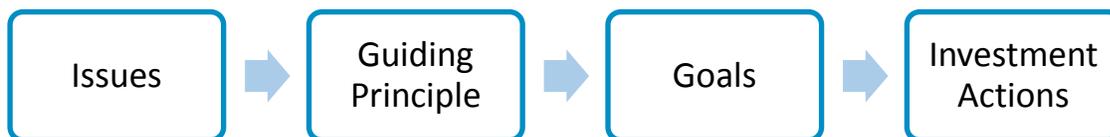


## 5. Choosing our path

As discussed in Chapter 1, the first step in the development of the Plan was to collect a wide variety of input from transportation stakeholders and members of the public from across the state. The purpose of this process was to identify a comprehensive set of state, regional, and local transportation issues, and to consider these needs when establishing a direction for Iowa's future transportation investments.



Key issues were identified in the previous section by each mode. Many issues are of a statewide nature, such as the increasing difficulty of maintaining acceptable condition ratings for roadways and bridges. Other issues are more regional in nature, such as river issues important to those areas along the Mississippi and Missouri Rivers. Finally, some issues are very local in nature, such as a lack of sidewalks and limited trail connectivity. Through the identification of these issues, a pathway was developed for the future direction of the Plan, including the development of the guiding principle, goals, and investment actions. The following diagram illustrates this path.



### 5.1 Summary of issues

The following pages include a summary of the numerous issues that have been identified across the state. Addressing the following state, regional, and urban issues with limited financial resources will be a challenge throughout the life of the Plan.

## State transportation issues

State issues were identified in consultation with the Iowa DOT’s modal offices and serve as a summary of the “key issues” identified by mode in Chapter 4.

- Inadequate funding
- Growing system-wide maintenance needs
- Airport facility and service improvement needs
- Increasing demand for well-connected bicycle and pedestrian facilities
- Increasing traffic and congestion and continuing highway safety concerns
- Major bridge structure concerns and increasing restrictions
- Excessive age of transit vehicles
- Need for expanded transit service and more coordination
- Existing rail infrastructure is not adequate to meet future demand
- Aging locks and dams

## Regional and urban transportation issues

Regional and urban issues were identified in consultation with the state’s eighteen Regional Planning Affiliations (RPAs) and nine Metropolitan Planning Organizations (MPOs).

### Regional issues

- Regional airport facilities have expansion and maintenance needs
- Regional bicycle and pedestrian facilities should be expanded with better connectivity and coordination with local facilities; ongoing maintenance and rehabilitation of existing facilities is needed
- Deficiencies exist across the roadway network, including high-cost bridges, and the secondary system is impacted by heavy agricultural equipment
- Transit user needs are changing due to an aging rural population; maintenance and expansion of services, coordination between transit systems and human service agencies, and replacement of old and inefficient buses are needed
- Train/vehicle conflicts are increasing at rail crossings; additional intermodal facilities are needed, as is improved communication between railroads, shippers, and communities
- Outdated locks and dams create congestion and operational problems for river transport and intermodal connections at river terminals

### Urban issues

- Airport improvements and continued marketing are needed to increase air freight and passenger demand
- More bicycle and pedestrian facilities are needed, including walkable communities with safe walkways and more seamless transfers with other modes and facilities
- New roadway capacity is needed in some metro areas due to deficiencies related to congestion and safety at selected locations, including high-cost bridges
- There is a need to maintain existing transit service levels, expand where justified, and improve coordination between transit systems and other modes
- Rail crossings conflict with high-traffic roadways in metro areas; rail infrastructure needs improvement due to growing freight demand; future passenger service is a desired travel option in some metro areas
- Outdated locks and dams create congestion and operational problems for river transport and intermodal connections at river terminals

## 5.2 Guiding principle

The Plan's guiding principle, highlighted below, focuses on the provision of safe and modern transportation systems and services for individuals who travel in Iowa as well as for the movement of freight. This guiding principle is accomplished when transportation investments support the goals identified in the following section.

**“Safely moving people and goods through investments  
that strengthen our economic vitality.”**

## 5.3 Goals

In order to support a renewed emphasis on the stewardship of our existing transportation system, a philosophy that was defined in the introduction to the Plan, three broad-based and far-reaching goals have been identified:

**Safety**—To make Iowa a safer place to travel

**Efficiency**—To make the best use of resources

**Quality of Life**—To make Iowa a better place to live, work, and travel

These goals serve as the pillars upon which the investment actions are based. They are the basis for decision-making and will guide investments covering all modal areas. The Plan requires a combination of preserving what infrastructure and services we currently have, as well as adding capacity where demand levels warrant. A well-maintained system that has consistent design characteristics and fosters modal interactions is essential for Iowa's continued success. Iowans have a strong desire to have a transportation system that is also sensitive to elements of the environment, such as clean air and water, protected wildlife and vegetation, low noise levels, and well-conceived land use plans.

### Safety

Transportation safety and security continue to be a primary concern and an integral element in the planning and programming processes. Increased transportation safety through the reduction of crashes is the foremost element in an effective transportation system.

### Efficiency

Transportation efficiency is a system-wide theme, which at its core implies the best use of available funding and a reduction in financial costs. Effective use of resources enhances Iowa's ability to compete economically. Many evaluation tools are available and will be used to achieve optimal investment decisions.

### Quality of Life

One of Iowa's greatest resources is the quality of life that exists within its borders, which is directly supported by the state's transportation services. Iowans value the ability to travel with ease, and the mobility provided by Iowa's transportation services supports its residents and economy while being sensitive to the environment.

## Why invest in these goals?

Increased safety reduces societal impacts:

- Lost lives
- Physical, emotional, and financial hardship
- Lost productivity due to disability
- Demand on emergency response

Increased efficiency reduces financial costs:

- System preservation and construction costs
- Travel time costs
- Freight shipping costs
- Vehicle operating and maintenance costs

Improved quality of life reduces migration out of Iowa:

- Supports retention and creation of good-paying jobs
- Maintains convenient access to amenities
- Enhances lifestyle options
- Provides a pleasant travel experience

## SAFETEA-LU

The current federal surface transportation bill is the Safe, Accountable, Flexible, Efficient Transportation Equity Act: a Legacy for Users (SAFETEA-LU). Being compliant with SAFETEA-LU is an important consideration in the transportation planning process. The three goals identified above are tied very closely to each of the eight SAFETEA-LU planning factors, which include:

1. Support economic vitality, 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 for 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; and
8. Emphasize the preservation of the existing transportation system.

The relationships between the Plan’s goals and the SAFETEA-LU planning factors are outlined in **Table 5.1**.

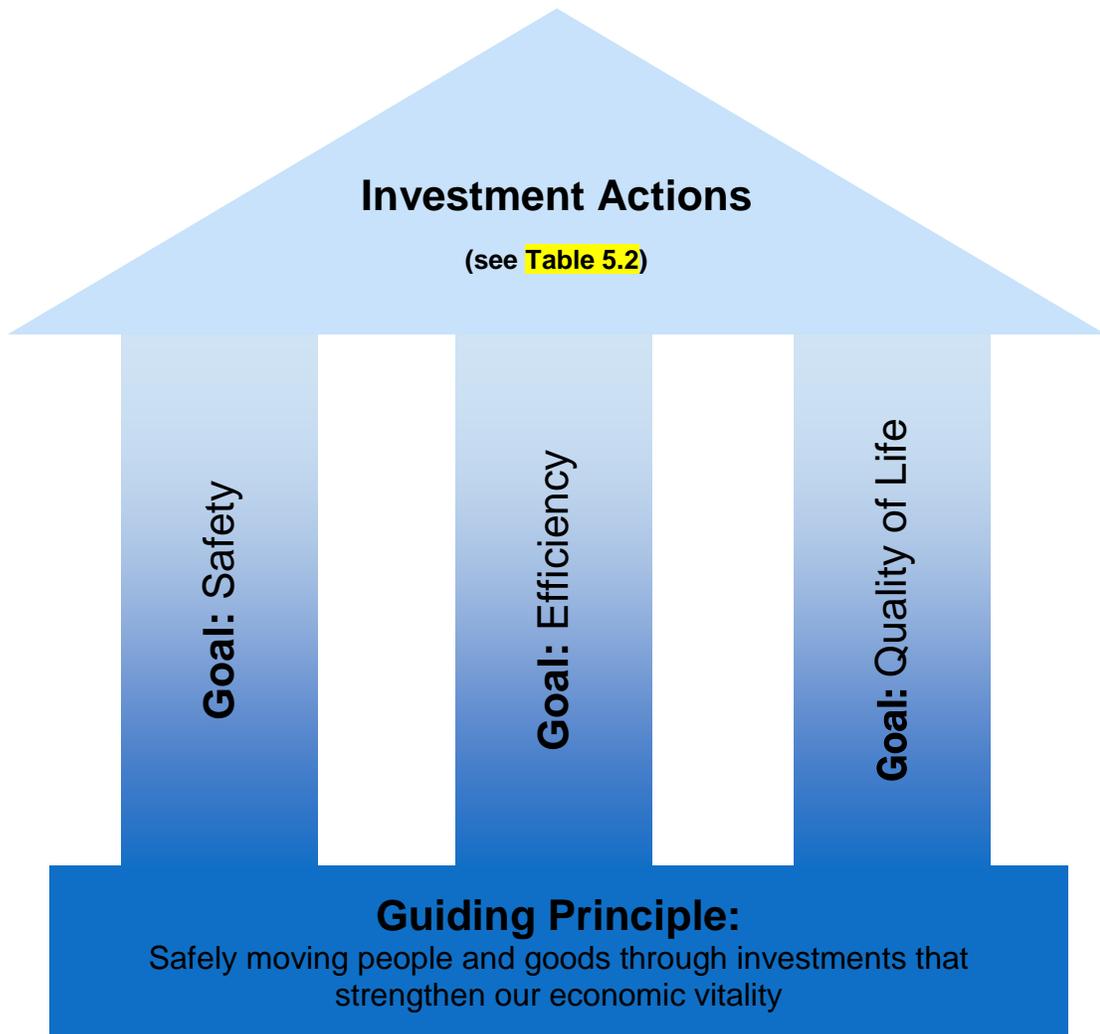
**Table 5.1: Relationship between Plan goals and SAFETEA-LU planning factors**

	Safety	Efficiency	Quality of life
1. Economic Vitality	✓	✓	✓
2. Safety	✓		
3. Security	✓		
4. Accessibility and Mobility			✓
5. Environment, Energy, Quality of Life, and Consistency	✓	✓	✓
6. Connectivity			✓
7. Efficient System Management and Operation		✓	
8. System Preservation		✓	

Source: Iowa DOT

It should be noted that possible future planning factors are currently being discussed at the national level. Some of these may eventually become part of the next Federal Transportation Bill. Common themes have included performance-based planning, mobility and access, alternative transportation, sustainability, and livability. However, because no bill has been passed to date, these hypothetical planning factors were not specifically addressed in **Table 5.1**.

## Guiding Principle and Goals



As a result of the identification of the guiding principle and goals, the investment actions were then considered.

## 5.4 Investment Actions

The investment actions listed on the following pages are categorized by the three goals—safety, efficiency, and quality of life—and are grouped by each mode. These investment actions will serve as a guide for the Iowa DOT’s future financial investments. In addition, as the Iowa DOT’s MPO and RPA partners draft their long-range transportation plans, they are also developing investment actions and projects that align with both their local planning goals and these statewide initiatives.

The investment actions in [Table 5.2](#) were derived from the input received as part of the Iowa DOT’s public outreach efforts as well as other departmental plans, studies, and reports. Other considerations were the analysis of Iowa’s demographic and economic trends, the movement of people and goods, and the condition of the system. The investment actions build upon the previous state transportation plan and will complement and support this Plan’s guiding principle and goals and the stewardship of our existing transportation system.

**Table 5.2: Investment Actions by Mode and Goal**

	Safety	Efficiency	Quality of life
Aviation	<p>Enhance aviation safety through awareness and education programs</p> <p>Maintain and enhance the statewide network of aviation weather observation systems</p> <p>Improve runway approaches through obstruction removal and mitigation funding</p> <p>Promote implementation of compatible land use guidelines near airports</p> <p>Promote and assist in active wildlife management at airports</p> <p>Promote communication between airports and local emergency personnel</p>	<p>Maintain and enhance airside facilities</p> <p>Maintain and enhance aviation vertical infrastructure facilities</p> <p>Maintain adequate accessibility to commercial air service</p> <p>Maintain adequate accessibility to airports with weather reporting and instrument approaches</p> <p>Encourage airport long-range business model planning</p> <p>Evaluate implementation of NextGen navigation within the state</p>	<p>Support a system of airports that meets the air transportation needs of businesses and citizens</p> <p>Promote an understanding of the benefits of Iowa’s air transportation system</p> <p>Support a system of airports that provides educational and career opportunities</p> <p>Promote the need for aviation services to meet user needs at airports</p>

	Safety	Efficiency	Quality of life
Bicycle & Pedestrian	<p>Develop recommended facility maintenance and signage practices</p> <p>Develop pedestrian safety program</p> <p>Expand bicycle safety program</p> <p>Develop projects that minimize barriers and promote more walking and bicycling to school</p>	<p>Focus investments on statewide Level 1 trails</p> <p>Continue investments on regional and local Level 2 and 3 trails</p> <p>Improve coordination and cooperation among trail developers (in-state and across borders)</p> <p>Maintain a bicycle and pedestrian facility data inventory</p> <p>Support the acquisition of abandoned rail lines for trail development</p>	<p>Provide accessible accommodations on Iowa’s roadway corridors for bicycles and pedestrians (e.g., Complete Streets Policy)</p> <p>Promote bicycling and walking as an alternative to driving to reduce emissions and improve the health and mobility of citizens</p> <p>Continue and enhance proactive involvement in education, promotion, and advocacy</p> <p>Update state bicycle map on a regular basis</p>



	Safety	Efficiency	Quality of life
Highway	<p>Target highway investments to reduce fatalities and major injuries</p> <p>Support the Iowa Comprehensive Highway Safety Plan</p> <p>Better accommodate the increasing number of elderly drivers</p> <p>Support access management improvements and planning</p> <p>Enhance security of highways and bridge structures</p>	<p>Preserve and rehabilitate existing highways and bridge structures</p> <p>Target selected capacity improvements to address access and operational needs</p> <p>Incorporate Intelligent Transportation Systems (ITS) to improve system operation</p> <p>Enhance multi-modal freight planning</p> <p>Support highway research initiatives</p> <p>Support living roadways and roadside vegetation to minimize maintenance costs</p> <p>Consider work zone impacts throughout the project development process to maximize vehicular mobility and work zone safety</p>	<p>Support economic development projects for local governments</p> <p>Reduce transportation related congestion and emissions</p> <p>Accommodate other modes as appropriate</p> <p>Support living roadways and roadway vegetation to enhance our environment</p> <p>Develop projects in a context sensitive manner that supports all users and enhances natural resources</p> <p>Accommodate public utilities as appropriate</p>



	Safety	Efficiency	Quality of life
Public Transit	<p>Improve safety for transit passengers</p> <p>Assist transit agencies with driver training, including efforts to enhance the safety of pedestrians exposed to transit vehicle traffic</p> <p>Assist transit agencies' efforts to improve and maintain worker safety at transit facilities</p> <p>Assist transit agencies in improving security of transit vehicles and facilities</p>	<p>Assist transit agencies in acquiring new vehicles and facilities</p> <p>Improve and maintain existing transit facilities</p> <p>Support commuter services</p> <p>Support intercity bus services</p> <p>Assist transit agencies in developing computerized dispatch capabilities</p> <p>Encourage increased coordination between transit agencies, human service organizations, and school districts</p>	<p>Focus on public transit's role to improve Iowa's economy and overcome mobility barriers</p> <p>Encourage transit agencies and intercity bus companies to provide seamless service across agency boundaries and between modes</p> <p>Promote transit and intercity bus as an alternative to driving to reduce congestion and emissions</p> <p>Consider and promote accessible pedestrian connections to transit facilities</p>
Rail	<p>Improve highway-rail crossing safety</p> <p>Monitor rail safety and security conditions</p> <p>Promote general rail safety</p>	<p>Improve the rail system physical infrastructure</p> <p>Preserve existing rail freight and passenger service and develop additional passenger service</p> <p>Assist business community in improvement of spur tracks and construct where appropriate</p> <p>Monitor rail regulatory issues</p> <p>Educate potential users on the benefits of rail transportation and facilitate availability of rail to shippers</p>	<p>Reduce rail-related congestion and air pollution</p> <p>Develop rail passenger services to provide increased mobility and encourage economic development</p> <p>Preserve historic and cultural rail facilities</p> <p>Serve as rail information and conflict resolution clearinghouse</p> <p>Promote rail as a sustainable freight and passenger alternative</p>

	Safety	Efficiency	Quality of life
Water	Support navigation safety improvements	Support navigation infrastructure improvements  Promote commercial navigation	Support river ecosystem restoration activities
Miscellaneous	Participate in and promote safety and security planning and programs  Support local governments and planning agencies in safety conscious planning	Support regional and metropolitan transportation planning activities  Participate in freight and passenger planning efforts  Conduct and participate in transportation research  Better integrate internal technology for efficient analysis and support	Enhance and expand the 511 system  Expand Intelligent Transportation System (ITS) development

Some of the investment actions outlined above will be accomplished by departmental staff efforts and are covered by internal administrative funding. Other investment actions will be paid for by dedicated federal, state, and local transportation funding sources.

The following chapter, “Paying Our Way”, provides information on how the Iowa DOT will pay for the investment actions outlined in this chapter.

