0	100.0	-	600.0
S. Sioux City	Veterans Trails	From Foundry Rd to 39th and C St	672.0	-	537.6	134.4
		Total Project Cost	**19,147.0**	1,800.0	537.6	16,809.4
		Projected Available Funding		1,800.0	3,545.8	16,809.4
		Balance		0.0	3,008.2	-
*TAP-IA: MPO decided to firstly allocate estimated future Iowa TAP Flex dollars to proposed TAP projects, after which the MPO disbursed the remaining dollars to STBG projects						

Table 8.10: PROPOSED DOT'S PROJECTS 2025 – 2035

			Amnts in $1,000's						
Sponsor	**Project Title**	**Project Description**	**Cost Est.**	**NHPP& PRF - IA**	**STBG-HBP -IA**	**NHPP - NE**	**NHPP - SD**	**HSIP - SD**	**State**
IA DOT	IA 12	I-29 Gordon Drive Viaduct	54,000.0	-	22,059.5	-	-	-	31,940.5
IA DOT	US 75	I-29 to Plymouth Co.	9,200.0	7,360.0	-	-	-	-	1,840.0
IA DOT	IA 376	over Cunningham Drive	4,000.0	4,000.0	-	-	-	-	
IA DOT	Maintenance & preservation		35,523.1	14,819.9	-	-	-	-	20,703.2
NE DOT	Maintenance & Preservation		4,366.0	-	-	3,492.8	-	-	873.2
SD DOT	I-29 Exit 2	I29 Exit 2: Signalization and access improvement	950.0	-	-	-	760.0	-	190.0
SD DOT	I-29: N/S	I-29: N/S: Minor joint and spall repair	950.0	-	-	-	760.0	-	190.0
SD DOT	I-29: N/S	I-29:N/S: Deck overlay, upgrad approach rails and approaches	550.0	-	-	-	440.0	-	110.0
SD DOT	Maintenance & preservation		14,713.0	-	-	-	1,505.1	-	13,207.9
SD DOT	Roadway safety improvement		14,094.0					7,808.0	6,286.0
SD DOT	I29-Exit 4 (North Shore Dr), North Sioux City	I29-Exit 4(north Shore Dr) in North Sioux City	13,875.0	-	-	-	11,100.0	-	2,775.0
		Total Project Cost	152,221.1	26,179.9	22,059.5	3,492.8	14,565.1	7,808.0	78,115.8
		Projected Available Funding		26,179.9	34,919.1	82,142.50	14,565.09	22,116.16	78,115.83
		Balance		0.0	12859.6	78,649.70	0.0	14,308.16	0.0

Table 8.11: PROPOSED CITY & COUNTY'S ROAD & BRIDGE PROJECTS 2036 – 2045

			Amnts in $1000's						
Sponsor	Project Title	Project Description	Cost Est.	STBG-IA*	STBG-NE	City Bridge (STBG-HBP)	TAP - IA*	PL	Local
Sergeant Bluff	S. Lewis Blvd.	Reonstruction: From 200 ft. N. of 1st intersection N. of Ridge Rd	3,477.0	2,427.0	-	-	-	-	1,050.0
Sergeant Bluff	Port Neal Road	School Zone from Warrior Road north to Port Neal Road	3,500.0	2,400.0	-	-	-	-	1,100.0
Sergeant Bluff	S. Lewis Blvd Ped Crossing Bridge	School Zone at Topaz and Port Neal east to the Sergeant Bluff Recreation Complex Warrior Road north to Port Neal Road	4,000.0	-	-	-	2,000.0	-	2,000.0
Sioux City	Talbot Road	Military Rd to Memorial Dr	30,400.0	500.0	-	-	-	-	29,900.0
Sioux City	Floyd Blvd	4th St to 33rd St	2,625.0	2,100.0	-	-	-	-	525.0
Sioux City	Morningside Ave	Peters Ave to Jay Ave	8,100.0	2,500.0	-	-	-	-	5,600.0
Sioux City	W 4th St	Market St. to Wesley Pky	7,184.3	2,500.0	-	-	-	-	4,684.3
Sioux City	Park and Ride		50.0	10.0	-	-	-	-	40.0
Sioux City	29th St	Jones St. to Cheyenne Blvd	4,210.7	1,000.0	-	-	-	-	3,210.7
Sioux City	27th St.	Court St. to Stone Park Blvd	9,750.0	2,000.0	-	-	-	-	7,750.0
Sioux City	Morningside Ave	S. Lakeport St to City Limits	3,798.9	1,000.0	-	-	-	-	2,798.9
Sioux City	W 3rd St	Hamilton Blvd to Perry St	1,245.0	996.0	-	-	-	-	249.0
Sioux City	Division St	Pueblo Court to Outer Dr N.	1,135.4	908.3	-	-	-	-	227.1
Sioux City	King's Highway	Hamilton Blvd to Meadow Lane	2,519.1	1,000.0	-	-	-	-	1,519.1
Sioux City	Glenn Ave	S St Aubin St to Morningside Ave	21,183.7	3,932.7	-	-	-	-	17,251.0
Sioux City	Orleans Ave	Morningside Ave to Glen Ellen Rd (New Bridge only)	16,875.0	-	-	1000	-	-	15,875.0
Sioux City	Leech Ave PPCB (#010461)	Replacement	800.0	-	-	800	-	-	-
Sioux City	46th St Bridge (#010710)	Bridge Deck	3,000.0	-	-	1000	-	-	2,000.0
Sioux City	Country Club Bridge (#010790)	Bridge Deck	2,000.0	-	-	1000	-	-	1,000.0
Sioux City	Old Hwy 141 (#053461)	Rehabilitation	3,000.0	-	-	1000	-	-	2,000.0
Sioux City	Old Hwy 141 (#053480)	Replacement	900.0	-	-	900	-	-	-
Sioux City	Stone Park Blvd (#501450)	Bridge Deck	2,000.0	-	-	1,000.0	-	-	1,000.0
Sioux City	Hamilton Blvd(#503270)	Bridge Deck	3,000.0	-	-	1,000.0	-	-	2,000.0
Sioux City	Hamilton Blvd(#503280)	Bridge Deck	3,000.0	-	-	1,000.0	-	-	2,000.0
S. Sioux City	New Street	Connecting Veterans Drive to Pine Street in Dakota City	8,200.0	-	6,560.0	-	-	-	1,640.0
Woodbury Co.	D51	D51: Port Neal road to Old hwy 75	750.0	530.0	-	-	-	-	215.0
SIMPCO	Planning - IA		1,959.4	-	-	-	-	1,500.1	459.4
SIMPCO	Planning - SD		605.7	-	-	-	-	489.6	116.1
SIMPCO	Planning - NE		674.4	-	-	-	-	555.9	118.5
		Total Project Cost	149,943.7	23,804.0	6,560.0	8,700.0	2,000.0	2,545.6	106,329.1
		Projected Available Funding		24,855.9	12,152.8	28,246.7	2,000.0	2,759.0	106,329.1
		Balance		1,051.9	5,592.8	19,546.7	0.0	213.5	-

*STBG-IA: MPO decided to firstly allocate estimated future Iowa TAP Flex dollars to proposed TAP projects, after which the MPO distributed the remailing dollars to STBG projects.

Table 8.12: PROPOSED CITY'S TRAIL PROJECTS 2036 – 2045

			Amnts in $1000's		
Sponsor	**Project Title**	**Project Description**	**Cost Est.**	**TAP - IA***	**Local**
Sergeant Bluff	S. Lewis Blvd Ped Crossing Bridge	School Zone at Topaz and Port Neal east to the Sergeant Bluff Recreation Complex Warrior Road north to Port Neal Road	4,000.0	2,000.0	2,000.0
		Total Project Cost	4,000.0	2,000.0	2,000.0
		Projected Available Funding		2,000.0	2,000.0
		Balance		0.0	0.0
*TAP-IA: MPO decided to firstly allocate estimated future Iowa TAP Flex dollars to proposed TAP projects, after which the MPO disbursed the remaining dollars to STBG projects.					

Table 8.13: PROPOSED DOT'S PROJECTS 2036 – 2045

			Amnts in $1000's				
Sponsor	**Project Title**	**Project Description**	**Cost Est.**	**NHPP&PRF-Iowa**	**NHPP - NE**	**NHPP - SD**	**State**
IA DOT	IA 376	Bridge over Floyd River	3,500.00	2,800.00	-	-	700.00
IA DOT	IA 12	Bridge repair/replacement	860.00	688.00	-	-	172.00
IA DOT	Maintenance & Preservation		59,065.75	20,311.80	-	-	38,753.95
NE DOT	Maintenance & Preservation		6,781.00		5,424.80	-	1,356.20
SD DOT	I-29: N/S	I-29: N/S:major joint and spall repair	1,200.00	-	-	960.00	240.00
SD DOT	I-29: S	1-29: S: major joint and spall repair	700.00	-	-	560.00	140.00
SD DOT	I-29: N/S	I-29: N/S: Epoxy Chip Seals	750.00	-	-	600.00	150.00
SD DOT	I-29: N/S	I-29: N/S: Deck overlay, upgrad approach rails and approaches	600.00	-	-	480.00	120.00
SD DOT	Maintenance & Preservation		23,056.00	-	-	10,640.00	12,416.00
		Total Project Cost	96,512.75	23,799.80	5,424.80	13,240.00	54,048.15
		Projected Available Funding		23,799.9	74,675.0	13,241.0	54,048.2
		Balance		0.1	69,250.2	1.0	-

Table 8.14: SUMMARY OF PROJECTED REVENUE AND PROPOSED INFRASTRUCTURE EXPENDITURE, 2021 TO 2045

	Amnts in $1000's											
Year Band	**2021 to 2024**				**2025 to 2035**				**2036 to 2045**			
Bicycle & Pedestrian	**Total**	**FA**	**State**	**Local**	**Total**	**FA**	**State**	**Local**	**Total**	**FA**	**State**	**Local**
Total Trail Projects Cost	1,840.25	625.00	-	1,215.25	19,147.04	2337.6	-	16,809.44	4,000.04	2,000.04	-	2,000.00
Forecasted Revenue	2,047.16	831.91	-	1,215.25	22,155.29	5,345.85	-	16,809.44	4,000.04	2,000.04	-	2,000.00
Balance	206.91	206.91	-	0.00	3,008.25	3,008.25	-	-	-	-	-	-
Streets & Highway												
Estimated Operation & Maintenance	2,297.00		2,297.00	-	54,602.13	19,817.80	34,784.33	-	88,902.75	36,376.60	52,526.15	-
Estimated Project Cost (Road & Bridges)	77,404.00	56,043.24	14,813.76	6,547.00	241,148.08	102,925.16	43,331.50	94,891.42	151,003.14	45,152.00	1,522.0	104,329.14
Forecasted Revenue	186,628.51	146,926.34	33,155.17	6,547.00	425,110.87	245,351.04	84,868.41	94,891.42	335,348.42	170,832.43	60,186.85	104,329.14
Balance	106,927.51	90,883.10	16,044.41		129,360.66	122,608.08	6,752.58	-	95,442.53	89,303.83	6,138.70	-

SUMMARY

The MPO has developed the 2045 SIMPCO MPO LRTP utilizing cooperative involvement of various local, regional, state, and federal transportation organizations. The LRTP expresses the MPO objectives for achieving efficient transportation systems in the Metropolitan Planning Area. The document is multimodal and intermodal in its composition. It will enable the transportation interests in the Metropolitan Planning Area to use it as a guide for future transportation planning and programming.

The LRTP is a working document and will continually be updated at least once every five years or as the need arises to serve as a guiding document of information. Thereby addressing current and projected transportation needs for the Metropolitan Planning Area from a planning perspective. This LRTP will be used as a means of identifying areas of need and developing means of addressing such issues. It is also the intent of the document to allow for citizen participation and the needs of the various transportation interests of the Metropolitan Planning Area.

APPENDIX A

Appendix A details information gathered at public input ZOOM presentation, the public input survey, as well as information on the public input that was, gathered during the 30 day public input period.

LONG RANGE TRANSPORTATION PLAN MEETING LIST

2045 SIMPCO LRTP Meeting List		
1/3/2019	MPO TTC Meeting	Outline and schedule review
1/3/2019	MPO Policy Board Meeting	Outline and schedule review
4/24/2019	MPO TTC Meeting	Draft Chapter 1
4/25/2019	MPO Policy Board Meeting	Draft Chapter 1
7/9/2019	MPO TTC Meeting	Draft Chapter 2
7/11/2019	MPO Policy Board Meeting	Draft Chapter 2
9/4/2019	MPO TTC Meeting	Draft Chapter 3
9/5/2019	MPO Policy Board Meeting	Draft Chapter 3
11/6/2019	MPO TTC Meeting	Draft Chapter 4
11/7/2019	MPO Policy Board Meeting	Draft Chapter 4
1/8/2020	MPO TTC Meeting	Draft Chapter 6
1/9/2020	MPO Policy Board Meeting	Draft Chapter 6
3/3/2020	MPO TTC Meeting	Draft Chapter 7
3/5/2020	MPO Policy Board Meeting	Draft Chapter 7
5/6/2020	MPO TTC Meeting	Draft Chapter 8
5/7/2020	MPO Policy Board Meeting	Draft Chapter 8
7/7/2020	MPO TTC Meeting	Draft Chapter 5
7/9/2020	MPO Policy Board Meeting	Draft Chapter 5
11/4/2020	MPO TTC Meeting	Final Draft
11/5/2020	MPO Policy Board Meeting	Final Draft
12/3/2020	Stakeholders Public Input Meeting	Public Input Zoom session
1/7/2021	MPO Policy Board Meeting	Final Approval

ONLINE SURVEY

SIMPCO staff sought input on the 2045 LRTP before starting the draft plan. On July 23, 2014, staff sent out a link to individuals, groups, organizations, and agencies that had expressed an interest in the future transportation system in the SIMPCO MPO area. The idea behind the survey was to gain public input on the 2045 LRTP. Those who received the survey were asked to forward it on to gain more participation. Tables A.1 to A.21 show the questions and responses from the survey that was sent out for public comment, there were 30 responses received.

A.1 Question 1

Q1 Considering the following available modes of transportation in the Sioux City metropolitan area, how do you rate the quality and ease of use of each?

Answered: 30 Skipped: 0

	VERY GOOD	GOOD	SATISFACTORY	NEEDS IMPROVEMENT	UNSATISFACTORY	TOTAL	WEIGHTED AVERAGE
Travel by motor vehicle	34.48% 10	37.93% 11	17.24% 5	10.34% 3	0.00% 0	29	2.03
Travel by bicycle	0.00% 0	10.00% 3	26.67% 8	50.00% 15	13.33% 4	30	3.67
Pedestrian travel by sidewalks	0.00% 0	20.00% 6	30.00% 9	40.00% 12	10.00% 3	30	3.40
Travel by bus	0.00% 0	8.33% 2	45.83% 11	37.50% 9	8.33% 2	24	3.46
Travel by air	0.00% 0	14.81% 4	51.85% 14	22.22% 6	11.11% 3	27	3.30

A.2 Question 2

Q2 Indicate your frequency of use or participation in the past twelve months for each of the following

Answered: 30 Skipped: 0

	NEVER	ONCE OR TWICE	3-12 TIMES	13 -24 TIMES	MORE THAN 24 TIMES	TOTAL
Sioux City Transit System (SCTS)	90.00% 27	3.33% 1	0.00% 0	3.33% 1	3.33% 1	30
Paratransit or Siouxland Regional Transit System (SRTS)	93.33% 28	0.00% 0	0.00% 0	3.33% 1	3.33% 1	30
Shared a ride to/from work (Uber, Lyft, Private carpool)	66.67% 20	20.00% 6	10.00% 3	0.00% 0	3.33% 1	30
Sioux Gateway Airport for air travel	33.33% 10	53.33% 16	13.33% 4	0.00% 0	0.00% 0	30
Taxi	96.43% 27	0.00% 0	0.00% 0	3.57% 1	0.00% 0	28
Bike trail (recreation or commute)	20.69% 6	27.59% 8	24.14% 7	3.45% 1	24.14% 7	29
On-road bike routes (recreation or commute)	43.33% 13	20.00% 6	13.33% 4	6.67% 2	16.67% 5	30
Walked to a destination instead of driving	10.00% 3	40.00% 12	30.00% 9	6.67% 2	13.33% 4	30
Attended a transportation related meeting	36.67% 11	36.67% 11	16.67% 5	6.67% 2	3.33% 1	30

A.3 Question 3

Q3 Rate the following aspects of the transportation system in the Sioux City metropolitan area.

Answered: 30 Skipped: 0

	NOT AN ISSUE/ACCEPTABLE	TOLERABLE	POOR	UNACCEPTABLE	TOTAL
Congestion levels on major streets during peak times	50.00% 15	43.33% 13	3.33% 1	3.33% 1	30
Condition of major streets, highways and interstate	40.00% 12	40.00% 12	16.67% 5	3.33% 1	30
Availability of bike paths	10.00% 3	53.33% 16	30.00% 9	6.67% 2	30
Availability of shared road with bicycles/pedestrians	3.33% 1	26.67% 8	53.33% 16	16.67% 5	30
Availability of public transit services (bus)	25.00% 7	42.86% 12	21.43% 6	10.71% 3	28
Availability of sidewalks and crosswalk areas	23.33% 7	46.67% 14	26.67% 8	3.33% 1	30
Traffic safety and controls on major streets (intersections) including railroad crossings	33.33% 10	50.00% 15	13.33% 4	3.33% 1	30
Neighborhood traffic safety	36.67% 11	50.00% 15	13.33% 4	0.00% 0	30

A.4 Question 4

Q4 The LRTP lays out project planning for the next 25 years. Please rate each of the following transportation planning efforts within the Sioux City metropolitan area.

Answered: 30 Skipped: 0

	VERY IMPORTANT	IMPORTANT	INDIFFERENT	NOT IMPORTANT	TOTAL	WEIGHTED AVERAGE
Widening of busy roads	13.33% 4	56.67% 17	6.67% 2	23.33% 7	30	2.40
Safety and traffic flow improvements at intersections	53.33% 16	33.33% 10	13.33% 4	0.00% 0	30	1.60
Ongoing maintenance and preservation of streets and highways	56.67% 17	36.67% 11	6.67% 2	0.00% 0	30	1.50
New interchanges and roads to respond to future growth	36.67% 11	36.67% 11	16.67% 5	10.00% 3	30	2.00
More bicycle paths and trails	50.00% 15	30.00% 9	16.67% 5	3.33% 1	30	1.73
Bicyclists and pedestrian safety	53.33% 16	36.67% 11	10.00% 3	0.00% 0	30	1.57
Transit service (bus) within and between cities in the metropolitan area	37.93% 11	37.93% 11	17.24% 5	6.90% 2	29	1.93
Implementation of traffic calming measures to slow traffic in residential areas and school zones	33.33% 10	46.67% 14	16.67% 5	3.33% 1	30	1.90

A.5 Question 5

Q5 What do you think is the most important transportation need in our region today? Choose three (3)

Answered: 30 Skipped: 0

ANSWER CHOICES	RESPONSES	
Repair our existing roads, bridges and rail system	76.67%	23
Provide more travel options (bus, biking, walking)	53.33%	16
Reduce traffic congestion	20.00%	6
Adequate dedicated transportation funding	43.33%	13
Reduce greenhouse gas emissions and improve air quality	30.00%	9
Improve safety	50.00%	15
Add freight capacity	0.00%	0
Other (please specify)	6.67%	2
Total Respondents: 30		

A.6 Question 6

Q6 Rate your willingness to have your tax dollars used to support the following transportation improvements in the Sioux City metropolitan area.

Answered: 30 Skipped: 0

	VERY WILLING	SOMEWHAT WILLING	NOT SURE	NOT WILLING	TOTAL	WEIGHTED AVERAGE
Developing new pedestrian and bike facilities	51.72% 15	27.59% 8	17.24% 5	3.45% 1	29	1.72
Improving existing pedestrian and bike facilities	48.28% 14	41.38% 12	10.34% 3	0.00% 0	29	1.62
Improving existing interchanges	24.14% 7	48.28% 14	27.59% 8	0.00% 0	29	2.03
Adding interchanges on interstates	17.24% 5	24.14% 7	34.48% 10	24.14% 7	29	2.66
Improving transit service (bus)	31.03% 9	37.93% 11	17.24% 5	13.79% 4	29	2.14
Improving the timing on traffic lights	50.00% 15	33.33% 10	10.00% 3	6.67% 2	30	1.73
Reduce traffic delays caused by trains	40.00% 12	30.00% 9	13.33% 4	16.67% 5	30	2.07
Improving roads/highway that link rural counties to Sioux City metro area	20.00% 6	50.00% 15	30.00% 9	0.00% 0	30	2.10
Setting aside land for traffic corridors and roads	10.00% 3	43.33% 13	36.67% 11	10.00% 3	30	2.47
Improving transportation service for seniors and persons with disabilities	43.33% 13	33.33% 10	16.67% 5	6.67% 2	30	1.87
Improving airport facilities in the region	23.33% 7	43.33% 13	26.67% 8	6.67% 2	30	2.17
Improving the areas freight transportation facilities	10.00% 3	40.00% 12	43.33% 13	6.67% 2	30	2.47
Adding lanes to interstates	0.00% 0	24.14% 7	24.14% 7	51.72% 15	29	3.28

A.7 Question 7

Q7 How many miles do you drive a vehicle per week?

Answered: 30 Skipped: 0

ANSWER CHOICES	RESPONSES	
<10 miles	10.00%	3
10-20 miles	6.67%	2
21-50 miles	26.67%	8
51-100 miles	26.67%	8
>100 miles	30.00%	9
TOTAL		30

A.8 Question 8

Q8 How far is your commute to work?

Answered: 30 Skipped: 0

ANSWER CHOICES	RESPONSES	
less than 1 mile	20.00%	6
1 to <5 miles	43.33%	13
5 to <10 miles	23.33%	7
10 to <20 miles	10.00%	3
20+ miles	3.33%	1
TOTAL		30

A.9 Question 9

Q9 Indicate the statement that best describes your impact on existing transportation infrastructure based on level of use. Please note, vehicle size/type, occupancy, frequency of use, and distance all contribute to a road use impact.

Answered: 30 Skipped: 0

ANSWER CHOICES	RESPONSES	
I do not typically consider what my personal impact would be	10.00%	3
I rarely use alternative methods of transportation (other than car)	60.00%	18
I try to use alternative methods of transportation, when I can	23.33%	7
I make every effort to take part in alternative methods of transportation	6.67%	2
TOTAL		30

A.10 Question 10

Q10 How high would the price of gas need to be, before you start seeking alternative forms of transportation?

Answered: 30 Skipped: 0

ANSWER CHOICES	RESPONSES	
I already use alternate forms	13.33%	4
>$3.50 per gallon	10.00%	3
>$4 per gallon	13.33%	4
>$5 per gallon	30.00%	9
>$6 per gallon	3.33%	1
I have no intention of using alternate forms	30.00%	9
TOTAL		30

A.11 Question 11

Q11 Considering fuel and parking costs, how much money do you spend on transportation per week? (not including car payments, maintenance and insurance)

Answered: 29 Skipped: 1

ANSWER CHOICES	RESPONSES	
<$10	34.48%	10
$10-$20	13.79%	4
$21-$50	41.38%	12
$51-$100	10.34%	3
$101-$200	0.00%	0
>$200	0.00%	0
TOTAL		29

A.12 Question 12

Q12 What is your preferred method of staying current on the metropolitan area's transportation issues? Choose three (3)

Answered: 30 Skipped: 0

ANSWER CHOICES	RESPONSES	
Access channel on cable TV	6.67%	2
Local paper(s)	30.00%	9
Radio	16.67%	5
Website	50.00%	15
Public meetings/forums	20.00%	6
Brochures	3.33%	1
Newsletters	23.33%	7
Local television news	36.67%	11
Word of mouth	13.33%	4
Social networking sites (Facebook, Twitter, blog)	53.33%	16
Other (please specify)	13.33%	4
Total Respondents: 30		

A.13 Question 13

Q13 Rate the existing bicycle infrastructure in the Sioux City metro area.

Answered: 30 Skipped: 0

	WAS UNAWARE	UNACCEPTABLE	NEEDS SOME IMPROVEMENT	ACCEPTABLE	EXCEEDS EXPECTATIONS	TOTAL	WEIGHTED AVERAGE
Bike racks	23.33% 7	10.00% 3	36.67% 11	30.00% 9	0.00% 0	30	2.73
Bus bike racks	30.00% 9	0.00% 0	10.00% 3	56.67% 17	3.33% 1	30	3.03
On-street bike route signage	23.33% 7	13.33% 4	40.00% 12	23.33% 7	0.00% 0	30	2.63
Bike trail signage	23.33% 7	3.33% 1	36.67% 11	33.33% 10	3.33% 1	30	2.90

A.14 Question 14

Q14 Using a scale of 1 to 10, with 10 being the highest quality of life, rate your opinion on the quality of life in the Sioux City metro area

Answered: 30 Skipped: 0

ANSWER CHOICES	AVERAGE NUMBER	TOTAL NUMBER	RESPONSES
	62	1,864	30
Total Respondents: 30			

A.15 Question 15

Q15 Which description fits your perception of environmental quality in the Sioux City metro area?

Answered: 30 Skipped: 0

ANSWER CHOICES	RESPONSES	
Very high quality	6.67%	2
High quality	33.33%	10
Neither high nor low quality	43.33%	13
Low quality	16.67%	5
Very low quality	0.00%	0
TOTAL		30

A.16 Question 16

Q16 Do you feel that the area's existing transportation infrastructure has a significant impact on the environmental quality of Sioux City metro region?

Answered: 30 Skipped: 0

ANSWER CHOICES	RESPONSES	
No, there is not any impact	3.33%	1
It has a small impact	53.33%	16
Yes, there is a noticeable impact	43.33%	13
Yes, the environmental quality is heavily impacted	0.00%	0
TOTAL		30

A.17 Question 17

Q17 In terms of additional pedestrian and non-motorized methods of transportation, rate the level of impact the following is likely to have in the metro area.

Answered: 30 Skipped: 0

	EXTREMELY NEGATIVE	NEGATIVE	NONE	POSITIVE	VERY POSITIVE	TOTAL	WEIGHTED AVERAGE
Public health	0.00% 0	3.45% 1	13.79% 4	44.83% 13	37.93% 11	29	1.83
Economic development	0.00% 0	3.33% 1	6.67% 2	56.67% 17	33.33% 10	30	1.80
Attracting new employees/residents	0.00% 0	3.33% 1	6.67% 2	40.00% 12	50.00% 15	30	1.63
Local tourism	0.00% 0	3.33% 1	20.00% 6	40.00% 12	36.67% 11	30	1.90
Transportation safety	0.00% 0	3.33% 1	10.00% 3	53.33% 16	33.33% 10	30	1.83
Overall quality of the built environment	0.00% 0	3.45% 1	6.90% 2	41.38% 12	48.28% 14	29	1.66

A.18 Question 18

Q18 Use this space to provide any additional comments regarding the transportation system in the Sioux City metropolitan area.

Answered: 9 Skipped: 21

A.19 Question 19

Q19 What is your age?

Answered: 30 Skipped: 0

ANSWER CHOICES	RESPONSES	
13 to 17	0.00%	0
18 to 24	3.33%	1
25 to 34	10.00%	3
35 to 44	23.33%	7
45 to 54	23.33%	7
55 to 64	30.00%	9
65 to 74	10.00%	3
75 or older	0.00%	0
TOTAL		30

A.20 Question 20

Q20 Are you a resident of the Sioux City metro area?

Answered: 29 Skipped: 1

ANSWER CHOICES	RESPONSES	
Yes	89.66%	26
No, but I work in the area	6.90%	2
No, but my commute/travel is affected by the metro transportation network.	3.45%	1
Other (please specify)	0.00%	0
TOTAL		29

A.21 Question 21

Q21 Would you be interested in receiving more information on the 2045 Transportation Plan for the Sioux City metro area or possibly attending community meetings

Answered: 28 Skipped: 2

ANSWER CHOICES	RESPONSES	
No	64.29%	18
Yes	35.71%	10
TOTAL		28

simpco
Siouxland Interstate Metropolitan Planning Council

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

MEMORANDUM

TO: SIMPCO MPO Stakeholders and Interested Parties

FROM: Michelle Bostinelos, Executive Director

DATE: November 30, 2020

RE: Draft SIMPCO MPO 2045 Long Range Transportation Plan

The Draft Siouxland Interstate Metropolitan Planning Council (SIMPCO) Metropolitan Planning Organization (MPO) 2045 Long Range Transportation Plan (LRTP) is now open for public comment and review. Please view the document online at:

https://simpco.org/divisions/transportation-planning/long-range-transportation-plans-lrtp/

The 2045 Long Range Transportation Plan is a tool for developing safe and efficient transportation improvements for the SIMPCO MPO region through the year 2045. These improvements encompass all modes of transportation, including public transit, bicycle and pedestrian travel, and street and highway travel.

SIMPCO staff will be holding a Public Input Meeting as an opportunity for the public to review and comment on the Draft 2045 LRTP on December 3, 2020 from 4:00 - 5:00 p.m. This meeting will be held by video/telephone conference only. All interested persons are invited to attend the meeting via video/telephone conference through Zoom. To participate, please use the following link: https://zoom.us/j/96541873453 Meeting ID: 965 4187 3453 Password: 615978 or call (1) 312-626-6799.

Staff will be available by appointment only from December 1, 2020 through December 31, 2020 to discuss the LRTP with the public or to answer any questions. Please call 712-279-6286 or email simpco@simpco.org to make an appointment.

Please submit all comments on the Draft 2045 LRTP to Michelle Bostinelos, Executive Director, SIMPCO: (712) 279-6286 or by email to michelle@simpco.org by December 31, 2020.

SIMPCO Public Input Meetings are open to all individuals. Any person with a special need requiring a reasonable accommodation to participate in a public input meeting should contact the SIMPCO office at (712)-279-6286 at least two (2) business days prior to the meeting.

simpco
Siouxland Interstate Metropolitan Planning Council

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

For Immediate Release
November 23, 2020

SIMPCO Metropolitan Planning Organization 2045 Long Range Transportation Plan (LRTP)

The Siouxland Interstate Metropolitan Planning Council (SIMPCO) Metropolitan Planning Organization (MPO) is in the process of developing the DRAFT 2045 Long Range Transportation Plan (LRTP) with approval scheduled for January 7, 2021.

The SIMPCO MPO area includes: Sioux City and Sergeant Bluff in Iowa; Dakota City and South Sioux City in Nebraska; and Dakota Dunes, North Sioux City and Jefferson, South Dakota. It also includes portions of Woodbury and Plymouth County, Iowa; Dakota County, Nebraska; and Union County, South Dakota.

The 2045 Long Range Transportation Plan is a tool for developing safe and efficient transportation improvements for the SIMPCO MPO region through the year 2045. These improvements encompass all modes of transportation, including public transit, bicycle and pedestrian travel, and street and highway travel.

The Draft 2045 LRTP is now available for public comment. The document can be viewed on the SIMPCO website at:

https://simpco.org/divisions/transportation-planning/long-range-transportation-plans-lrtp/

On request, SIMPCO can provide a hard copy of the document or it may be viewed at the SIMPCO office by appointment. Please call 712-279-6286 or email simpco@simpco.org to make an appointment.

SIMPCO staff will be holding a Public Input Meeting as an opportunity for the public to review and comment on the Draft 2045 LRTP on December 3, 2020 from 4:00 - 5:00 p.m. This meeting will be held by video/telephone conference only. All interested persons are invited to attend the meeting via video/telephone conference through Zoom. To participate, please use the following link: https://zoom.us/j/96541873453 Meeting ID: 965 4187 3453 Password: 615978 or call (1) 312-626-6799.

Staff will be available by appointment only from December 1, 2020 through December 31, 2020 to discuss the LRTP with the public or to answer any questions. Please call 712-279-6286 or email simpco@simpco.org to make an appointment.

Please submit all comments on the Draft 2045 LRTP to Michelle Bostinelos, Executive Director, SIMPCO: (712) 279-6286 or by email to michelle@simpco.org by December 31, 2020.

SIMPCO Public Input Meetings are open to all individuals. Any person with a special need requiring a reasonable accommodation to participate in a public input meeting should contact the SIMPCO office at (712)-279-6286 at least two (2) business days prior to the meeting.

APPENDIX B

CHAPTERS 2 & 5

Appendix B details the population, household, and employment distribution projections and distributions identified in Chapter 2 and used for Chapter 5's travel demand model. Population projections were developed in conjunction with the IDOT, SIMPCO staff, and SIMPCO member agencies. The MPO used a mathematical technique of population projection to forecast future population and housing for each of the jurisdictions within the MPO. A linear population projection method was used to forecast the population of Dakota City, and South Sioux City using 1980 and 2010 decennial census data. In forecasting the population of the unincorporated areas, the MPO used the step-down population technique. With this technique, the MPO projected the 2015 to 2045 population of each of the counties (Dakota – NE, Plymouth – IA, Union – SD, and Woodbury - IA) that make up the MPO area using the growth rate from the 1980 and 2010 decennial census. The MPO then applied proportions (population of unincorporated area in 2010/sum of the population of the 4 counties in 2010) to the sum of the population of the four counties from 2015 to 2045 to arrive at the future population for the unincorporated areas in the MPO. The 2015 to 2045 population of Sioux City, Sergeant Bluff, North Sioux City, Jefferson, and Dakota Dunes were obtained by averaging the result of the linear and geometric methods of population projections using the growth rate from the American Community Survey, 2011 to 2017. The MPO used this growth rate due to the irregularities of the historic population of these jurisdictions. The MPO held the future population of Dakota Dunes from 2025 to 2045 constant, as Dakota Dunes is expected to be built out by 2025. The MPO then adjusted the forecasted population of each of the jurisdictions from 2015 to 2045, based on the outcome of meeting with representatives from each of the jurisdictions.

The travel demand model relies on data about economic activity to predict transportation decisions and trip generation. In residential areas, the number of housing units determines trip-making potential. In non-residential areas, economic activity can be represented by several possible indicators including employment, building area, and land use area. A small number of specialized activities can be more accurately measured by more specific indicators such as student enrollment, hospital beds, or air passenger enplanements. The 2045 travel demand model relies on parcel data as the main source of socio-economic (SE) information to predict future travel behaviors in the MPO. After processing the parcel data from the four counties, each Traffic Attraction Zone's (TAZ) unique number was tagged to the parcel data using a join tool in TransCad. Socio-economic data must be imported into the parcel bin to be aggregated to the TAZ level during the travel demand model run.

The base year (2015) housing data was obtained from the parcel data. The projected population was converted to housing units using the 2010 decennial census average household size for each of the jurisdictions within the MPO. The result was then added to the base year housing data to obtain the total estimated housing units from 2025 to 2045 for each of the MPO entities. Each entity provided input to identify where planned housing is to occur for the planning period. Future housing growth was then allocated to the parcel of each of the communities based on the input provided by MPO members. South Sioux City is currently annexing and developing all land east of its corporate limits to the Missouri River.

Historic employment for each of the four counties was gathered and forecasted from 2015 to 2045. Each of the jurisdiction's shares of total 2010 employment in each of the four counties

was applied to their respective counties to get the forecasted employment numbers for each MPO community from 2015 to 2045. MPO members then discussed and reviewed the forecasted numbers to discuss expected future employment. The numbers were adjusted and distributed according to expected business expansion and where new businesses were expected to be located within the planning period. The final forecasted employment numbers were converted to square footage based on rates generated by Iowa DOT using Iowa Workforce Development Employment Data.

Table B.1 Population Trend and Projections Determined Using US Census Bureau Data									
Jurisdiction	**1990**	**2000**	**2010**	**2015**	**2020**	**2025**	**2030**	**2040**	**2045**
Unincorporated	N/A	N/A	8,689	8,719	8,749	8,779	8,809	8,869	8,899
Sioux City	80,505	85,012	82,684	82,812	82,940	83,068	83,196	83,452	83,580
Sergeant Bluff	2,772	3,321	4,227	4,596	4,964	5,333	5,702	6,439	6,808
South Sioux City	9,677	11,925	13,353	14,120	14,886	15,653	16,419	17,952	18,719
Dakota City	1,470	1,821	1,919	2,009	2,099	2,189	2,279	2,459	2,549
North Sioux City	2,019	2,288	2,530	2,628	2,726	2,824	2,922	3,118	3,216
Jefferson	527	586	547	541	534	527	520	507	500
Dakota Dunes	N/A	N/A	2,540	2,730	2,920	3,060	3,200	3,200	3,310
Total Population	96,970	104,953	116,489	118,155	119,818	121,433	123,047	125,996	127,581

Table B.2.1 Population Summary by Jurisdiction and Year as Distributed into the Model							
	Population						
Jurisdiction	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**
Unincorporated	8,071	8,257	8,372	8,435	8,533	8,636	8,746
Sioux City	83,057	83,805	84,153	84,396	84,403	84,566	84,882
Sergeant Bluff	4,817	5,840	6,296	6,663	6,993	7,301	7,754
South Sioux City	13,774	14,186	15,024	15,793	16,850	17,436	18,123
Dakota City	2,018	2,108	2,198	2,298	2,379	2,468	2,558
North Sioux City	3,175	3,329	3,398	3,466	3,513	3,586	3,684
Jefferson	542	535	528	520	514	507	500
Dakota Dunes	2,775	2,875	3,040	3,205	3,205	3,205	3,315
Total Population	118,229	120,935	123,009	124,776	126,390	127,705	129,562

Table B.2.2 Housing Summary by Jurisdiction and Year as Distributed into the Model							
	Housing Units						
Jurisdiction	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**
Unincorporated	2,846	2,890	2,929	2,938	2,957	2,981	3,013
Sioux City	31,660	31,797	31,819	31,885	31,891	32,275	32,391
Sergeant Bluff	1,650	2,008	2,201	2,296	2,388	2,504	2,658
South Sioux City	4,719	4,880	5,151	5,414	5,774	5,941	6,181
Dakota City	669	697	726	754	783	815	844
North Sioux City	1,335	1,397	1,443	1,461	1,481	1,509	1,550
Jefferson	232	228	224	220	218	215	212
Dakota Dunes	1,040	1,082	1,127	1,167	1,167	1,167	1,200
Total Population	44,151	44,979	45,620	46,135	46,659	47,407	48,049

Table B.3 Employment Summary by Jurisdiction and Year as Distributed into the Model							
Employment Rate:	**Employment**						
Jurisdiction	**2015**	**2020**	**2025**	**2030**	**2035**	**2040**	**2045**
Unincorporated	4,087	4,287	4,632	5,197	5,512	5,898	6,263
Sioux City	45,532	49,412	50,835	52,512	53,976	55,306	57,089
Sergeant Bluff	2,351	2,376	2,526	2,551	2,576	2,621	2,673
South Sioux City	6,310	6,810	7,040	7,215	7,365	7,472	7,666
Dakota City	5,677	5,677	5,692	5,707	5,722	5,737	5,747
North Sioux City	2,659	2,699	2,724	2,724	2,924	3,143	3,240
Jefferson	198	198	198	198	198	198	198
Dakota Dunes	2,072	2,130	2,145	2,160	2,160	2,160	2,183
Total Jobs	68,886	73,589	75,792	78,264	80,433	82,535	85,058

APPENDIX C

CHAPTER 8

Appendix C details aspects of the financial chapter, these parts include; revenue history and projections of non-federal aid revenues, operations and maintenance cost history and projections, history and projections of federal revenues, illustrative projects list, and project costs in current year dollars. These are included to help validate the aspects of the fiscal constraint that Chapter 8 lays out.

Throughout Chapter 8, it was discussed that for Federal funding sources, the SIMPCO MPO used historical funding records from 2015 up to 2020. The current TIP, 2021-2024, was included in this since the funds have already been programed to their respective projects. 2015 was decided as the base year, because certain funding sources were being changed around that time. 2015 was also used as a base year for many components in Chapter 2, so it was decided to keep it consistent throughout the plan. Table C.1A-D shows the various funding sources the SIMPCO MPO area has utilized in the past.

Table C.2 combines operation and maintenance cost history and projections, with history and projections of non-federal aid revenues. This table has been included to show the aspects of operations and maintenance, and how they were calculated out. Included in this table is the non-federal aid revenue, which not only funds the operation maintenance but also funds the local matches to the federal aid projects.

Table C.3 shows illustrative projects in the SIMPCO MPO area. Since there are limited federal funds for road projects, not all projects are allowed into the fiscally constrained 2045 LRTP. These projects are potential future projects but do not have a federal funding source tied to them and will be paid by the project sponsor. It is possible that the project sponsor may seek federal aid for these projects in the future. Federal aid may come from an application to a federal transportation program. If an illustrative project is awarded federal funds, an amendment to the 2040 LRTP must take place for the project to move forward and receive federal dollars.

Table C.4 highlights the current cost vs the Year of Expenditure (YOE) of the fiscally constrained project lists in tables 8.7 to 8.8 in Chapter 8. The purpose of this table is to show what current year dollars are, and what the estimated YOE would be for this project. While project are shown in year bands, YOE was calculated based on estimated year project would take place within the year band. An inflation rate of 5% was used for these calculations, just like chapter 8 mentions.

Table C.5 shows how projects ranked against the 2045 LRTP. The evaluation criteria from Chapter 1's goals were measured against each project submitted to the SIMPCO MPO. SIMPCO MPO staff then compared each goal to every project. Once this was done, the scores were averaged to a final ranking. The projects that are highlighted on the list are the projects that are fiscally constrained. Many of the projects within the plan were selected before these rankings came out, these rankings are to help the SIMPCO MPO better distribute scarce federal funds to projects that are the top priorities of the region.

Table C.1A: Historic Federal Funding, numbers in 1,000's - Iowa

Major Funding Sources for Iowa Side of the MPO							
	2015	2016	2017	2018	2019	2020	Average
STBG-HBP	63,598,000.00	7,082,000.00	1,904,000.00	2,904,000.00	1,904,000.00	-	12,898,667
NHPP	-	63,123,000.00	562,000.00	49,139,000.00	19,119,000.00	10,288,000.00	23,705,167
STBG - IOWA	2,271,500.00	2,259,800.00	2,326,100.00	2,327,000.00	2,516,064.00	2,597,885.00	2,383,058
TAP	127,100.00	126,300.00	129,800.00	130,000.00	128,473.00	126,401.00	128,012
CMAQ	-	20,000.00	-	-	-	-	3,333
PL	125,000.00	169,000.00	169,000.00	169,000.00	165,000.00	140,000.00	156,167
DEMO	2,828,000.00	1,487,000.00	1,487,000.00	-	-	-	967,000
TAP Flex	97,300.00	95,900.00	96,000.00	96,000.00	96,000.00	96,600.00	96,300
PRF	866,000.00	52,000.00	441,000.00	1,338,000.00	86,000.00	793,000.00	596,000
Total	69,046,900.00	74,363,000.00	6,673,900.00	54,765,000.00	21,688,537.00	11,424,886.00	39,660,371

Table C1.B - Table C.1A: Historic Federal Funding, numbers in 1,000's - Nebraska

Major Funding Sources for Nebraska Side of the MPO							
	2015	2016	2017	2018	2019	2020	Average
STBG-NE	745,000.00	-	-	-	-	-	124,166.67
NHPP	-	-	-	-	3,800,000.00	10,700,000.00	2,416,666.67
PL	62,400.00	62,400.00	62,400.00	62,400.00	62,400.00	62,400.00	62,400.00
HSIP	30,000.00	60,000.00	30,000.00	30,000.00	30,000.00	30,000.00	35,000.00
SRTS	382,083.00	382,083.00	-	-	-	-	127,361.00
CMAQ	10,000.00	10,000.00	-	-	-	-	3,333.33
HRRR	-	-	11,700.00	-	-	-	1,950.00
TAP	-	-	453,000.00	135,800.00	350,083.00	-	156,480.50
Total	1,229,483.00	514,483.00	557,100.00	228,200.00	4,242,483.00	10,792,400.00	2,927,358.17

Table C1.C: Historic Federal Funding, numbers in 1,000's - South Dakota

Major Funding Sources for South Dakota Side of the MPO							
	2015	2016	2017	2018	2019	2020	Average
NHPP	-	1,689,000.00	-	-	663,000.00	1,504,600.00	642,766.67
PL	49,300.00	49,300.00	49,300.00	49,300.00	49,300.00	49,300.00	49,300.00
RHCP	81,000.00	-	-	-	-	-	13,500.00
TAP	-	-	-	-	219,000.00	-	36,500.00
HSIP	-	2,670,000.00	1,659,000.00	-	780,000.00	2,699,000.00	1,301,333.33
	130300	4408300	1708300	49300	1711300	4252900	2,043,400.00

Table C1.D: Historic Federal Funding, numbers in 1,000's - Funding by Level of Government

	2015	2016	2017	2018	2019	2020	Average
Federal	70,406,683.00	79,285,783.00	8,939,300.00	55,042,500.00	27,642,320.00	26,470,186.00	44,631,128.67
Iowa	7,599,000.00	8,135,000.00	1,206,000.00	6,797,000.00	4,450,000.00	9,470,000.00	6,276,166.67
Nebraska	186,000.00	-	-	50,000.00	470,000.00	2,750,000.00	576,000.00
South Dakota	-	504,000.00	306,000.00	1,620,000.00	66,000.00	159,400.00	442,566.67
Cities	6,986,500.00	7,461,500.00	5,260,820.75	7,250,700.00	2,470,270.75	1,139,500.00	5,094,881.92
SIMPCO	54,389.00	456,780.00	66,780.00	66,780.00	66,780.00	66,780.00	129,714.83

Table C.2 MPO Non-Federal Aid Revenues and MPO Operation and Maintenance Expenditures

	City Operations	City Maintenance	NDOT Maintenance Costs	SD DOT Maintenance Costs	Total Maintenance	Total RUTF Receipts	Total Other Road Monies	Total Receipts Service Debt	Total Non-Federal Aid Revenues
2019	421,579	2,871,926	1,016,259	20,000	3,908,185	11,228,306	28,874,265	8,739,749	49,878,579
2020	434,226	2,958,084	1,046,747	20,600	4,025,431	11,565,155	29,740,493	8,739,749	51,112,744
2020 to 2024	1,736,905	11,832,335	4,186,987	82,400	16,101,722	46,260,621	118,961,972	34,958,996	204,450,976
2025 to 2035	4,776,490	32,538,922	11,514,214	226,600	44,279,736	127,216,707	327,145,422	96,137,239	562,240,183
2036 to 2045	4,342,264	29,580,838	10,467,468	206,000	40,254,306	115,651,552	297,404,930	87,397,490	511,127,439

Table C.3 Illustrative Projects

			Amnts in $1,000's		
Sponsor	Project Title	Project Description	Cost Est	Federal	Local Share
Sergeant Bluff	Old Lakeport Road	Reconstruction: N. 300 ft. of Intersection of 1st St. S. to 300 ft. S. of intersection at Warrior Rd	4,800.0	3,400.0	1,400.0
Sioux City	Outer Drive	Hamilton Boulevard to Outer Drive	22,275.0	17,820.0	4,455.0
Sioux City	Floyd Blvd	Outer Drive to 46th	12,203.8	2,440.8	9,763.0
Sioux City	Midtown East/West Connector	Floyd Blvd to Hamilton Blvd	97,500.0	78,000.0	19,500.0
Sioux City	Glenn Oaks	Outer to Chambers	11,024.4	8,819.5	2,204.9
Sioux City	Correctionville Road	Fairmount Street to City Limits	30,100.0	24,080.0	6,020.0
Sioux City	Burton Street	W 4th Street to Military Road	21,500.0	17,200.0	4,300.0
Sioux City	Plum Creek Road	Plum Creek Road to Riverside Blvd/IA-12	37,800.0	30,240.0	7,560.0
Sioux City	Orleans Ave	Morningside Avenue to Glen Ellen Rd	16,875.0	6,750.0	3,375.0
Sioux City	W. Street	Stone Park Boulevard to City Limits	16,500.0	13,200.0	3,300.0
Sioux City	Floyd Blvd Viaduct	Dace to 4th with Flyover to 3rd Street	124,000.0	99,200.0	24,800.0
Sioux City	6th Street Underpass	Hwy 75 and Pavonia Street	55,500.0	44,400.0	11,100.0
Sioux City	Buckwalter Drive	Hamilton Boulevard to Outer Drive	30,000.0	24,000.0	6,000.0
Sioux City	Stone Park Blvd	Woodland Way to Rebecca Street	13,125.0	10,500.0	2,625.0
Sioux City	Garretson Avenue	Morningside Avenue to Highway 20	33,250.0	26,600.0	6,650.0

Sioux City	46th St.	Buckwalter Drive to Rustin Street	18,000.0	14,400.0	3,600.0
Woodbury Co.	Old Lakeport Road	Old Lakeport Road-SCL Sioux City to Sgt Bluff city limit	3,617.0	2,890.0	727.0
Woodbury Co.	Correctionville Road	Correctionville Road ECL Sioux City to MPO boundary	1,935.0	1,540.0	395.0

Table C.4 Project Table Today Dollars vs YOE

Sponsor	***Project Description***	***Type of work***	***Location***	***Type of Federal PGM/ funding sources***	***Programmed Amount in $1,000's***				
					Federal (YOE)	***State (YOE)***	***Local (YOE)***	***Total (YOE)***	***Total in 2020 Dollars***
2024 to 2034									
Sgt Bluff	First Street: Fareway Entrance to Old Lakeport Road	Roadway Reconstruction/Trail	From east of South Lewis Blvd intersection east to the intersection of Old Lakeport Road	STBG	1930		832	2762	2762
Sgt Bluff	8th Street: Harbor Drive to South Lewis Blvd	Roadway Reconstruction/ Widen	From intersection of Harbor Drive east to UPRR at South Lewis Blvd	STBG	1000		500	1500	1300

Sgt Bluff	South Lewis Blvd: South Ridge Road to North City Limits	Roadway Overlay/Widening	From intersection of South Ridge Road north to North City Limits; Widen at West Ridge Road 300 feet each way	STBG	1582		680	2262	2036
Sgt Bluff	Loess Hills Connector Trail: First Street to Ridge Road	Trail	From First Street and Baker Drive north through Baker Park east to Old Lakeport Road and north to Ridge Road	TAP	600		400	1000	1000
Sioux City	18th Street Viaduct	New Construction	Floyd Blvd to Steuben Street	STBG-HBP	15149.8		3787	18937	15781
Sioux City	Hawkeye Drive -	Reconstruction	18th Street to 28th Street	STBG	5428		1357	6785	5428
Sioux City	Hoeven Drive	New Construction	11th Street to 28th Street	STBG	8453.12		2113	10566	8128
Sioux City	Hamilton-	Reconstruction	Intersection Triview and Hamilton	STBG	1080		270	1350	1000
Sioux City	Lakeport-	Reconstruction	Intersection Lakeport and Sergeant Road	STBG	2240		560	2800	2000
Sioux City	West 19th Street	Reconstruction	Hamilton Blvd to Helmer St	STBG	726.16		181.5	907.7	626
Sioux City	Glenn Avenue	Reconstruction	S St Aubin St to Morningside Ave	STBG	16947		4237	21184	12461
Sioux City	South Lewis Boulevard	Reconstruction	Singing Hills to City Limits	STBG	3322.8		830.7	4153.5	2769

Sioux City	Floyd Boulevard Viaduct with Hoeven Flyover to 3rd Street	Bridge Replacement	Dace to 4th with Flyover to 3rd Street	STBG-HBP	99200		24800	124000	80000
Sioux City	Hamilton-	Resurfacing	W 15th to W 20th	STBG	1536		384	1920	1200
Sioux City	Outer Drive-	Reconstruction	Hamilton Boulevard to Outer Drive	STBG	17820		4455	22275	13500
Sioux City	Floyd Boulevard -	Resurfacing	4th Street to 33rd Street	STBG	2100		525	2625	1500
Sioux City	Morningside Avenue-	Pavement Replacement	Peters Ave to Jay Avenue	STBG	6480		1620	8100	4500
City of SSC	East 25th Street	New construction	G Street to Riverview Drive.	FAUS	678		169.5	847.5	
City of SSC	West 29th Street	Reconstruction	From Daniel's Lane to Lake Avenue	FAUS	541		135.3	676.25	
City of SSC and Dakota County	142nd Street	New construction	From Hwy 20, starting at Lite Form and back to Old Hwy 20	FAUS	608		152	760	
City of Dakota City	Pine Street	New construction	From Dakota Avenue to Highway 77	FAUS	2633		658.3	3291.3	
City of SSC and Dakota County	Atokad Drive	Reconstruction	From West 39th Street to Highway 77	FAUS	1594		398.5	1992.5	
Dixon Path	Dixon Path	New construction	Connecting Dixon Path to Golf Road	FAUS	1015.6		253.9	1269.5	

City of SSC	Lake Avenue	Reconstruction	From Old Highway 20 to Old Saw Mill Road	FAUS	906		226.5	1132.5	
City of SSC	New Street	New construction	Extending Commerce Way and connecting to West 21st Street	FAUS	306.2		76.55	382.75	
City of SSC, Dakota County and Dakota City	New Street	New construction	Connecting Veterans Drive to Pine Street in Dakota City	FAUS	4000		1000	5000	
SD DOT	I29 Exit 2: Signalization and access improvement	Signalization and access improvement	I-29 Exit 2		760	190		950	
SD DOT	I-29: N/S: Minor joint and spall repair	Minor Joint and spall repair	I-29: N/S		760	190		950	
SD DOT	I-29:N/S: Deck overlay, upgrade approach rails and approaches	Deck overlay, upgrade approach rails and approaches	I-29: N/S		440	110		550	
SD DOT	Maintenance & preservation: various location	maintenance & Preservation	Various locations/regionwide	various funding sources	11770.4	2943		14713	
SD DOT	Roadway safety improvement	Roadway safety Improvement	Various locations/regionwide	various funding sources	11275.2	2819		14094	

SD DOT	I29-Exit 4(north Shore Dr) in North Sioux City		I29-Exit 4 (North Shore Dr), North Sioux City	various funding sources	11100	2775		13875	
Plymouth Co.	County Rd C-80	Pavement Rehab	From K-22 east 3.425 mi. to Hwy 75	STBG	2380		1020	3400	
IA DOT	US 20	Reconstruction	From US 75/IA 12 to Little Whiskey Creek (EB & WB)	NHPP	12000			12000	
IA DOT	IA 12	Pavement Rehab	I29 to Sioux river Rd	NHPP	4800	1200		6000	
IA DOT	IA 12	Bridge repair/replacement	I-29 Gordon Drive Viaduct	NHPP	43200	10800		54000	
IA DOT	Maintenance & preservation			various funding sources	28418.5	7105		35523	
Sioux City/Dakota dune	Dakota Dunes Ped Bridge	New Ped Bridge	Pedestrian Bridge that will expand the Big Sioux River from Riverside Park to Dakota Dunes.	TAP,other	1200	600	200	2000	
Union County	CR #1B Surface Replacement	Mill and Overlay	4.5 miles south of Jefferson SD to I-29 Exit 4				2200		2200
Woodbury County	Southbridge Interchange: New interchange on 1-29	New Construction	Southbridge Interchange	STBG	3943		14442	18385	

Woodbury County	Old Hwy 141-SCL Sioux limits to MPO boundary	Resurface/Widen	Old Hwy 141-SCL Sioux limits to MPO boundary	STBG	1240		311	1551	
Woodbury County	Old Hwy 75: SCL Sgt Bluff to 260th Street Intersection	Resurface/Widen	Old Hwy 75: SCL Sgt Bluff to 260th Street Intersection	STBG	1850		464	2322	
NDOT	Maintenance & Preservation			various funding sources	3492.8	873.2		4366	
2035 to 2045									
Sgt Bluff	South Lewis Blvd: 1st Street to South Ridge Road	Reconstruction/ Storm Sewer	From 200 feet north of First Street intersection north to Ridge Road	STBG	2427		1050	3477	3130
Sgt Bluff	Old Lakeport Road: 1st Street to Warrior Road	Reconstruction/ Trail	North 300 feet of Intersection of 1st Street south to 300 feet south of intersection at Warrior Road	STBG	3400		1400	4800	3960

Sgt Bluff	South Lewis Blvd Pedestrian Crossing Bridge	Trail/ Bridge	School Zone at Topaz and Port Neal east to the Sergeant Bluff Recreation Complex Warrior Road north to Port Neal Road	TAP, Other	2000		2000	4000	3800
Sgt Bluff	Port Neal Road: Warrior Road to 1st Street	Reconstruction/ Widen	School Zone from Warrior Road north to Port Neal Road	STBG	2400		1100	3500	2750
Sioux City	11th Street	Reconstruction	Cargill Entrance to Missouri Valley Steel Entrance	STBG	3596		899	4495	3100
Sioux City	11th Street over Floyd River	Bridge Deck		STBG-HBP	1920		480	2400	2000
Sioux City	Floyd Boulevard -	Pavement Replacement	Outer Drive to 46th	STBG	9763.04		2441	12204	8717
Sioux City	Midtown East/West Connector -	New Construction	Floyd Blvd to Hamilton Blvd	STBG-HBP/STBG	78000		19500	97500	50000
Sioux City	Stone Park Boulevard	Reconstruction	W Clifton St to Idlewood St	STBG	3739.2		934.8	4674	3116
Sioux City	Glenn Oaks-	Reconstruction	Outer to Chambers	STBG	8819.52		2205	11024	9187
Sioux City	Correctionville Road over Unnamed Creek (504670 RCB Culvert)	Culvert Replacement		STBG-HBP	343.2		85.8	429	260

Sioux City	W 4th Street	Reconstruction	Market to Wesley Parkway	STBG	5747.4		1437	7184.3	3193
Sioux City	29th Street-	Reconstruction	Jones to Cheyenne	LOCAL			4211	4210.7	3239
Sioux City	27th Street -	Reconstruction	Court Street to Stone Park	LOCAL			9750	9750	6500
Sioux City	Rebecca Street	Reconstruction	W 16th to Villa Ave	STBG	2152.44		538.1	2690.6	1993
Sioux City	Correctionville Road -	Reconstruction	Fairmount Street to City Limits	STBG	24080		6020	30100	14000
Sioux City	Morningside Avenue-	Pavement Replacement	S Lakeport to City Limits	STBG	3039.12		759.8	3798.9	2814
Sioux City	Stueben Street over Drainage Ditch	Bridge Replacement	Between 11th Street and 18th Street	STBG-HBP	4179.6		1045	5224.5	3870
Sioux City	Burton Street	New Construction/Reconstruction	W 4th Street to Military Road	STBG	17200		4300	21500	10000
Sioux City	West 3rd Street	Reconstruction	Hamilton Blvd to Perry Street	LOCAL			1245	1245	996
Sioux City	Talbot Road -	Reconstruction	Military Road to Memorial Drive	LOCAL			30400	30400	19000
Sioux City	Division Street-	Reconstruction	Pueblo Ct to Outer	LOCAL			1135	1135.4	841
Sioux City	6th Street Underpass -	New Bridge	Hwy 75 and Pavonia Street	STBG-HBP	44400		11100	55500	30000
Sioux City	Buckwalter Drive -	New Construction	Hamilton Boulevard to Outer Drive	LOCAL			30000	30000	15000

Sioux City	King's Highway-	Reconstruction	Hamilton to Meadow Ln	LOCAL			2519	2519.1	1866
Sioux City	Plum Creek Road -	New Construction	Plum Creek Road to Riverside Blvd/IA-12	STBG	30240		7560	37800	18000
Sioux City	Stone Park Boulevard -	New Construction	Woodland Way to Rebecca Street	LOCAL			13125	13125	7500
Sioux City	Orleans Avenue -	New Construction	Morningside Avenue to Glen Ellen Rd	STBG-HBP	13500		3375	16875	7500
Sioux City	Garretson Avenue -	New Construction	Morningside Avenue to Highway 20	LOCAL			33250	33250	19000
Sioux City	West Street -	New Construction	Stone Park Boulevard to City Limits	STBG	13200		3300	16500	7500
Sioux City	46th Street -	New Construction	Buckwalter Drive to Rustin Street	LOCAL			18000	18000	9000
Sioux City	Park and Ride			LOCAL			50	50	40
Sioux City	Stone Park Boulevard	Reconstruction		STBG	1600		400	2000	2000
SD DOT	I-29: N/S:major joint and spall repair	Major joint and spall repair	I-29: N/S		960	240		1200	
SD DOT	1-29: S: major joint and spall repair	Major joint and spall repair	I-29: S		560	140		700	
SD DOT	I-29: S: major joint and spall repair	Major joint and spall repair	I-29: S		560	140		700	

SD DOT	I-29: N/S: Epoxy Chip Seals	Epoxy chip seals	I-29: N/S		600	150		750	
SD DOT	I-29: N/S: Deck overlay, upgrad approach rails and approaches	Deck overlay, upgrad approach rails and approaches	I-29: N/S	various funding	480	120		600	
SD DOT	Maintenance & preservation	Maintenance & preservation		various funding	18444.8	4611		23056	
IA DOT	IA 12	Pavement Rehab	US 20/US 75/IA 12 to Gordon Drive	NHPP	4240	1060		5300	
IA DOT	US 75	Pavement rehab	I-29 to Plymouth Co.	NHPP	7360	1840		9200	
IA DOT	IA 376	Bridge repair/replacement	Over Floyd River	NHPP	2800	700		3500	
IA DOT	IA 376	Bridge repair/replacement	over Cunningham Drive	NHPP	4000			4000	
IA DOT	IA 12	Bridge repair/replacement	.5mi south of Stone State Park	NHPP	688	172		860	
IA DOT	Maintenance & preservation			various funding	47252.6	11813		59066	
Sioux City/S. Sioux City	S. Sioux Ped Bridge	New Ped Bridge	Signature Pedestrian Bridge that will expand across the Missouri River from Chris Larsen Park to Scenic Park.	TAP, Other	7200	3600	1200	12000	

Woodbury County	Correctionville Road ECL Sioux City to MPO boundary	Resurface/Widen	Correctionville Road ECL Sioux City to MPO boundary	STBG	1540		387	1935	
Woodbury County	Old Lakeport Road-SCL Sioux City to Sgt Bluff city limit	Pavement Rehab	Old Lakeport Road-SCL Sioux City to Sgt Bluff city limit	STBG	2890		723	3617	
Woodbury County	D51: Port Neal road to Old hwy 75	PCC Pavement Overlay	D51: Port Neal road to Old hwy 75	STBG	530		215	750	
NDOT	Maintenance & preservation			various funding	5424.8	1356		6781	

Table C 5: Project Prioritization Based on Goal Ranking

	Project Prioritization Ranking Table			*Ranking Goals and Maximum Scores(see Table 1.1)*										
Band Years	**Sponsor**	**Project Description**	**Location**	**#1** *14*	**#2** *15*	**#3** 8	**#4** 25	**#5** 11	**#6** -7	**#7** 10	**#8** 9	**#9** 15	Total Score 100	**Rank**
2025-35	Sioux City	Hamilton Blvd	Intersection Triview and Hamilton	*14*	*15*	7	25	8	0	10	6	15	100	**1**
2025-35	Sioux City	Lakeport	Intersection Lakeport and Sergeant Road	*9*	*15*	7	25	9	0	8	9	15	97	**2**
2025-35	Sioux City	West 19th Street	Hamilton Blvd to Helmer St	*14*	*13*	5	21	11	0	8	9	15	96	**3**
2036-45	Sioux City	Glenn Avenue	S St Aubin St to Morningside Ave	*12*	*15*	6	22	8	0	8	9	14	94	**4**
2025-35	Sioux City	South Lewis Boulevard	Singing Hills to City Limits	*12*	*14*	6	22	9	0	8	9	14	94	**4**
2025-35	Sgt Bluff	First Street: Fareway Entrance to Old Lakeport Road	From east of South Lewis Blvd intersection east to the intersection of Old Lakeport Road	*12*	*9*	5	20	11	3	6	6	15	87	**6**
2025-35	Sioux City	Hamilton	W 15th to W 20th	*12*	*10*	5	25	6	0	6	6	12	82	**7**
2036-45	Sioux City	Floyd Boulevard	4th Street to 33rd Street	*14*	*10*	5	20	7	0	5	6	13	80	**8**
2036-45	Sgt Bluff	South Lewis Blvd: 1st Street to South Ridge Road	From 200 feet north of First Street intersection north to Ridge Road	*14*	*9*	6	20	7	3	8	3	10	80	**8**
2036-45	Sgt Bluff	Port Neal Road: Warrior Road to 1st Street	School Zone from Warrior Road north to Port Neal Road	*9*	*10*	5	20	9	3	8	6	10	80	**8**
2025-35	City of SSC	West 29th Street	From Daniel's Lane to Lake Avenue	*14*	*11*	4	25	7	1	6	3	5	76	**11**
2025-35	Woodbury County	Southbridge Interchange: New interchange on 1-29	Southbridge Interchange	*15*	*12*	7	20	9	2	9	0	0	74	**12**
2026-35	Sioux City	Morningside Avenue	Peters Ave to Jay Avenue	*11*	*12*	5	17	6	0	5	6	11	73	**13**
2025-35	City of SSC and Dakota County	Atokad Drive	From West 39th Street to Highway 77	*10*	*13*	4	20	11	1	7	6	0	72	**14**
2025-35	Woodbury County	Old Hwy 75: SCL Sgt Bluff to 260th Street	Old Hwy 75: SCL Sgt Bluff to 260th Street Intersection	*12*	*10*	6	16	8	2	8	0	10	72	**14**
2025-35	Sgt Bluff	8th Street: Harbor Drive to South Lewis Blvd	From intersection of Harbor Drive east to UPRR at South Lewis Blvd	*14*	*6*	6	20	4	2	9	0	10	71	**16**
2036-45	Sgt Bluff	South Lewis Blvd Pedestrian Crossing Bridge	School Zone at Topaz and Port Neal east to the Sergeant Bluff Recreation Complex Warrior Road north to Port Neal Road	*6*	*9*	6	10	11	3	10	6	10	71	**16**
2025-35	Sioux City	11th Street	Cargill Entrance to Missouri Valley Steel Entrance	*14*	*6*	5	23	4	0	9	0	10	71	**16**
2025-35	Sioux City	11th Street over Floyd River -	Bridge Deck	*14*	*10*	3	12	5	0	6	6	15	71	**16**
2025-35	City of SSC	East 25th Street	G Street to Riverview Drive.	*13*	*10*	6	18	11	2	6	0	3	69	**20**
2025-35	City of Dakota City	Pine Street	From Dakota Avenue to Highway 77	*14*	*11*	2	25	8	2	7	0	0	69	**20**
2025-35	Union County	CR #1B Surface Replacement	4.5 miles south of Jefferson SD to I-29 Exit 4	*14*	*3*	5	25	0	0	7	0	15	69	**20**
2025-35	Sioux City	18th Street Viaduct	Floyd Blvd to Steuben Street	*10*	*6*	5	23	8	0	7	3	5	67	**23**
2025-35	City of SSC	New Street	Extending Commerce Way and connecting to West 21st Street	*14*	*10*	4	13	8	1	4	3	10	67	**23**
2025-35	Sgt Bluff	South Lewis Blvd: South Ridge Road to North City Limits	From intersection of South Ridge Road north to North City Limits; Widen at West Ridge Road 300 feet each way	*14*	*5*	3	20	4	1	8	0	10	65	**25**
2036-45	Woodbury County	D51: Port Neal road to Old hwy 75	D51: Port Neal road to Old hwy 75	*14*	*7*	4	10	7	2	8	0	12	64	**26**
2036-45	City of SSC, Dakota County and Dakota City	New Street	Connecting Veterans Drive to Pine Street in Dakota City	*14*	*9*	4	20	7	1	6	0	0	61	**27**
2036-45	Sioux City	Park and Ride		*13*	*5*	5	17	9	1	7	3	0	60	**28**
2025-35	City of SSC and Dakota County	142nd Street	From Hwy 20, starting at Lite Form and back to Old Hwy 20	*14*	*11*	6	15	6	1	5	0	0	58	**29**
2025-35	Sioux City	Correctionville Road over Unnamed Creek (504670)	Culvert Replacement	*6*	*10*	3	11	8	0	7	3	10	58	**29**

2036-45	Sioux City	W 4th Street	Market to Wesley Parkway	*8*	*9*	1	7	4	0	6	8	14	57	**31**
2036-45	Sioux City	29th Street	Jones to Cheyenne	*7*	*8*	1	10	5	0	6	7	12	56	**32**
2036-45	Sioux City	27th Street	Court Street to Stone Park	*9*	*9*	3	11	5	0	2	7	10	56	**32**
2025-35	Sioux City	Hawkeye Drive -	18th Street to 28th Street	*10*	*9*	2	14	4	0	5	0	10	54	**34**
2025-35	Plymouth Co.	County Rd C-80	From K-22 east 3.425 mi. to Hwy 75	*11*	*7*	4	12	6	0	3	0	10	53	**35**
2036-45	Sioux City	Morningside Avenue	S Lakeport to City Limits	*8*	*6*	2	12	4	0	2	4	13	51	**36**
2036-45	Sioux City	Stone Park Boulevard	Bridge Deck	*5*	*7*	5	10	5	1	8	0	10	51	**36**
2025-35	Dixon Path	Dixon Path	Connecting Dixon Path to Golf Road	*11*	*8*	5	13	7	1	4	0	0	49	**38**
2025-35	City of SSC	Lake Avenue	From Old Highway 20 to Old Saw Mill Road	*10*	*10*	6	11	5	1	4	0	0	47	**39**
2025-35	Sioux City	Steuben Street over Drainage Ditch	Between 11th Street and 18th Street	*11*	*0*	2	18	0	0	0	0	14	45	**40**
2025-35	Sgt Bluff	Loess Hills Connector Trail: First Street to Ridge Road	From First Street and Baker Drive north through Baker Park east to Old Lakeport Road and north to Ridge Road	*1*	*5*	5	0	11	3	3	6	10	44	**41**
2025-35	Woodbury County	Old Hwy 141-SCL Sioux limits to MPO boundary	Old Hwy 141-SCL Sioux limits to MPO boundary	*7*	*7*	2	7	5	2	4	0	10	44	**41**
2036-45	Sioux City	West 3rd Street	Hamilton Blvd to Perry Street	*9*	*11*	0	0	4	0	2	5	11	42	**43**
2025-35	Sioux City/S. Sioux City	S. Sioux Ped Bridge	Signature Pedestrian Bridge across the Missouri River from Chris Larsen Park to Scenic Park.	*11*	*5*	2	7	11	-10	7	9	0	42	**43**
2036-45	Sioux City	Talbot Road	Military Road to Memorial Drive	*8*	*6*	2	7	2	0	1	2	9	37	**45**
2036-45	Sioux City	Division Street	Pueblo Ct to Outer	*4*	*7*	1	3	2	0	1	5	13	36	**46**
2025-35	Sioux City	Hoeven Drive	11th Street to 28th Street	*9*	*2*	2	10	2	0	3	3	0	31	**47**
2025-35	Sioux City/Dakota Dunes	Dakota Dunes Ped Bridge	Pedestrian Bridge that will cross the Big Sioux River from Riverside Park to Dakota Dunes.	*10*	*5*	0	8	9	-10	3	6	0	31	**47**
2036-45	Sioux City	King's Highway	Hamilton to Meadow Ln	*4*	*6*	0	4	2	0	1	4	9	30	**49**

APPENDIX B

RESOLUTION

simpco
Siouxland Interstate Metropolitan Planning Council

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

SIMPCO MPO Resolution 2021 – 8

Final Approval of 2045 Long Range Metropolitan Transportation Plan

WHEREAS, the development of a long-range metropolitan transportation plan is required by the Fixing American's Surface Transportation (FAST) Act of 2015 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, Nebraska Department of Roads, and the South Dakota Department of Transportation; and

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

NOW, THEREFORE, BE IT RESOLVED, that the SIMPCO MPO Policy Board approves the 2045 Long Range Metropolitan Transportation Plan as the long-range transportation plan for the Sioux City Metropolitan Planning Area.

Approved by the MPO Policy Board and signed this 7th day of January, 2021.

Ken Beaulieu
MPO Policy Board Chairperson

David Carney
MPO Transportation Technical Committee Chairperson

ATTEST

Michelle Bostinelos
SIMPCO Executive Director