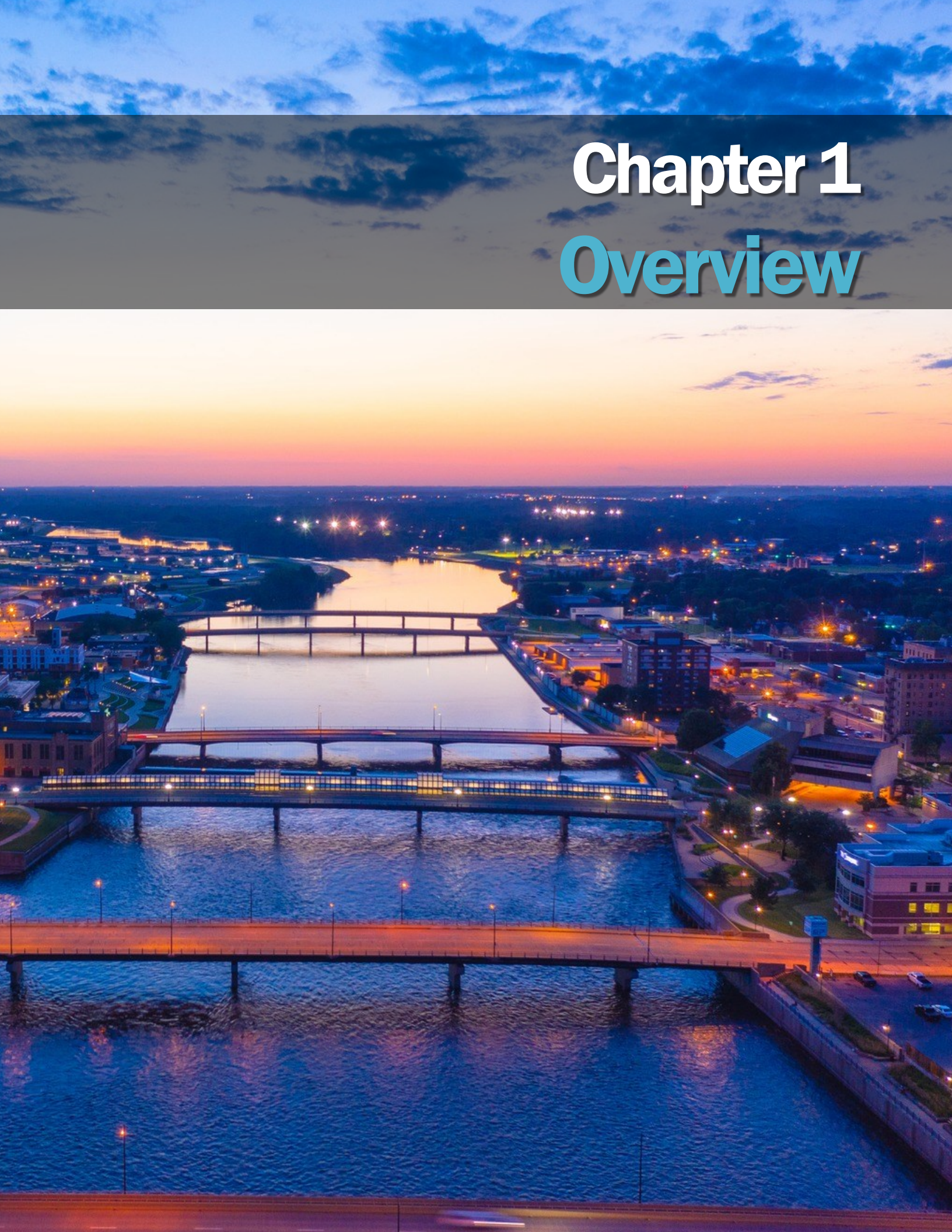
Chapter 1
Overview



Chapter 1 – Overview

The goal of the Long-Range Transportation Plan (LRTP) is to document the present state of transportation patterns and infrastructure in the Iowa Northland Region across all modes, and to provide a plan for the maintenance and improvement of each mode based on anticipated needs and revenues. This Plan has a horizon year of 2050. As such, it endeavors to gauge the transportation system over three decades. While these forecasted needs are based on past trends and expected progression, it is necessary to periodically review and update this Plan to consider new developments and changing trends. Accordingly, this Plan is reviewed and revised every five years.

This document has been prepared to align with the 2021 federal transportation bill, the Infrastructure Investment and Jobs Act (IIJA), under the authority of the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Iowa Department of Transportation (DOT). IIJA builds on previous federal transportation bills that included provisions to make transportation more streamlined, performance-based, and multimodal, and to address challenges, including improving safety, maintaining infrastructure conditions, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery. IIJA also incorporates performance goals, measures, and targets into the process of identifying needed transportation improvements and project selection.

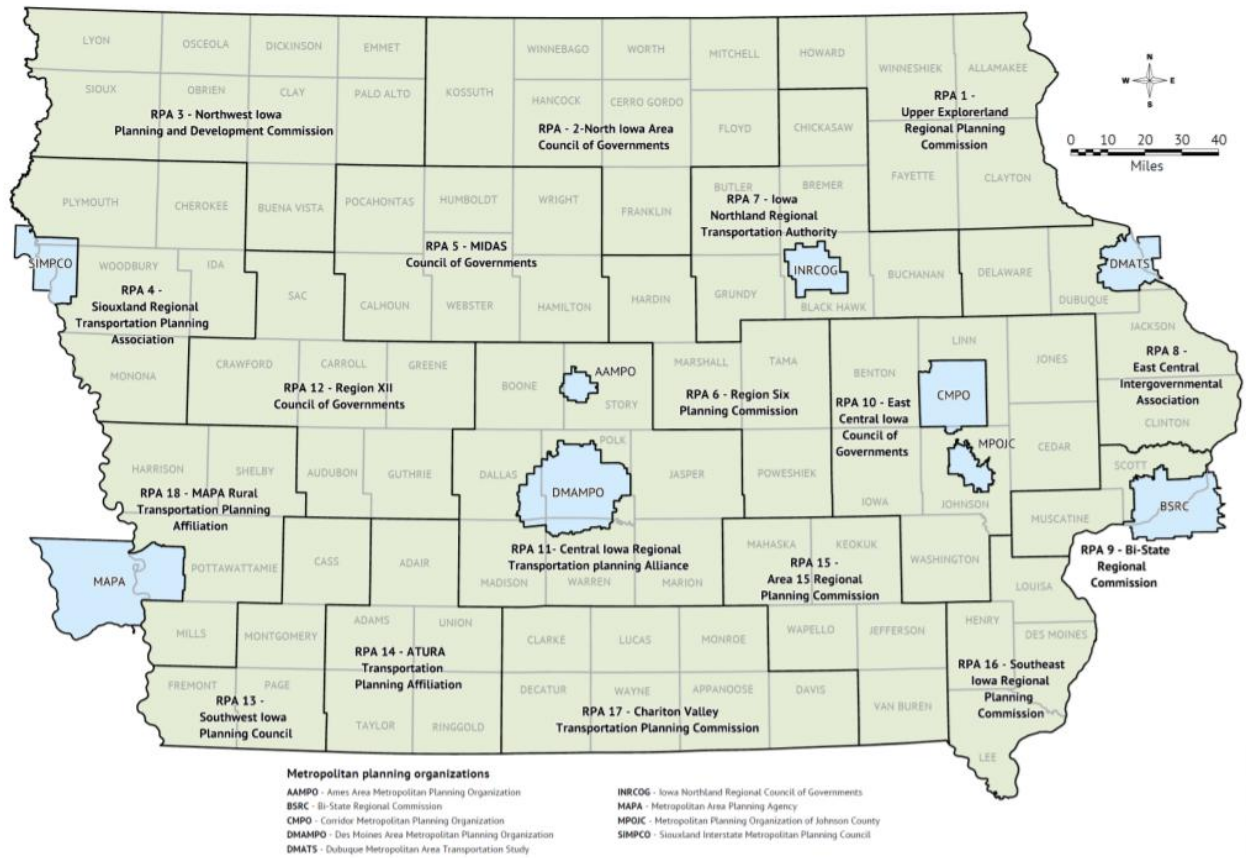
Purpose of the Long-Range Transportation Plan

The Long-Range Transportation Plan serves as a mechanism for the Iowa Northland Regional Transportation Authority (RTA) to examine its current transportation networks – highway, transit, air, rail, bicycle, and pedestrian modes – and to assess their adequacy for the existing population and economy. Moreover, it provides area officials with an opportunity to explore the future transportation needs of the community based on existing conditions, projected revenues, and population and employment projections. This effort is conducted through close coordination with the RTA Transportation Technical Committee (TTC), area officials, and the solicitation of public input to discuss the needs and opportunities of the region.

This document provides a framework upon which local jurisdictions can base transportation project selection during the annual programming process. Given a constrained financial future, local officials must be able to prioritize and select projects that best meet the needs of the region, while not exceeding the revenue projected to be available during the life of this Plan.

Regional Planning Affiliations

The State of Iowa has developed a system of Regional Planning Affiliations (RPA) to carry out transportation planning, even though federal law does not mandate specific transportation planning funding or requirements for non-metropolitan areas. Iowa has 18 RPAs that cover the area outside of the nine Metropolitan Planning Organizations (MPOs). The Iowa DOT provides funding through FHWA and FTA sources to the RPAs to finance planning and programming for transportation projects. In return, the RPAs conduct regional planning activities that mirror those federally required of MPOs. This includes several planning documents and conducting a continuing, cooperative, and comprehensive (3-C) planning process.



MPOs and RPAs in Iowa
Source: Iowa DOT

What is the RTA?

The Iowa Northland Regional Transportation Authority (RTA) was established in 1993 to conduct transportation planning and programming for Black Hawk, Bremer, Buchanan, Butler, Chickasaw, and Grundy Counties, excluding the Waterloo-Cedar Falls metropolitan area (Map 1.1). The RTA was established under the umbrella of the Iowa Northland Regional Council of Governments (INRCOG) which has been a regional planning agency serving those same counties since 1973. INRCOG is also designated by the State of Iowa as the MPO for the Black Hawk County Metropolitan Area. Map 1.2 provides an overview of the RTA region.

Structure of the RTA

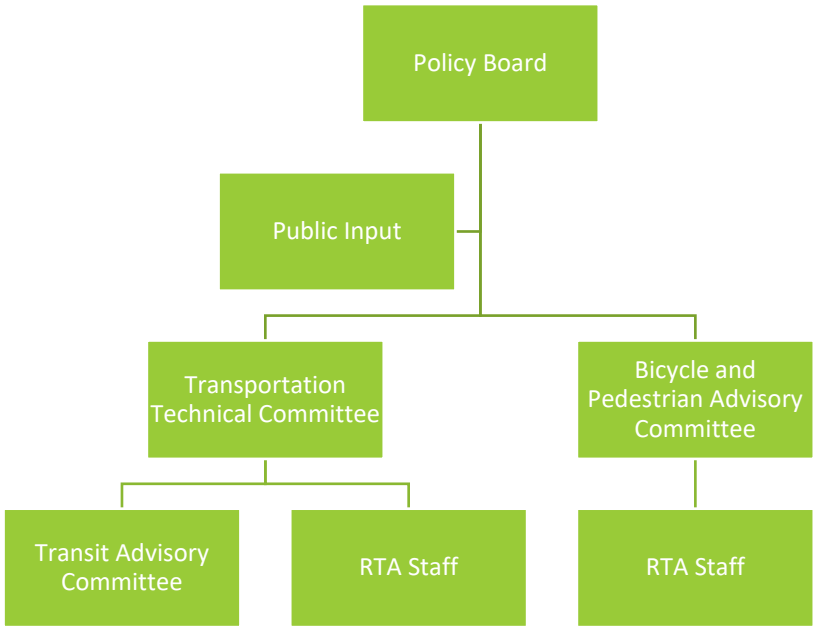
Three designated committees form the structure of the RTA: The **Policy Board**, the **Transportation Technical Committee (TTC)**, and the **Bicycle and Pedestrian Advisory Committee (BPAC)**. The Policy Board and TTC meet jointly, monthly.

The **Policy Board** is the governing body of the RTA. Voting members include a member of the Board of Supervisors for Black Hawk, Bremer, Buchanan, Butler, Chickasaw, and Grundy Counties; a representative from Waverly and Independence, as designated by their respective mayor and/or city council; and a representative from four cities at-large.

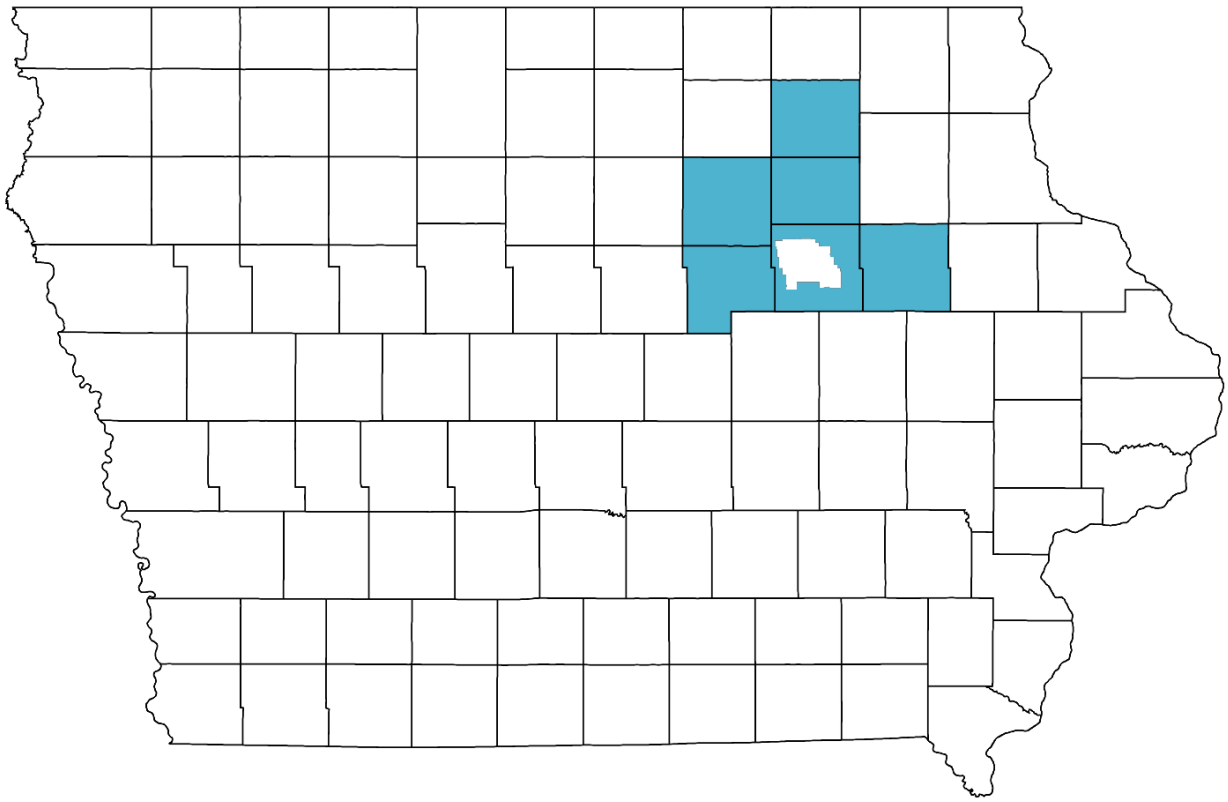
The **Transportation Technical Committee** consists of local engineers, planners, modal representatives, and interested parties. The TTC advises the Policy Board but does not vote on policy issues.

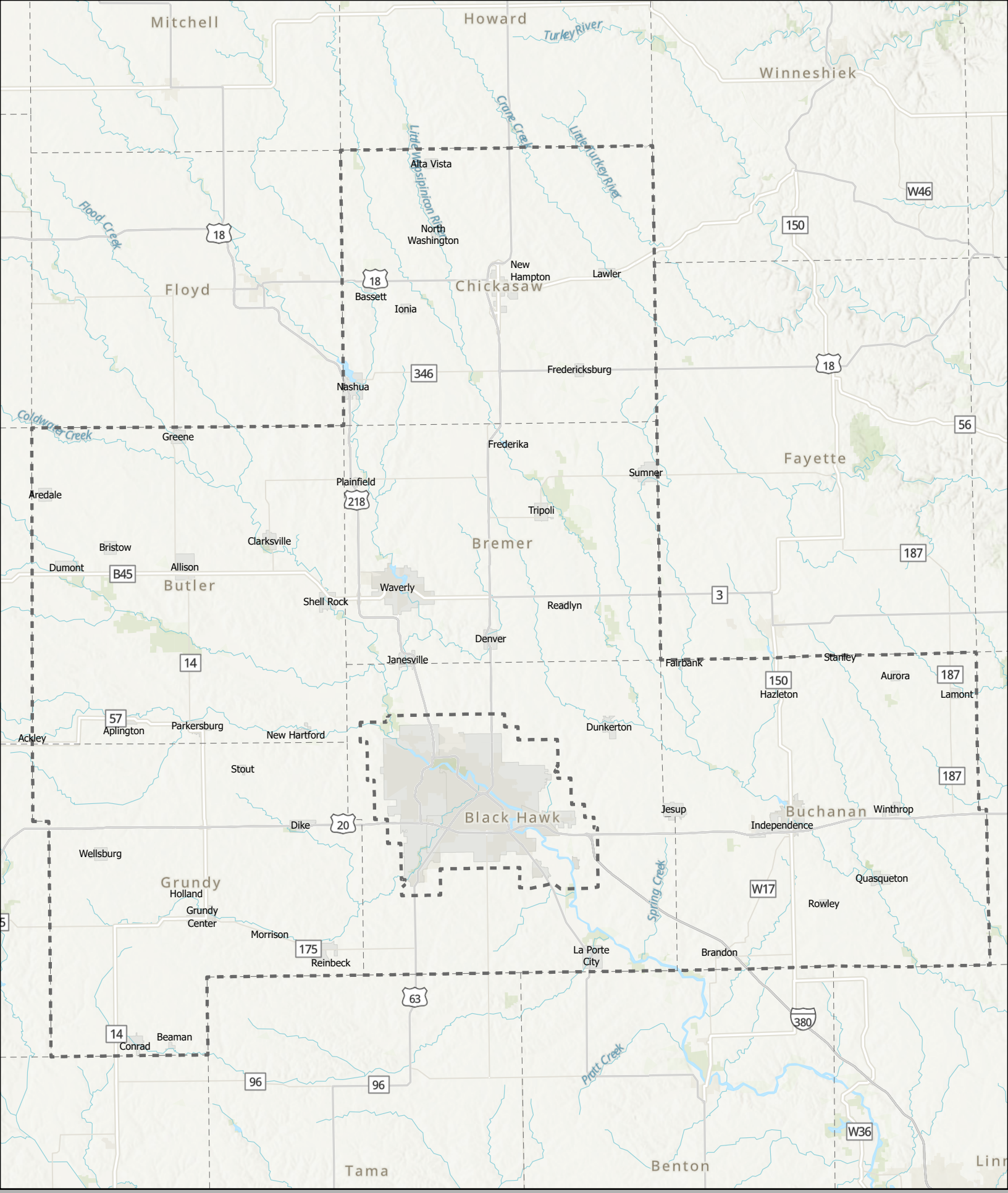
The Bicycle and Pedestrian Advisory Committee is directly responsible to the Policy Board to provide guidance and strategies on the planning and implementation of transportation projects related to bicycle and pedestrian travel. The BPAC meets annually to discuss, rank, and program transportation alternative projects.

The RTA establishes and supports subcommittees and working groups as needed. The standing subcommittee of the Transportation Technical Committee is the Transit Advisory Committee (TAC). This group meets at least twice annually to discuss passenger transportation and human service agency coordination, and to help develop the Passenger Transportation Plan (PTP).



Map 1.1: Iowa Northland Region





Map 1.2

Iowa Northland Region

INRCOG
Iowa Northland Regional Council of Governments

IIJA Planning Factors

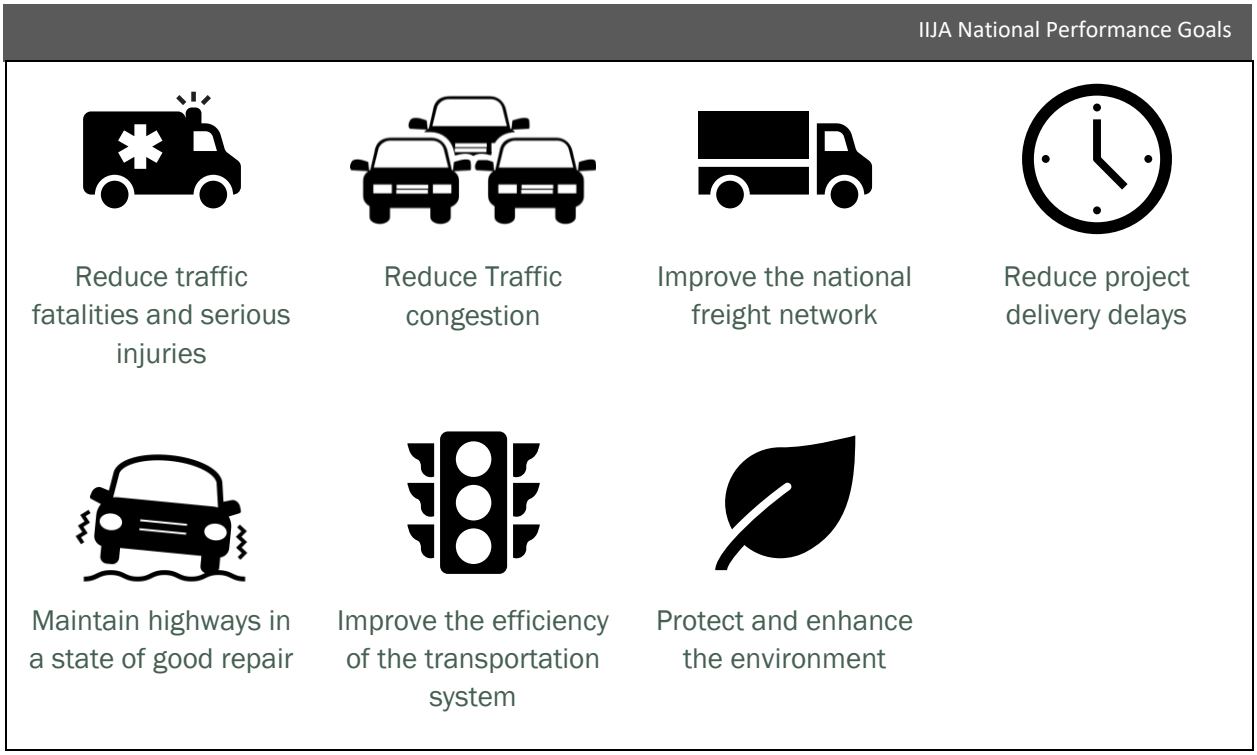
The planning and programming process is outlined in IIJA. Like the previous federal transportation bill, IIJA continues, and further strengthens, the requirement that an extensive, ongoing, and cooperative planning effort for the programming of federal funds be undertaken. The RTA's overall transportation planning goal is to provide for the **adequate**, **safe**, and **efficient** movement of people and goods in the region. The RTA utilizes IIJA's planning factors to help reach this goal, which are as follows:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency
- Increase the safety of the transportation system for motorized and non-motorized users
- Increase the security of the transportation system for motorized and non-motorized users
- Increase the accessibility and mobility of people and for freight
- 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
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight
- Promote efficient system management and operation
- Emphasize the preservation of the existing transportation system
- Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts on surface transportation
- Enhance travel and tourism

IIJA National Goals

The federal transportation bill emphasizes a performance-based approach and requires a process of performance measurement setting, starting with the U.S. DOT establishing performance measures, followed by the states and MPOs establishing performance targets. The national goals are as follows:

- **Safety** – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
- **Infrastructure Condition** – To maintain the highway infrastructure asset system in a state of good repair
- **Congestion Reduction** – To achieve a significant reduction in congestion on the National Highway System
- **System Reliability** – To improve the efficiency of the surface transportation system
- **Freight Movement and Economic Vitality** – To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
- **Environmental Sustainability** – To enhance the performance of the transportation system while protecting and enhancing the natural environment
- **Reduced Project Delivery Delays** – To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices



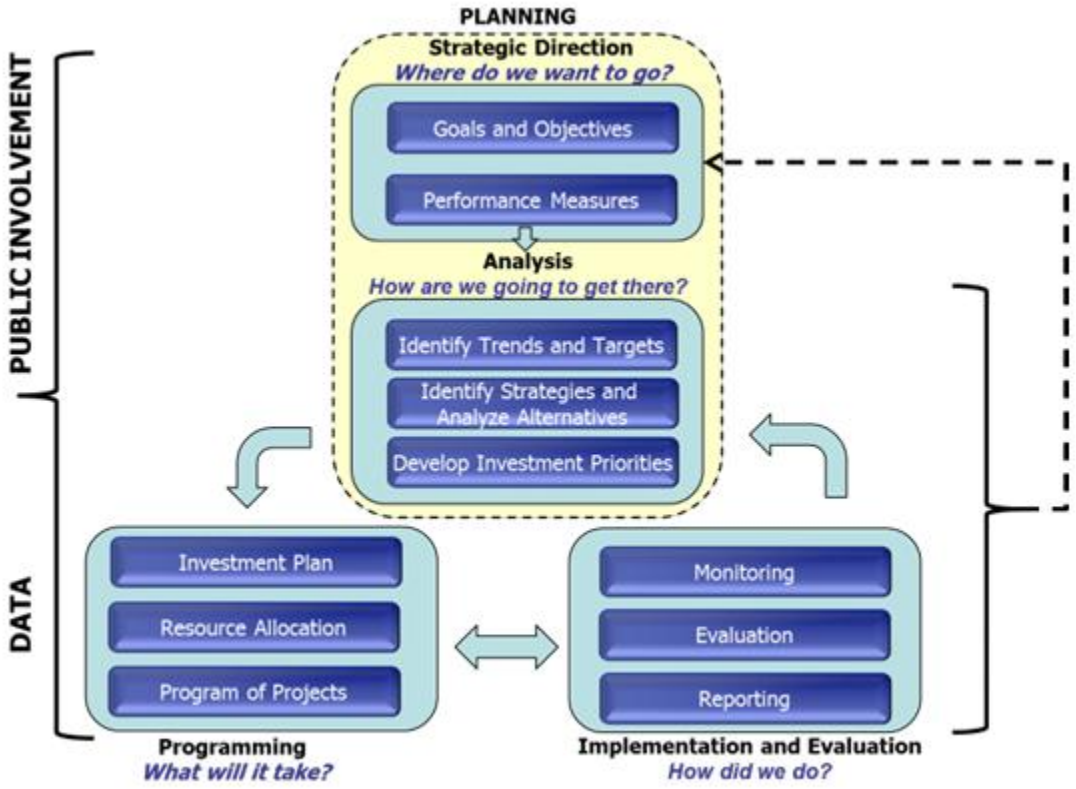
Performance-Based Planning and Programming

The foundation of this Plan is built upon performance-based planning and programming. This approach provides a link between short-term management and long-term decisions about policies and investments made for the transportation system, links specific actionable strategies to help improve decision making, and provides accountability for following through on the plan. The building blocks for a performance-based planning process are goals, objectives, and performance measures which are defined as:

- **Goal** – A broad statement that describes a desired end state.
- **Objective** – A specific and measurable statement that supports achievement of a goal.
- **Performance Measure** – A metric used to assess progress toward meeting an objective.

Performance-based planning and programming begins with a strategic direction, which indicates where the RTA would like to go in the future. The RTA sets this strategic direction by choosing goals, quantifiable objectives, and performance measures to guide decision making. Next, the RTA creates a long-range plan that identifies trends, targets, defines strategies, and develops investment priorities. The RTA then links the long-range plan to the Transportation Improvement Program (TIP) to deliver projects that improve performance and achieve targets within the strategic direction. Finally, the RTA monitors and evaluates performance-based planning and programming to create a feedback loop that informs future planning efforts. Figure 1.1 illustrates the performance-based planning and programming process.

Figure 1.1: Framework for Performance-based Planning and Programming



Source: FHWA Performance-Based Planning and Programming Guidebook, Page iv.

RTA Goals, Objectives, and Performance Measures

The RTA identified four goals for the 2050 Long-Range Transportation Plan which are to:

- Increase the safety of the transportation system.
- Strategically preserve the existing infrastructure.
- Support an efficient transportation system.
- Provide a high degree of multimodal accessibility and mobility.

The RTA adopted several objectives to help achieve these goals and performance measurements to track the progress toward meeting the objectives. Performance measurements are federally required only for Metropolitan Planning Organizations and therefore do not apply to the RTA. Nevertheless, the RTA recognizes the value of establishing region-specific performance measures to guide future regional planning initiatives and to facilitate the implementation of the state transportation plan. The RTA's goals, objectives, and performance measures can be found in Table 1.1.

Transportation Performance Management approach
Source: FHWA

Why is Performance-Based Planning and Programming Important?

With limited transportation funds and a growing list of infrastructure needs, it is critical that the RTA prioritizes projects that accomplish the goals of the Long-Range Transportation Plan. One of the best ways to accomplish this is to select performance measures and targets and then prioritize projects that help achieve those measures. The performance measures identified in the 2050 LRTP are the first step towards a performance-based planning and programming process for the RTA.

Table 1.1: 2050 Long-Range Transportation Plan Goals, Objectives, and Performance Measures

Goal	Objective	Performance Measurement	2015-2019 RTA Baseline Condition Data	2020-2024 Data	Desired Trend	Current Trend
Increase the safety of the transportation system	1.1) Reduce the number of traffic fatalities	Number of fatalities	11.6 / year	15.0 / year		
	1.2) Reduce the rate of traffic fatalities	Fatality rate (per 100 million VMT)	0.842	1.050		
	1.3) Reduce the number of traffic serious injuries	Number of serious injuries	42.8 / year	58.2 / year		
	1.4) Reduce the rate of traffic serious injuries	Serious injury rate (per 100 million VMT)	3.108	3.423		
	1.5) Reduce the number of non-motorized fatalities and serious injuries	Non-motorized fatalities and serious injuries	2.2 / year	2.0 / year		
	1.6) Reduce the number of traffic accidents involving pedestrians and bicyclists	Reported crashes involving pedestrians and bicyclists	10.2 / year	8.2 / year		
Strategically preserve the existing infrastructure	2.1) Preserve and maintain the Interstate system pavement	Percent of pavement in good condition	15.6%	59.8%		
		Percent of pavements in poor condition	0%	0.2%		
	2.2) Preserve and maintain the non-Interstate National Highway System (NHS) pavement	Percent of pavement in good condition	51.9%	62.2%		
		Percent of pavements in poor condition	1.3%	1.2%		
	2.3) Preserve and maintain state-owned pavement	Percent of pavement in good condition (IRI)	55.2%	63.7%		
		Percent of pavement in poor condition (IRI)	3.6%	2.0%		
	2.4) Preserve and maintain city and county road pavement conditions	Percent of pavement in good condition	64.7%	64.2% (2022)		
		Percent of pavements in poor condition	6.0%	6.1% (2022)		
	2.5) Preserve and maintain NHS bridges – Iowa DOT	Percent of bridges in good condition (deck area)	64.9%	58.0%		
		Percent of bridges in poor condition (deck area)	0%	0.2%		
	2.6) Preserve and maintain local bridges – City and County	Percent of bridges in good condition (deck area)	53.6%	51.4%		
		Percent of bridges in poor condition (deck area)	11.7%	16.3%		
	2.7) Decrease the number of bridges that are posted or closed	Posted or closed bridges	4.0 / year	7.0/year		

Goal	Objective	Performance Measurement	2015-2019 RTA Baseline Condition Data	2020-2024 Data	Desired Trend	Current Trend
Support an efficient transportation system	3.1) Maintain the percentage of person-miles traveled on Interstate that are reliable*	Level of Travel Time Reliability (LOTTR)	100%	100%		
	3.2) Maintain the percentage of the person-miles traveled on the non-Interstate NHS that are reliable*	Level of Travel Time Reliability (LOTTR)	98.6%	98.4%		
	3.3) Improve freight travel time reliability*	Truck Travel Time Reliability (TTTR) Index	1.24 (1.18)	1.22		
Provide a high degree of multimodal accessibility and mobility	4.1) Provide more on-road bicycle facilities	Miles of on-road bicycle accommodations (bike lane, paved shoulder, signed bike route, shared road, suggested on-road route)	–	535		
	4.2) Provide more off-road recreational trails	Miles of paved off-road trails	95.5	105.6		
	4.3) Decrease the percentage of RTA's vehicles that are beyond the Useful Life Benchmark (ULB)	Percent of vehicles that have met or exceeded ULB	59.1% (13 of 22)	40.9% (9 of 22)		
	4.4) A greater number of trips are made using public transit	Number of RTA rides 5-year average	115,816 / year	40,956 / year		

***Baseline Condition Data limited to 2019*

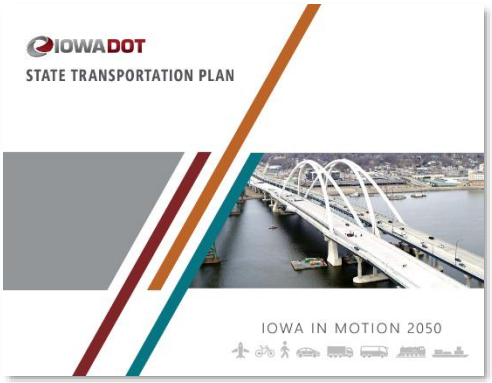
*** Under the Iowa DOT's pavement data collection framework, pavement conditions are surveyed annually on Interstates, every two years on the remaining NHS and state highways, and every four years on local (non-NHS) paved roads.*

*** A new definition and calculation methodology for "on-road bicycle accommodations" has been established. As a result, baseline data is not available.*

State Transportation Plans

The users are the primary beneficiaries of the nation's intermodal transportation system, built to serve public mobility and productivity. Transportation decisions must be made in an environmentally sensitive way, using a comprehensive planning process that includes the public and considers land use, development, safety, and security. The vision of the Iowa DOT and the Transportation Commission is "***A safe and efficient multimodal transportation system that enables the social and economic well-being of all Iowans, provides enhanced access and mobility for people and freight, and accommodates the unique needs of urban and rural areas sustainably.***" The Iowa DOT has adopted several plans to address federal requirements and guide transportation investments to achieve the system vision.

Iowa in Motion 2050 State Transportation Plan



Adopted in 2022, this long-range document addresses federal requirements and serves as a transportation investment guide for each transportation mode. The State Long Range Transportation Plan (SLRTP) is updated every five years because Iowa's transportation system is ever-changing. Proactive planning for the future of the system is critical to ensure people and goods can get where they need to go in a safe manner. The needs for the system are continually evolving due to changes in demographics, land use, travel patterns, technology, legislation, and available funding. The SLRTP establishes the vision and objectives for the state's multimodal transportation system, identifies existing and emerging needs, risks, and challenges, and recommends strategies to achieve the vision for the transportation system. SLRTP also supports a continued emphasis on stewardship. The Iowa DOT views stewardship as an efficient investment and prudent, responsible management of the existing transportation system.

The 2050 SLRTP is the third in the current series of long-range plans. In 2012, a policy-level plan was adopted. In 2017, the plan was expanded to identify primary investment areas, categorize future needs across modes, and provide strategies to achieve the system objectives. The 2022 SLRTP planning effort and document builds on these past plans with enhancements that include the following:

- Additional focus on emerging planning considerations
- Establishment of system objectives
- Expanded analysis of highway system needs and risks
- Updated strategies to implement the plan
- Development of Iowa DOT's rightsizing policy

https://iowadot.gov/iowainmotion/State-Transportation-Plan

Iowa Transportation Asset Management Plan 2023

Transportation asset management is a strategic approach to managing transportation infrastructure. It embodies comprehensive, proactive, and long-term philosophy. The overall goals of asset management are to minimize long-term costs, extend the life of the transportation system, and improve the performance of the transportation system. Transportation Asset Management Plans (TAMP) act as a focal point for information about the state's assets, management strategies, long-term expenditure forecasts, and business management processes. The Iowa DOT's TAMP describes how the agency manages its bridges and pavements throughout their lives. The document also connects the SLRTP and system and modal plans to the Iowa DOT's five-year Transportation Improvement Program. In addition to meeting federal requirements, this TAMP meets the following objectives:

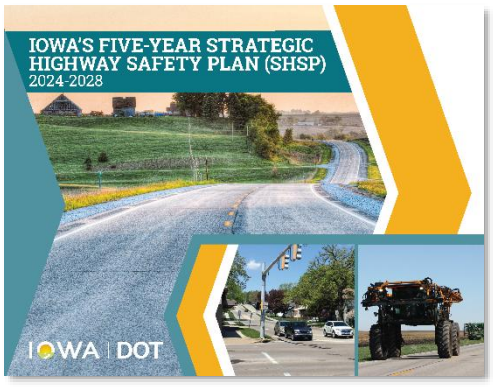
- Defines clear links among agency goals, objectives, and decisions
- Defines the relationship between proposed funding levels and expected results
- Develops a long-term outlook for asset performance
- Documents how decisions are supported by sound information
- Develops a feedback loop from observed performance to subsequent planning and programming decisions
- Improve accountability for decision-making
- Unify existing data, business practices, and divisions to achieve asset management goals

Consistent with best practices nationally, the Iowa DOT's asset management goals are to:

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

www.iowadot.gov/systems_planning/Planning/Federal-Performance-Management-and-Asset-Management

Iowa Strategic Highway Safety Plan 2024



One method a state uses to conduct safety planning is through the development of a highway safety plan. A Strategic Highway Safety Plan (SHSP) is a statewide-coordinated safety plan that provides a comprehensive framework for reducing highway fatalities and serious injuries on all public roads. The SHSP establishes statewide goals, objectives, and key areas of emphasis developed in consultation with federal, state, local, and private sector safety stakeholders. The 2024 SHSP is the fifth statewide safety plan to be adopted in Iowa.

The 2024 SHSP was developed in consultation with the SHSP Implementation Team, which is comprised of individuals representing the E's of safety – education, emergency medical services, engineering, and enforcement. These multidisciplinary representatives provide updates on programs, policies, and educational campaigns for their respective organizations, as well as data on the latest

research for their areas of expertise. Iowa's SHSP also considers a fifth E: everyone. Ultimately, every driver on Iowa's roadways is responsible for making safe choices and driving responsibly.

For this update, the emphasis areas were prioritized based on an analysis of crash data and an extensive statewide input process involving Iowa's traffic safety stakeholders, resulting in seven key emphasis areas. Strategies for each key emphasis area are based on prior strategies in the previous SHSP, FHWA's Proven Safety Countermeasures, and NHTSA's Countermeasures That Work. The recommended safety strategies selected provide the greatest opportunity to reduce fatalities and serious injuries on Iowa's roadways. The seven key emphasis areas are as follows:

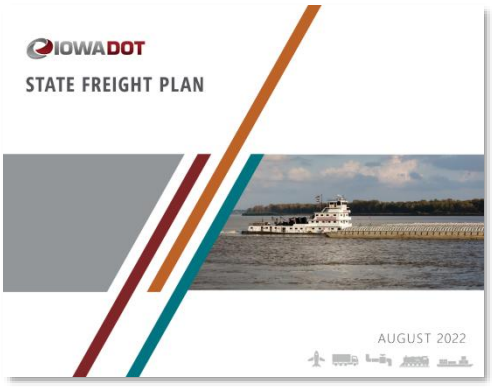
- Distracted Driving
- Impairment Involved
- Lane Departures
- Local Roads
- Roadside Collisions
- Occupant Protection (Unprotected Persons)
- Work Zones

The implementation of the SHSP will be conducted by the SHSP Implementation Team and broadly supported by traffic safety professionals from around the state. The implementation and progress of the plan will be evaluated on an annual basis for the five-year planning period. The goal of this plan is **Zero Fatalities**; however, interim annual goals aligned with the Highway Safety Improvement Program (HSIP) performance measures will be developed during the plan period.

Although Zero Fatalities is Iowa's long-term vision, the state also recognizes the need to establish short-term goals in pursuit of this vision. In 2016, FHWA published the HSIP and Safety Performance Management Final Rules. As part of these rules, states are required to develop statewide targets annually for five safety performance measures. These targets serve as the short-term goals for the state.

www.iowadot.gov/traffic/shsp/home

Iowa State Freight Plan 2022



The primary purpose of the State Freight Plan is to document the immediate and long-range freight planning activities and investments in the state. More specifically, it provides guidance on how to address issues, adapt to emerging trends, and invest strategically in the freight system to grow a stronger economy, strengthen the nation's competitive advantage, and enhance the quality of life for Iowans.

Developed in coordination with the Iowa Freight Advisory Council (FAC), the State Freight Plan serves as a platform for connecting Iowa's freight-related initiatives and a tool for informed decision-making aimed at addressing the ongoing challenges of today's freight system and supply chains.

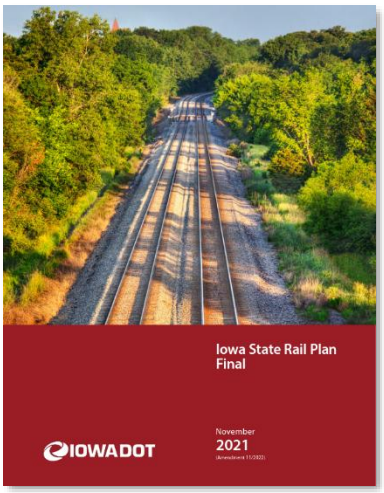
This document is the second in the current series of freight plans that are now federally required to be updated every four years. The 2022 State Freight Plan is an updated and streamlined version of the original 2017 State Freight Plan with several notable enhancements that will impact the freight transportation system, including:

- Clearly defined system objectives
- Process for identifying multimodal bottlenecks
- Focus on infrastructure and supply chain resiliency

- Freight design considerations
- Commercial motor vehicle parking facilities assessment
- Catalog of freight-generating facilities

www.iowadot.gov/iowainmotion/Specialized-System-plans/2022-State-Freight-Plan

Iowa State Rail Plan 2021



This document is intended to guide the Iowa DOT in its activities of promoting access to rail transportation, helping to improve the freight railroad transportation system, expanding passenger rail service, and promoting improved safety both on the rail system and where the rail system interacts with people and other transportation modes. The State Rail Plan describes the state's existing rail network and rail-related economic and socioeconomic impacts. It also describes the State Rail Plan process, Iowa's rail vision and supporting goals, proposed short- and long-range capital improvements, studies, and recommended next steps to address the issues identified. The State Rail Plan is intended to meet the requirements established under Section 303 of the Passenger Rail Investment and Improvement Act of 2008, which provides for enhanced State involvement in rail policy, planning, and development efforts, including requiring States to develop FRA-accepted State Rail Plans to be eligible for capital grants authorized under this act and subsequent federal transportation bills.

https://iowadot.gov/iowainmotion/modal-plans/rail-transportation-plan

Iowa Public Transit 2050 Long Range Plan

In 2020, the Iowa DOT adopted the Iowa Public Transit 2050 Long Range Plan. While the Iowa DOT has conducted specific planning efforts – Iowa Statewide Passenger Transportation Funding Study, Iowa Park and Ride System Plan – this Plan looks at the public transit system from a broader point of view. The Plan seeks to coordinate planning, programming, and technical assistance statewide to support transit operations at the local level. The goal is to provide specific strategies and improvements that can be implemented and revisited over time.

This Plan serves as a guide to assist the Iowa DOT in making informed public transit decisions for the state. The strategies and action items within the plan serve as the starting point for the implementation phases of the planning process. The transit plan will also be updated every five years to stay current with trends, forecasts, and factors that influence decision-making.

www.iowadot.gov/iowainmotion/Modal-Plans/Public-Transit-Plan

Iowa Bicycle and Pedestrian Long-Range Plan

Adopted in 2018, this plan outlines a strategic vision to improve safety, connectivity, and accessibility for bicyclists and pedestrians across the state. This comprehensive plan identifies priorities, goals, and action steps to create a safer, more equitable transportation network that supports both recreational and commuter needs.

Key elements of the plan include:

- Complete Streets Policy: The plan incorporates a Complete Streets approach, which emphasizes designing streets that are safe and accessible for all users, regardless of age, ability, or mode of transportation. This approach integrates infrastructure improvements such as sidewalks, bike lanes, crosswalks, and transit facilities to promote multi-modal transportation options.
- Improving Infrastructure: Expanding and maintaining bike lanes, multi-use trails, sidewalks, crossings, and other essential facilities to ensure safe and seamless access for all users.
- Enhancing Safety: Addressing safety concerns through design improvements, targeted education programs, and implementing best practices for safer road crossings and connectivity.
- Promoting Connectivity: Strengthening regional and local connections between communities by linking multi-modal transportation networks to support commuting, recreation, and community access.
- Equity and Access: Ensuring all Iowans, regardless of age, income, or geography, have access to safe and affordable active transportation options.

The plan emphasizes collaboration between state, regional, and local partners to implement improvements while addressing economic development opportunities, environmental sustainability, and quality-of-life enhancements. The Iowa Bicycle and Pedestrian Long-Range Plan provide a framework for integrating walking and biking infrastructure into future planning, development, and decision-making, supporting healthier, more connected, and livable communities across Iowa.

https://iowadot.gov/iowainmotion/Modal-Plans/Bicycle-and-Pedestrian-Plan