State Transportation Plan Update

Iowa Transportation Commission

August 8, 2016

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Status Update

- Five Internal Steering Committee meetings
- Five Action Plan Focus Group meetings
- Previous Commission presentations in January, May
  - Overall approach to plan update and key changes
  - Initial round of public input
  - Use in informing vision and investment areas
  - Highway capacity needs analysis
- Ongoing development of base document chapters
- Ongoing technical analysis for action plan
- Second round of public input

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Key takeaway to-date

- Public input, stakeholder input, and initial analysis all point in the same direction of a **dominant theme of stewardship**, particularly as it relates to highway investment.

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Vision and Action Plan

- 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, **improvements** the department feels are necessary to help achieve the overall system vision

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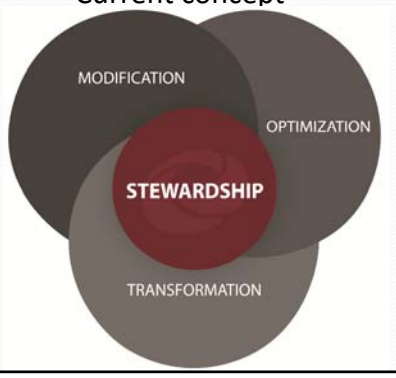
Vision

Our vision is a safe and efficient multimodal transportation system that enables the social and economic wellbeing of all Iowans, provides enhanced access and mobility for people and freight, and accommodates the unique needs of urban and rural areas in an environmentally conscious manner.

Colorado's visualization

Current concept



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Defining strategies and improvements

- Reviewed existing planning documents to identify relevant strategies
- Additional strategies will be identified through planning discussions
- Started discussions with aviation, public transit, and rail regarding modal strategies/improvements
- Ongoing analysis related to highway improvement identification
  - Capacity (May workshop)
  - Mobility and safety (August workshop)
  - Freight
  - Condition
  - Operations

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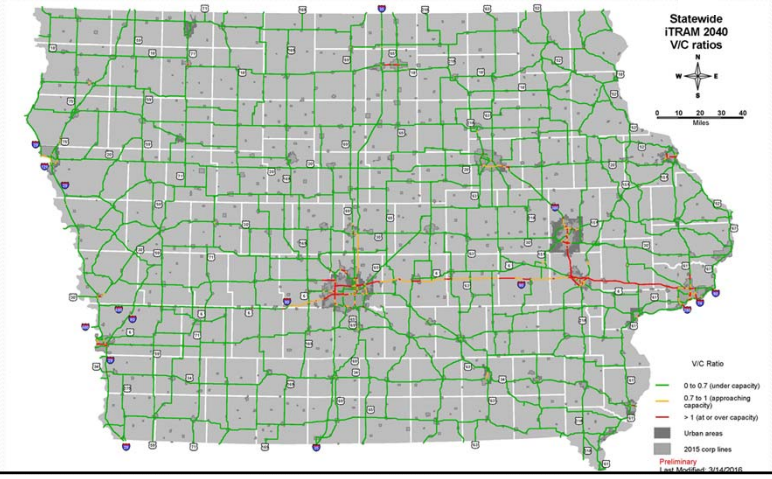
Future capacity needs analysis

- Segments approaching/over capacity in 2040 limited to urban areas and key interstate corridors: I-80 from central Iowa to the Quad Cities, I-380 between Iowa City and Cedar Rapids, I-35 between Des Moines and Ames



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Mobility and safety analysis

- Next step in iterative highway improvement identification process, following capacity analysis
- Needs/benefits
  - Enhanced safety
  - Improved operations on two-lane primary highway system
  - Cost effectiveness
  - Complementary network to the multilane highway network
  - Practical approach allowing opportunity to address broader user/service needs

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Background

- Super-2 concept discussed for the CIN in 1997 Iowa in Motion
- Super-2 improvements implemented in some locations and corridors, but not widely adopted
- In the past, Super-2 generally included aggressive geometric improvements and stricter design policies that would enable higher speed limits
- Mobility and safety improvements being discussed are a more relaxed version of the Super-2, focused on implementing the appropriate mix of elements based on each corridor's characteristics
- This type of improvement has been discussed with the Commission as an alternative to address operational needs on roadways that do not need 4-lane capacity expansion

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Background

- Types of improvements could include:
  - Paved shoulders
  - Limited access
  - Geometric improvements
  - Left and right turn lanes
  - Acceleration lanes
  - Climbing/passing lanes
- Improvements would be less prescriptive, more opportunistic
- Two corridors where Super-2 like improvements were implemented saw significant safety benefits
  - US 169 from Fort Dodge to Humboldt – 26% reduction in crashes (67% if animal crashes excluded)
  - US 63 from Oskaloosa to New Sharon – 49% reduction in crashes

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Analysis overview

- Reviewed five elements of the primary system
  - Identification of existing climbing/passing lanes
  - Crash statistics from 2010-2014
  - Roadway grade
  - 2014 Average Annual Daily Traffic (AADT) and percent truck traffic
  - Average trip length on corridors
- Analysis provided good information for background and comparisons between routes, but did not result in an obvious network of improvements

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Corridor identification

- Filtered analysis with considerations related to connectivity, geographic access, and existing networks
  - Existing/future multilane highway network
  - Commercial and Industrial Network and Access Iowa
  - Iowa Multimodal Freight Network
  - Commission priorities
  - Corridor association requests
- Network would represent corridors that do not need 4-lane capacity expansion, but could be targeted for mobility and safety improvements

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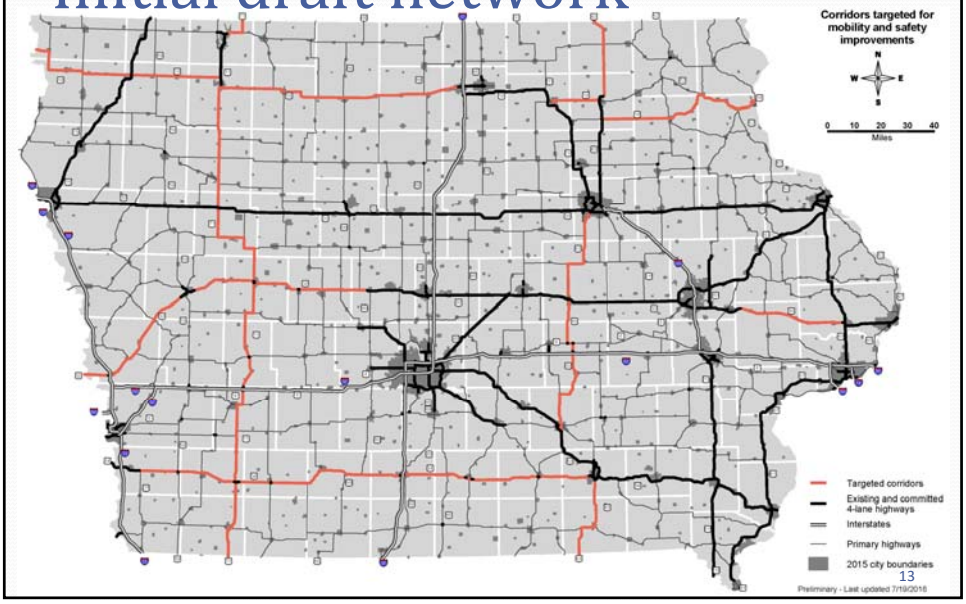
Initial draft network



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Next steps

- Continue analysis for identifying highway improvements
  - Conduct remaining layers of highway analysis (freight, condition, operations, bridges)
  - Review MPO models for a more detailed look at capacity needs in urban areas
  - Continue work on modal strategies and improvements
- Second round of public input active through September

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Contact

Plan update webpage: www.iowadot.gov/iowainmotion

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