

# 2017 State Transportation Plan

Passenger Transportation Summit  
Marshalltown  
May 12, 2016



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## Background/Update Cycle

- 23 CFR § 450.214(a): *The State shall develop a long-range statewide transportation plan, with a minimum 20-year forecast period at the time of adoption, that provides for the development and implementation of the multimodal transportation system for the State...*
- The plan provides direction for planning efforts and investment decisions for each mode
- Iowa in Motion – Planning Ahead 2040 was adopted on May 8, 2012
- 5-year update cycle



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## Notable Changes from 2012 Plan

- Extensive internal and external stakeholder and public input efforts throughout the plan development process.
- An action plan with specific strategies and improvements that will be implemented and revisited over time. This could include short-term, long-term, and ongoing strategies, study corridors, and potential future improvements.
- Performance measures to help the department track and monitor performance in key areas over time.

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## Status Update

- Internal Steering Committee started meeting in September
- Action Plan Focus Group started meeting in November
- Commission presentations in January and May
- Presentation on emerging transportation trends, including autonomous and connected vehicles, in February
- Public input through online tool in February
- Ongoing development of base document chapters
- Ongoing technical analysis for action plan

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## General Timeline

- Spring/summer — Finalize vision and continue action plan development
- Late summer — More focused stakeholder input; second round of public input
- Fall/winter— Finalize draft document
- Spring 2017 — Commission approval of final document

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## Plan Structure

Vision, investment areas, and action plan

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## Visioning

- Initial internal visioning and public input based on three main questions
  - How does your vision for the transportation system in 2045 differ from what exists today?
  - What investment areas need to be considered in the system vision?
  - Within these investment areas, what strategies and improvements should be considered?

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## Vision and Action Plan

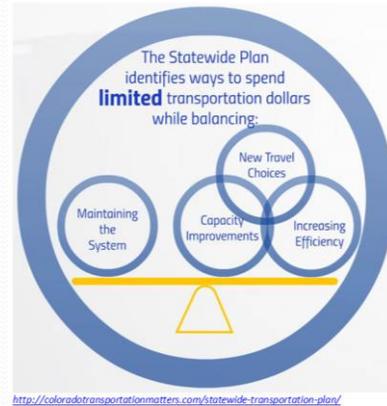
- Draft structure
  - A broad **vision statement** that encapsulates the overall vision for Iowa's future transportation system
  - Overarching **investment areas** within which actions will be defined to implement the system vision
  - Specific **strategies** that will be utilized by the department that fit within one or more of the investment areas
  - Where appropriate, specific **improvements** the department feels are necessary to help achieve the overall system vision



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## Balancing Investment Areas

- Initial concept similar to Colorado DOT's
- Working on visualization that emphasizes stewardship but shows overlap among all investment areas
- Each strategy or improvement will map back to one or more investment area



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## Draft Investment Areas

- Modification through **right-sizing the system**
- Stewardship through **maintaining a state of good repair**
- Transformation through **increasing mobility and travel choices**
- Optimization through **improving efficiency and resiliency**

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# Initial Public Input

February online survey results

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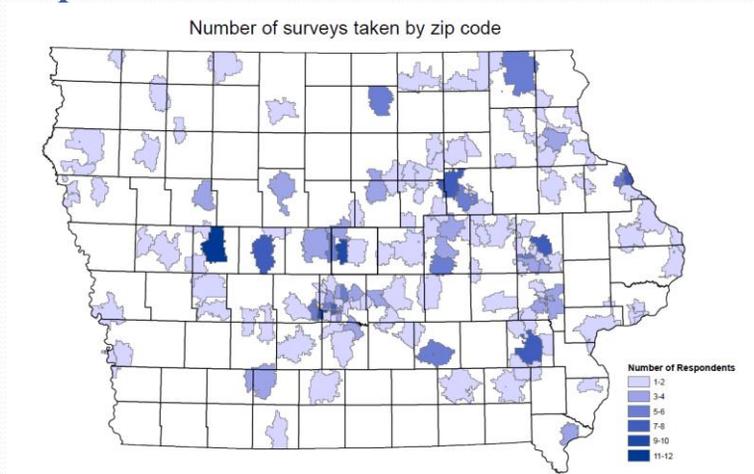
## Public Input Survey

- Survey was available throughout February
- Total of 520 visitors with data, almost double the number of responses (264) to the 2012 plan survey
- Good geographic distribution of responses across the state (most from an individual zip code was 12 responses)
- Results have been shared with the Internal Steering Committee and are being incorporated into draft vision/strategy development



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## Response Distribution

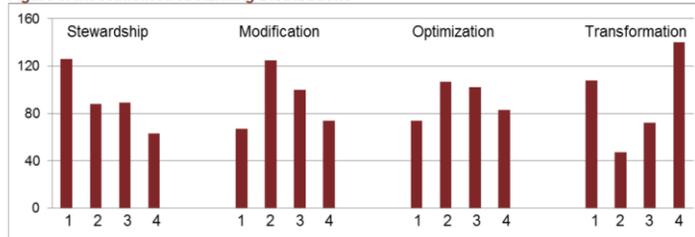


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## Results – Investment Areas

- *Stewardship/maintaining a state of good repair* was clearly ranked as the highest priority among the investment areas
- *Modification/right-sizing the system* and *optimization/improving system efficiency and resiliency* were almost equally ranked as the second and third priorities
- *Transformation/increasing mobility and travel choices* was ranked as the fourth priority overall, but had nearly as many people ranking it as their number one priority as did stewardship

Figure 1: Investment Area Ranking Distributions

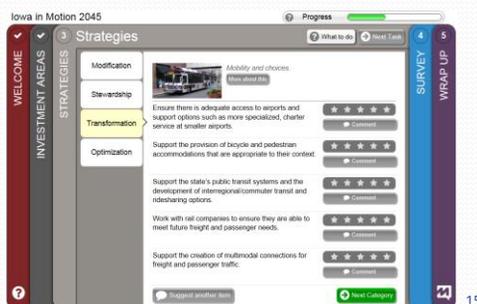


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## Results – Strategies

- Five strategies were provided for each of the investment areas
- Overall average ranking for the five strategies in each investment area showed a clear separation between stewardship and the other investment areas

- Stewardship – 3.93
- Modification – 3.63
- Optimization – 3.58
- Transformation – 3.57



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## Results – Strategies

- Several modal strategies were provided under the *transformation* investment area
- “Support the state’s public transit systems and the development of interregional/commuter transit and ridesharing options” ranked among the highest for this grouping

Item	1 Star (1)	2 Stars (2)	3 Stars (3)	4 Stars (4)	5 Stars (5)	Average *
Bike and Ped Accommodations	47	44	85	67	150	3.58
Aviation Access and Options	46	59	139	90	58	3.14
Rail Service	22	56	77	117	120	3.66
Public Transit Options	21	45	90	100	136	3.73
Multimodal Connections	21	35	92	108	134	3.77
<b>Total</b>	<b>157</b>	<b>239</b>	<b>483</b>	<b>482</b>	<b>598</b>	<b>3.57</b>

\* Average - Each input is stored as a number (in parentheses), so the average can help understand trends

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## Public Input Takeaways

- The dominant theme among responses is interest in maintaining an **appropriately-sized system** that meets the **needs of all users** and **grows when and where it is necessary**
- It is preferred that the Iowa DOT focus on ways to **maintain the current system** and ensure that **expansion is only done when there is significant need**
- There is interest in **increasing the efficiency of the department** and **increasing communication between the Iowa DOT and the public and stakeholder groups**
- There is interest in the Iowa DOT ensuring that the **appropriate materials are used** and the **right repairs are done the first time** for projects to reduce costs associated with future improvements and **ensure the system lasts longer**
- Support was expressed for **alternative modes of transportation** as a way to **reduce the need to increase capacity** and **ensure everyone has the ability to travel** within the state

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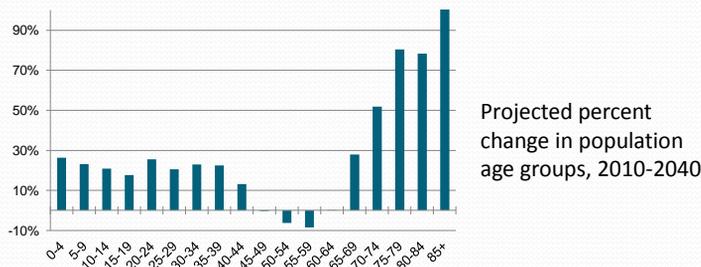
## Trends and Forecasts

Where is Iowa headed?

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## Demographic Trends

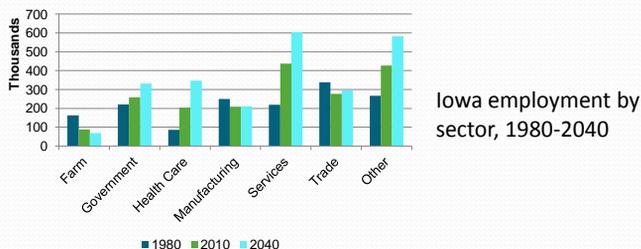
- Iowa's population is growing at a slow pace, but is expected to increase to 3.5 million in 2040
- Iowa's population growth is not uniform throughout the state, and is expected to continue to urbanize
- Iowa's population is aging and becoming more diverse



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## Economic Trends

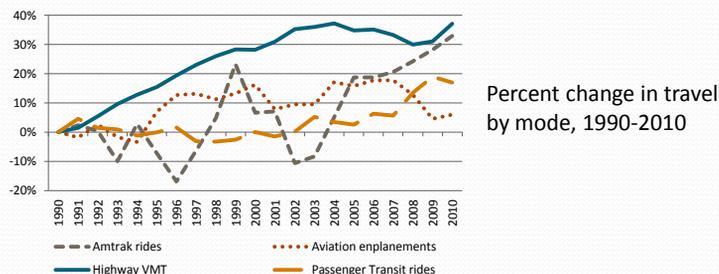
- Total employment in Iowa is expected to increase slowly
- Iowa's traditional employment sectors have changed
- Projections for 2040 suggest that the number of farm jobs will decrease, manufacturing jobs will remain relatively stable, and jobs in other areas, such as health care and services, will increase



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## Passenger Trends

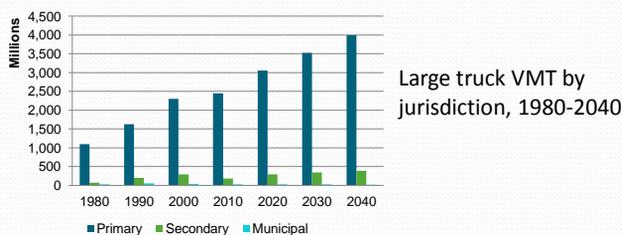
- Iowans are traveling more, but passenger travel is not uniform across all modes of transportation
- The number of vehicles per household has increased
- Average travel time to work has increased, but Iowans still have one of the lowest average commute times nationally, and most Iowans drive to work alone



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## Freight Trends

- The majority of freight in Iowa is moved by truck
- Iowa freight will increase across modes, but will be concentrated among truck and rail. Of the total increase in tonnage from 2010-2040, 92.2% is forecast to be carried by truck and 4.4% by rail.
- As value-added production increases in Iowa, freight movements will also increase
- Iowa exports to other states and countries will continue to increase



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## Technological Changes

- Collection and use of big data and embedded analytics
- Integration of technology across the system to allow for dynamic response to conditions and events
- Connected and autonomous vehicles
- Energy industry changes, including production of alternative fuels, manufacturing of industry components, and use of alternative fuel technology in vehicles across modes
- Increasing availability of on-board technology across modes
- Use of technology and apps for non-personal automobile travel, such as ridesharing services and transit trip planners

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## Looking to the Future

What does the future of Iowa passenger transportation, particularly public transit, look like?

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## Image search – future of public transportation



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## Thinking about the Future

- What trends are impacting the transportation needs and desires of lowans?
- What strategies do we need to be implementing to address short-term needs and move towards long-term vision/realities?

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## Public Transit Investment Actions in 2012 Iowa in Motion

	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>

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## What is Transportation?

- Transportation as a service – the focus is on mobility
- Rapidly growing “transportation” companies do not own vehicles or infrastructure, hire drivers, etc. – they facilitate the service
- Bundled transportation options – ability to purchase access to multiple transportation options rather than one mode or trip at a time
- Increasing connections between technology and transportation – communicating with customers through social media, using apps to find and navigate service, on-demand transportation, etc.
- Shifts in public and private roles in transportation?
  - Different types of innovations
  - How to ensure social equity

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## Discussion starters

In 2045...

- What user groups have emerged and how are they using public and private passenger transportation services?
- How are we traveling? Are automobiles still the dominant form of transportation? Do most people still drive to work alone?
- What are the most important attributes to transportation system users? Time? Safety? Speed? Distance? Convenience?
- What does our transportation system look like?
  - What do metro and regional transit systems look like? Are there passenger transportation options that do not exist today?
  - Are there more public transit options? Is service provided differently?
  - Are there more rideshare options?
  - Has intercity bus service expanded or changed?
  - Has passenger rail service been expanded?
  - Have autonomous and connected vehicles resulted in less car ownership and changes in how we live and travel?

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## Contact

**Plan update webpage:** [www.iowadot.gov/iowainmotion](http://www.iowadot.gov/iowainmotion)

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