

State Transportation Plan Update

MPO/RPA Quarterly Meeting
March 29, 2017



1

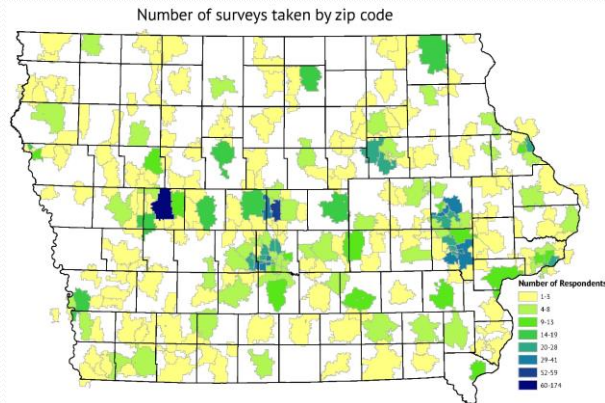
Status Update

- Full draft available at <http://www.iowadot.gov/iowainmotion/index.html>
- Public comment period began Feb. 22, ends April 7
- Public input meeting held on March 21
- Will review public input and present draft plan to Commission at April 10 workshop
- Commission will consider adoption at May 9 business meeting

2

Public input surveys

- First survey in Feb. 2016; focused on investment areas and broad strategies
- Second survey in Aug.-Sept. 2016; focused on highway system needs



3

Survey #1 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

4

Survey #2 takeaways

- Overall, public input strongly supported the ultimate direction of the plan
- Examples: Highway action plan feedback
 - **Capacity needs:** Majority favor operational improvements or added lane capacity on targeted corridors (urban areas, 3 key interstate corridors). Only 12.7% favor added lane capacity elsewhere.
 - **Mobility & Safety needs:** Majority favor Super-2-like enhancements on targeted corridors.
 - **Freight needs:** Majority favor targeted investments to address freight bottlenecks.

5

Plan content

- Chapter 1: Looking ahead to 2045
 - What the Plan is, what it includes, how it was developed, and how it is used
- Chapter 2: Understanding Iowa
 - How Iowa will be different in 2045, and how the transportation system will be affected
- Chapter 3: Planning considerations
 - Various key issues to consider as we plan the future transportation system
- Chapter 4: System overview
 - Mode-by-mode summary of Iowa's current transportation system

6

Plan content

- Chapter 5: Choosing our path
 - Vision for the transportation system, associated Investment Areas, and supporting Strategies and Improvement Needs for each mode
- Chapter 6: Paying our way
 - Cost to maintain/improve the system, anticipated future revenues, and potential shortfall and implications
- Chapter 7: Making it happen
 - Financing, programming, and performance monitoring

7

Vision and Investment Areas

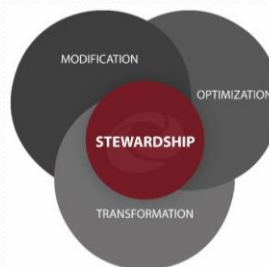
- Vision
 - A safe and efficient multimodal transportation system that enables the social and economic wellbeing of all lowans, provides enhanced access and mobility for people and freight, and accommodates the unique needs of urban and rural areas in an environmentally conscious manner.
- Investment Areas
 - Four principal investment areas were identified to help achieve the system vision. Each of these investment areas are supported by specific strategies and improvement types.
 - **Stewardship** through maintaining a state of good repair.
 - **Modification** through rightsizing the system.
 - **Optimization** through improving operational efficiency and resiliency.
 - **Transformation** through increasing mobility and travel choices.

8

Strategies

- Strategies were derived from a variety of sources, including ongoing activities, existing plans, and stakeholder and public input.
- Each strategy aligns with one or more of the four investment areas, and consists of an action statement and explanation of what it entails.
- 80 strategies were identified across the following categories.

- Asset management
- Aviation
- Bicycle/pedestrian
- Bridge
- Energy
- Freight
- Highway
- Public Transit
- Rail
- Safety
- Technology
- Transportation System Management and Operation (TSMO)



9

Strategies

- Example from strategies section

TSMO



74. Reduce the number of overall major crashes and the number of secondary crashes. Transportation system safety, reliability, and efficiency is improved by minimizing the frequency and severity of crashes. Secondary crashes also present a significant safety problem. Often these crashes can be more severe than the original incident, posing safety risks to incident responders, other travelers, and those involved in the initial incident. Quick response and quick, safe clearance, as articulated in the National Unified Goal for Traffic Incident Management, support the Iowa DOT's traffic incident management objectives.



75. Increase the resilience of the transportation system to floods, winter weather, and other extreme weather events. System resiliency requires a proactive approach to extreme weather events and other large scale incidents that threaten the continuity of system operations. The Iowa DOT seeks to minimize the impact of extreme weather by intentionally designing and managing certain routes to be resistant to extreme weather, and to move people and goods throughout the state both during and after extreme weather events.



76. Implement critical emergency transportation operations (ETO) strategies as identified in the ETO Plan. The ETO Plan identified strategies to address all types of hazards and incidents that may seriously threaten or disrupt the operation and resiliency of the transportation system. Preparedness strategies represent efforts by Iowa ETO program partners to identify threats, determine vulnerabilities, and identify required resources, policies, and procedures. Response strategies represent efforts that address the direct, usually short-term effects of an event. Recovery strategies address the execution of restoration plans, evaluation and reporting of the event, and development of mitigation initiatives.



77. Maximize the use of existing roadway capacity. TSMO strategies support the Iowa DOT's ability to utilize existing roadway capacity more efficiently by actively managing traffic flow and identifying congestion hotspots for operational improvements. This increases system efficiency and reliability, reducing or postponing the need for major construction investments, and supporting targeted capacity improvements in critical corridors.



78. Work with special event generators to actively manage traffic during large scale events that impact the highway network. The state of Iowa hosts a significant number of special events that generate large volumes of traffic over a fairly brief duration. Such events can negatively affect system efficiency and reliability. By working with event coordinators in advance, the Iowa DOT can support active traffic management during the event, which also enhances traveler information accuracy before and during the event.

10

Improvement Needs

- Highway needs
 - A seven-layer analysis was conducted to analyze multiple types of needs.
 - The primary highway system was divided into 464 corridors for analysis, and needs were identified at the corridor level.
 - A comprehensive matrix covering the entire primary highway system is included in the Plan. The matrix shows which need(s) were identified for each highway corridor.
- Modal Needs
 - For aviation, bicycle/pedestrian, public transit, rail, and water, needs were derived from existing system plans for those modes or from updated analysis where warranted.
 - Various types of needs were identified as applicable, including infrastructure and service needs for some modes.

Improvement Needs

- Example section of highway improvement needs matrix

Route	Counties	Corridor	Miles	Capacity	Freight (out of 94)	Condition	Operations (out of 54)	Bridge (out of 216)
I-29	Fremont	MO border to IA 2	10.0		29		51	
	Fremont, Mills	IA 2 to US 34	25.8		94, 29		54	
	Mills, Pottawattamie	US 34 to I-80	14.0		54		37	
	Pottawattamie	I-80 to I-480/US 6	2.9				17	
	Pottawattamie	I-480/US 6 to IA 192	2.9				30	
	Pottawattamie	IA 192 to I-680	14.4		81		49	56
	Harrison, Monona	US 30 to IA 175	36.5				52	23, (104, 212), 158
	Monona, Woodbury	IA 175 to US 20/I-129	36.5		38, 63, 92, 85		43	90
Woodbury	US 20/I-129 to SD border	8.4		38		5	55	
I-35	Decatur, Clarke	MO border to US 34	32.9				48	
	Clarke, Warren	US 34 to IA 92	23.6		80, 58, 83, 72		45	22, 117, 175, 182, 198
	Warren, Polk	IA 92 to IA 5	12.0		60, 57, 67		35	177, 186
	Polk	IA 5 to I-80/I-235	4.7		13, 70		15	
	Polk	I-80/I-235 to IA 160	3.1		10, 22		9	
	Polk, Story	IA 160 to US 30	20.9		17, 23, 25, 44, 10		17	(129, 140), 203
	Story, Hamilton	US 30 to US 20	30.7		8, 87, 17		27	
	Hamilton, Wright, Franklin	US 20 to IA 3	23.5		90, 8		39	
I-35/80	Franklin, Cerro Gordo	IA 3 to US 18	28.3		51		53	
	Cerro Gordo, Worth	US 18 to MN border	24.6		51		35	
	Polk	W mixmaster to US 6	2.1		13, 70, 35, 19		2	
	Polk	US 6 to IA 141	2.5		19, 9, 42, 4		13	
	Polk	IA 141 to IA 28	3.9		4, 53, 24		8	
	Polk	IA 28 to IA 415	4.0		18		11	42
Polk	IA 415 to E mixmaster	2.0		33, 34, 22		6	178	