

Iowa in Motion

Planning Ahead 2040

Iowa Transportation Commission

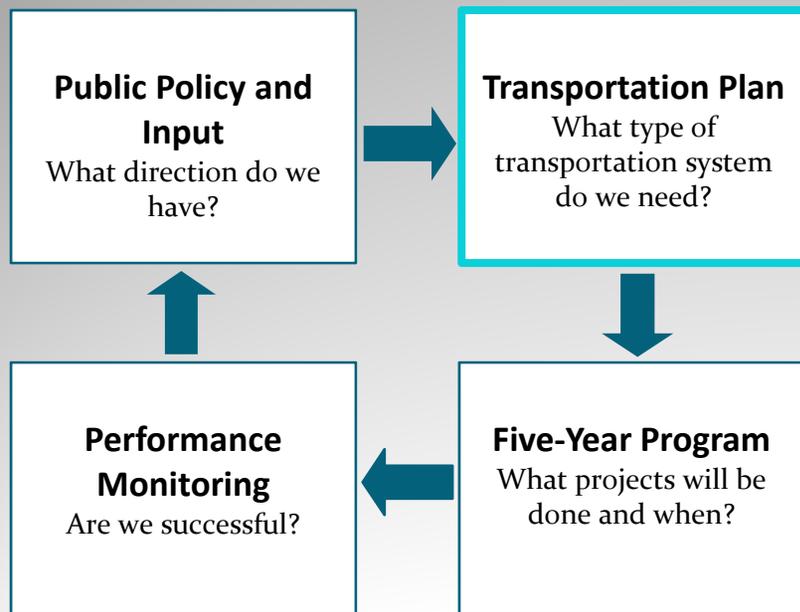
May 10, 2011



Presentation Outline

- Plan Introduction
 - Iowa's existing state transportation plan
 - Federal requirements
 - Transition to current update
 - Neighboring states
 - Document outline
 - Schedule
- Chapter 1: Looking ahead to 2040
- Chapter 5: Choosing our path

How can the Plan be used?



- Assist the Commission in making investment decisions
- Provide a framework for MPO/RPA plans
- Provide a logical source for projects in the Five Year Program
- Performance monitoring

Iowa's existing state plan

- *Iowa in Motion*
- Adopted July 15, 1997
- Much of *Iowa in Motion* has been implemented.
- While successful, now is the time for an update.
 - New 2010 Census data
 - TIME-21 needs study
 - Various modal plans and studies recently completed
 - Several MPO/RPA long range plans recently completed
 - Reauthorization
 - Transportation 2020

Federal requirements

- 23CFR450.214 Development and content of the long-range statewide transportation plan
 - “The State shall develop a long-range statewide transportation plan, with a minimum 20-year forecast period at the time of adoption...”
 - “The State shall continually evaluate, revise, and periodically update the long-range statewide transportation plan, as appropriate...”
- Reauthorization may strengthen state long-range planning requirements.

Transition to current update

- *Iowa in Motion* contained specific investment corridors.
- Update would shift to a policy/vision plan.
 - Identifies key issues and prioritizes types of investments
 - Benefit: Provides direction but allows for more flexibility

Neighboring states

- Policy/Vision plans: Illinois, Minnesota, Nebraska, and South Dakota
- Hybrid Policy/Vision and Corridor plans: Missouri and Wisconsin
- These plans have been updated within the last 5 years

Document outline

- **Chapter 1: Looking ahead to 2040**
 - What is the Plan?
 - What will the Plan include?
 - How will the Plan be developed?
 - How can the Plan be used?
- **Chapter 2: Trends**
 - Population trends
 - Economic trends
 - Passenger trends
 - Freight trends
 - Implications for transportation

Document outline

- Chapter 3: Planning considerations
 - Economic Vitality
 - Energy
 - Environmental mitigation
 - Environmental justice
 - Land use and livability
 - Maintenance and preservation
 - Safety
 - Security

Document outline

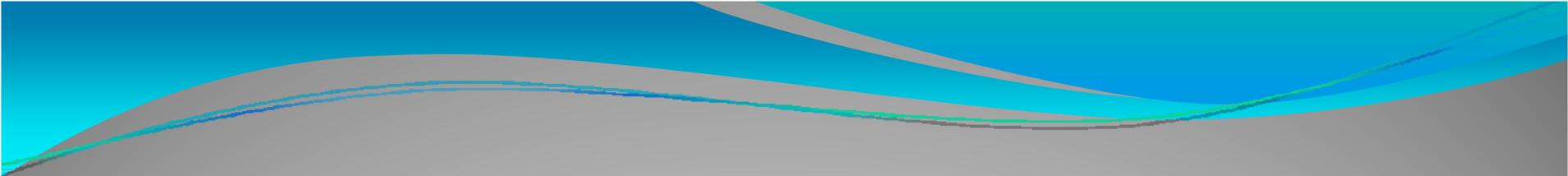
- Chapter 4: Measuring our system condition
 - A discussion for each mode, including:
 - An introduction to the mode
 - The impact of the mode on Iowa's economy
 - Meaningful highlights of that modal system
 - Current trends
 - Key issues
- **Chapter 5: Choosing our path**
 - Summary of issues
 - Guiding principle and goals
 - Investment actions

Document outline

- Chapter 6: Paying our way
 - Introduction to transportation funding
 - Future costs and revenues by mode
 - Overall outlook and financial assessment
- Chapter 7: Making it happen
 - Addressing the shortfall
 - Programming
 - Performance monitoring
 - Keys to making it happen
 - What we learned

Schedule

- Today: Chapters 1 and 5
- July workshop: Chapters 2, 3, and 4
- September workshop: Chapters 6 and 7
- September-October: Public comment period
- November: Final editing, presentation of public input
- December business meeting: Adoption



Chapter 1

Looking ahead to 2040

What is the plan?

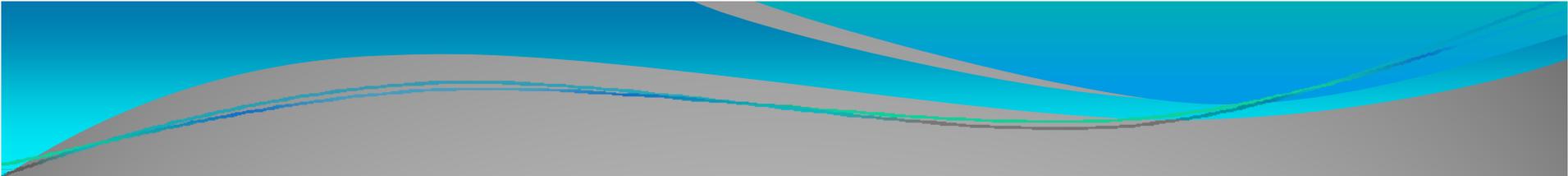
- Document that will address federal requirements
- Document that considers future transportation demand
- Document that serves as an investment guide for each mode
- Document that supports continued **stewardship** of our existing transportation infrastructure

What will the Plan include?

- Trends analysis
- System condition
- Guiding principle and goals
- Investment actions
- Future costs and revenues
- Implementation strategies

How will the Plan be developed?

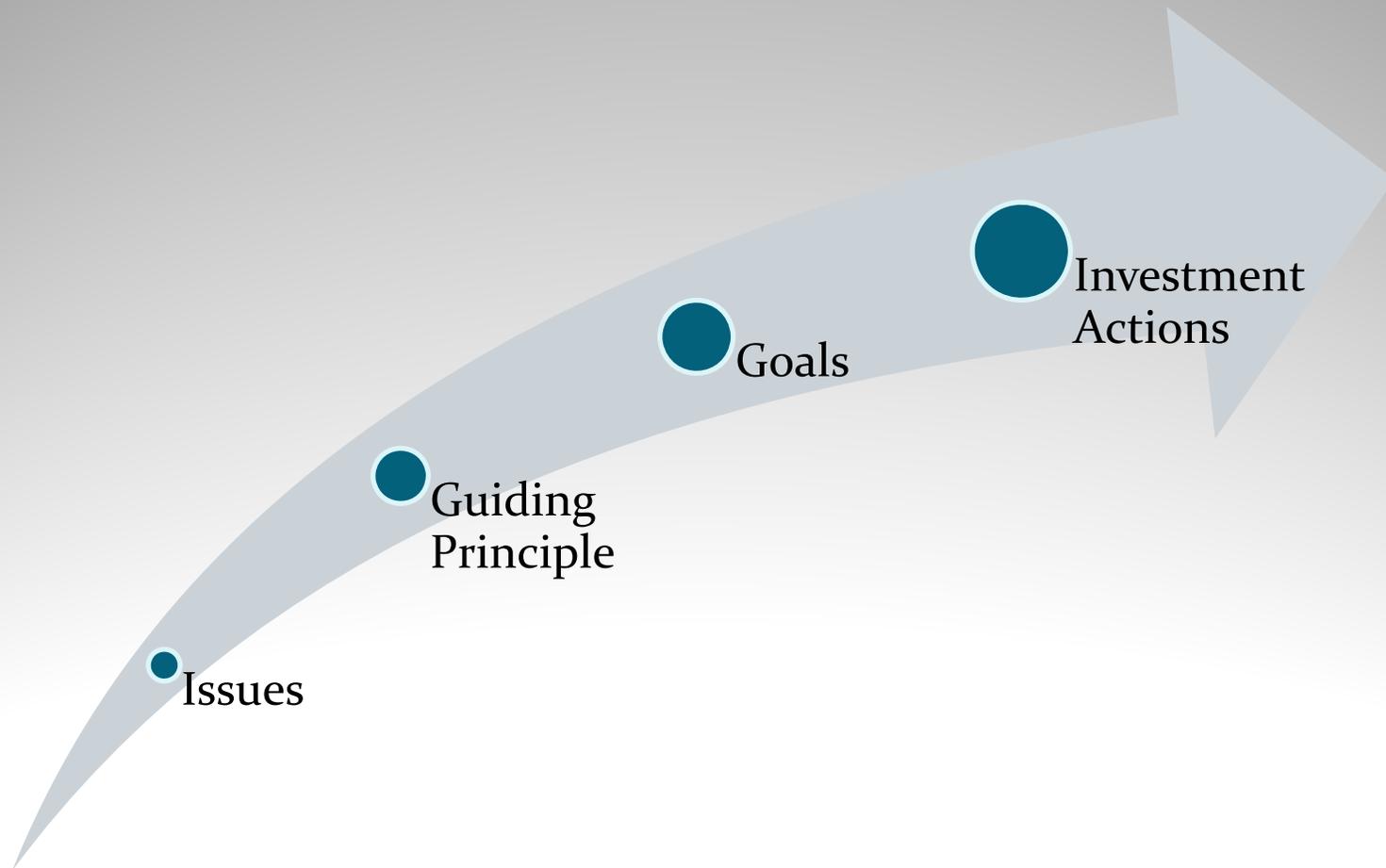
- Public input
- Iowa Transportation Commission
- Departmental efforts
- State planning agencies (MPOs, RPAs)
- Interagency consultation
- Other plans and studies
- Transportation 2020



Chapter 5

Choosing our path

Choosing our path



Summary of issues

- State transportation issues: Developed in consultation with modal offices
- Regional issues: Developed in consultation with the Regional Planning Affiliations
- Urban issues: Developed in consultation with the Metropolitan Planning Organizations

State transportation issues

- Growing system-wide maintenance needs
- Inadequate funding
- Airport facility improvement needs
- Increasing demand for well-connected bicycle and pedestrian facilities
- Increasing traffic and congestion
- 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 transportation 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 trails is needed
- Deficiencies exist across the roadway network, including high-cost bridges, and the secondary system is impacted by heavy farm equipment and trucks
- 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 is 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 transportation 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

Guiding principle & goals

- Guiding Principle: **“Safely moving people and goods through investments that strengthen our economic vitality.”**
- Goals:
 - **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

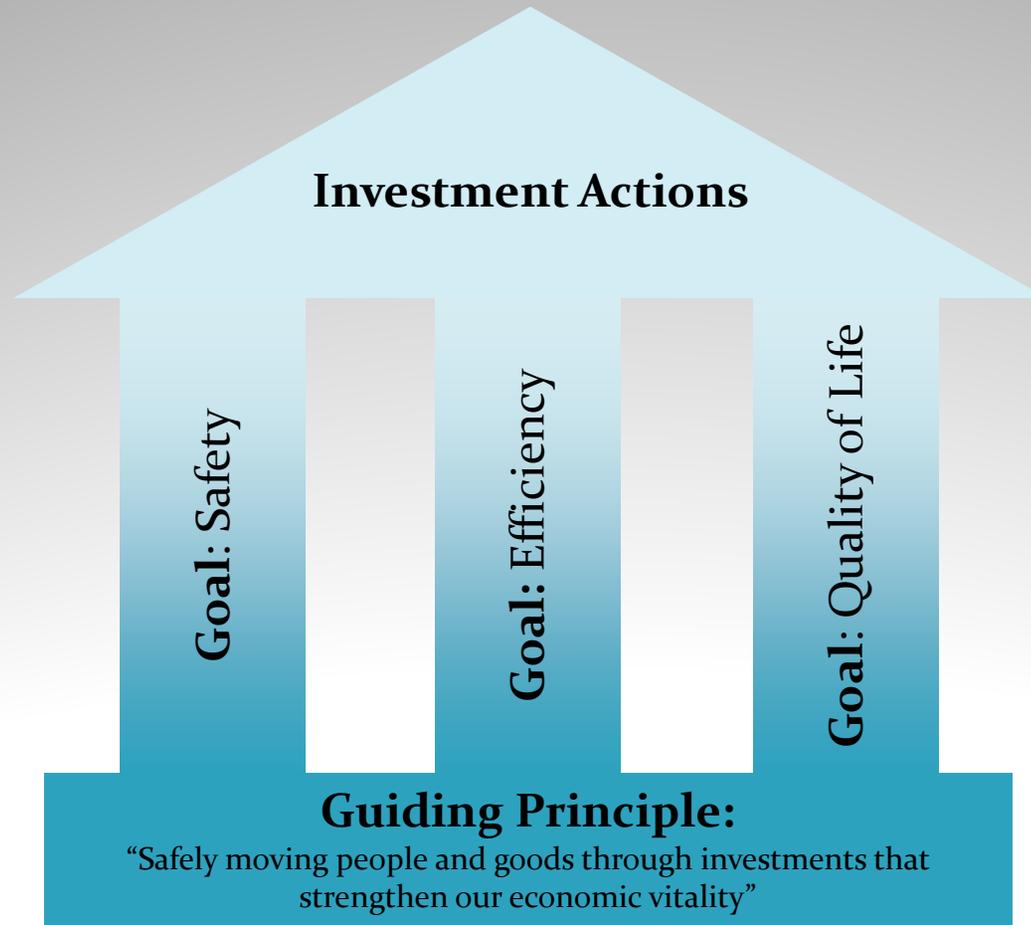
Why invest in these goals?

- 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

Why invest in these goals?

- 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

A foundation for investment

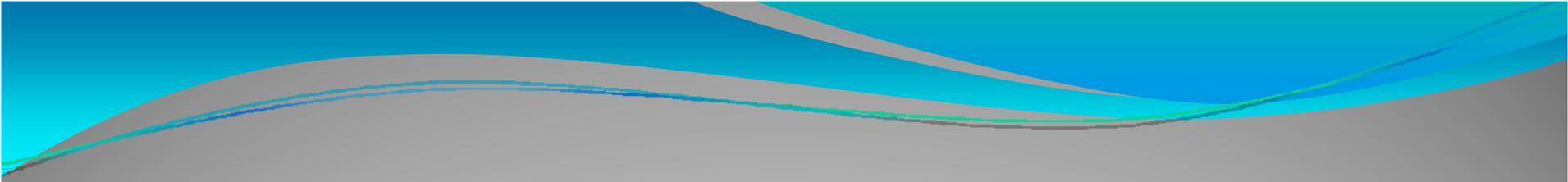


Aviation investment actions

- Enhance aviation safety through awareness, education, and programs (safety)
- Maintain and enhance the statewide network of aviation weather observation systems (safety)
- Improve runway approaches through obstruction removal and mitigation funding (safety)
- Promote implementation of compatible land use guidelines near airports (safety)
- Promote and assist in active wildlife management at airports (safety)
- Promote communication between airports and local emergency personnel (safety)
- Maintain and enhance airside facilities (efficiency)
- Maintain and enhance aviation vertical infrastructure facilities (efficiency)
- Maintain adequate accessibility to commercial air service (efficiency)
- Maintain adequate accessibility to airports with weather reporting and instrument approaches (efficiency)
- Encourage airport long-range business model planning (efficiency)
- Evaluate implementation of NextGen navigation within the state (efficiency)

Aviation investment actions cont.

- Support a system of airports that meet the air transportation need of businesses and citizens (quality of life)
- Promote an understanding of the benefits of Iowa's air transportation system (quality of life)
- Support a system of airports that provides educational and career opportunities (quality of life)
- Promote the need for aviation services to meet user needs at airports (quality of life)

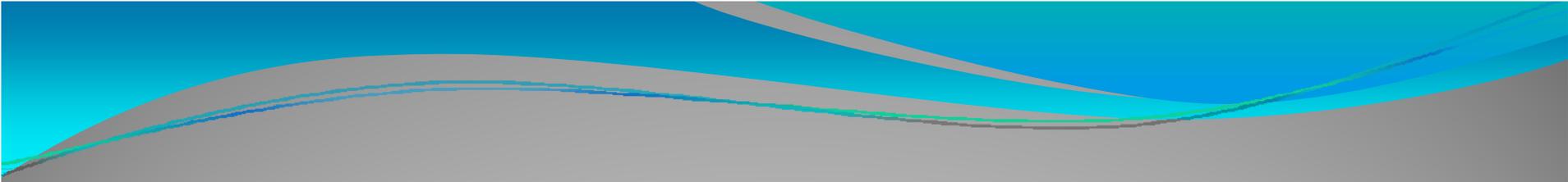


Bike/Ped investment actions

- Develop recommended trail maintenance and signage practices (safety)
- Develop pedestrian safety program (safety)
- Expand bicycle safety program (safety)
- Focus investment on Level 1 trails (efficiency)
- Continue investment on Level 2 and 3 trails (efficiency)
- Improve coordination and cooperation among trail developers (efficiency)
- Maintain a bike/ped data inventory (efficiency)
- Support the acquisition of abandoned rail lines (efficiency)
- Provide accommodations on roadways (quality of life)
- Promote bicycling and walking as alternative to driving to reduce emissions (quality of life)
- Continue involvement in education, promotion, advocacy (quality of life)
- Update state bicycle map on a regular basis (quality of life)

Highway investment actions

- Target highway investments to reduce fatalities and major injuries (safety)
- Support the Iowa Comprehensive Highway Safety Plan (safety)
- Accommodate the increasing number of elderly drivers (safety)
- Support access management improvements and planning (safety)
- Enhance security of highways and bridge structures (safety)
- Preserve and rehabilitate existing highways and bridge structures (efficiency)
- Target selected capacity improvements to address access and operational needs (efficiency)
- Incorporate ITS to improve system operation (efficiency)
- Enhance multi-modal freight planning (efficiency)
- Support highway research initiatives (efficiency)
- Invest in living roadways/roadside vegetation to minimize maintenance costs (efficiency)
- Consider work zone impacts throughout the project development process to maximize vehicular mobility and work zone safety (efficiency)



Highway investment actions cont.

- Support economic development projects for local governments (quality of life)
- Reduce transportation related congestion and emissions (quality of life)
- Accommodate other modes as appropriate (quality of life)
- Support living roadways and roadway vegetation to enhance our environment (quality of life)
- Develop context sensitive projects that support all users and enhance natural resources (quality of life)
- Accommodate public utilities as appropriate (quality of life)

Public Transit investment actions

- Improve safety for transit passengers (safety)
- Assist transit agencies with driver training, including efforts to enhance the safety of pedestrians exposed to transit vehicle traffic (safety)
- Assist transit agencies' efforts to improve and maintain worker safety at transit facilities (safety)
- Assist transit agencies in improving security of transit vehicles and facilities (safety)
- Assist transit agencies in acquiring new vehicles (efficiency)
- Improve and maintain existing transit facilities (efficiency)
- Support commuter services (efficiency)
- Support intercity bus services (efficiency)
- Assist transit agencies in developing computerized dispatch capabilities (efficiency)
- Encourage increased coordination between transit agencies, human service organizations, and school districts (efficiency)
- Focus on public transit's role to improve Iowa's economy and overcome mobility barriers (quality of life)
- Encourage transit agencies and intercity bus companies to provide seamless service across agency boundaries/ between modes (quality of life)
- Promote transit and intercity bus as an alternative to driving to reduce congestion and emissions (quality of life)

Rail investment actions

- Improve highway-rail crossing safety (safety)
- Monitor rail safety and security conditions (safety)
- Promote general rail safety (safety)
- Improve the rail system physical infrastructure (efficiency)
- Preserve existing rail freight and passenger service and develop additional passenger services (efficiency)
- Assist business community in improvement of spur tracks and construct where appropriate (efficiency)
- Monitor rail regulatory issues (efficiency)
- Educate on the benefits of rail and facilitate availability of rail to shippers (efficiency)
- Reduce rail-related congestion and air pollution (quality of life)
- Develop rail passenger services to provide increased mobility and encourage economic development (quality of life)
- Preserve historic/cultural rail facilities (quality of life)
- Serve as rail info. and conflict resolution clearing house (quality of life)
- Promote rail as a sustainable freight and passenger alternative (quality of life)

Misc. investment actions

- Participate in and promote safety and security planning and programs (safety)
- Support local government and planning agencies in safety conscious planning (safety)
- Support regional and metro planning activities (efficiency)
- Participate in freight and passenger planning (efficiency)
- Conduct and participate in transportation research (efficiency)
- Better integrate internal technology for efficient analysis and support (efficiency)
- Expand Intelligent Transportation Systems (ITS) development (efficiency)
- Enhance and expand the 511 system (quality of life)

Wrap up

- Chapters 1 & 5 will be posted to department website for broader review and comment
- Reminder: July workshop will cover Chapters 2, 3, & 4
- Questions or comments?