

Iowa State Freight Plan

Iowa Transportation Commission

July 12, 2016



Outline

- Background
- Objectives
- Input
- Other state freight plans
- Next steps



IOWA STATE FREIGHT PLAN



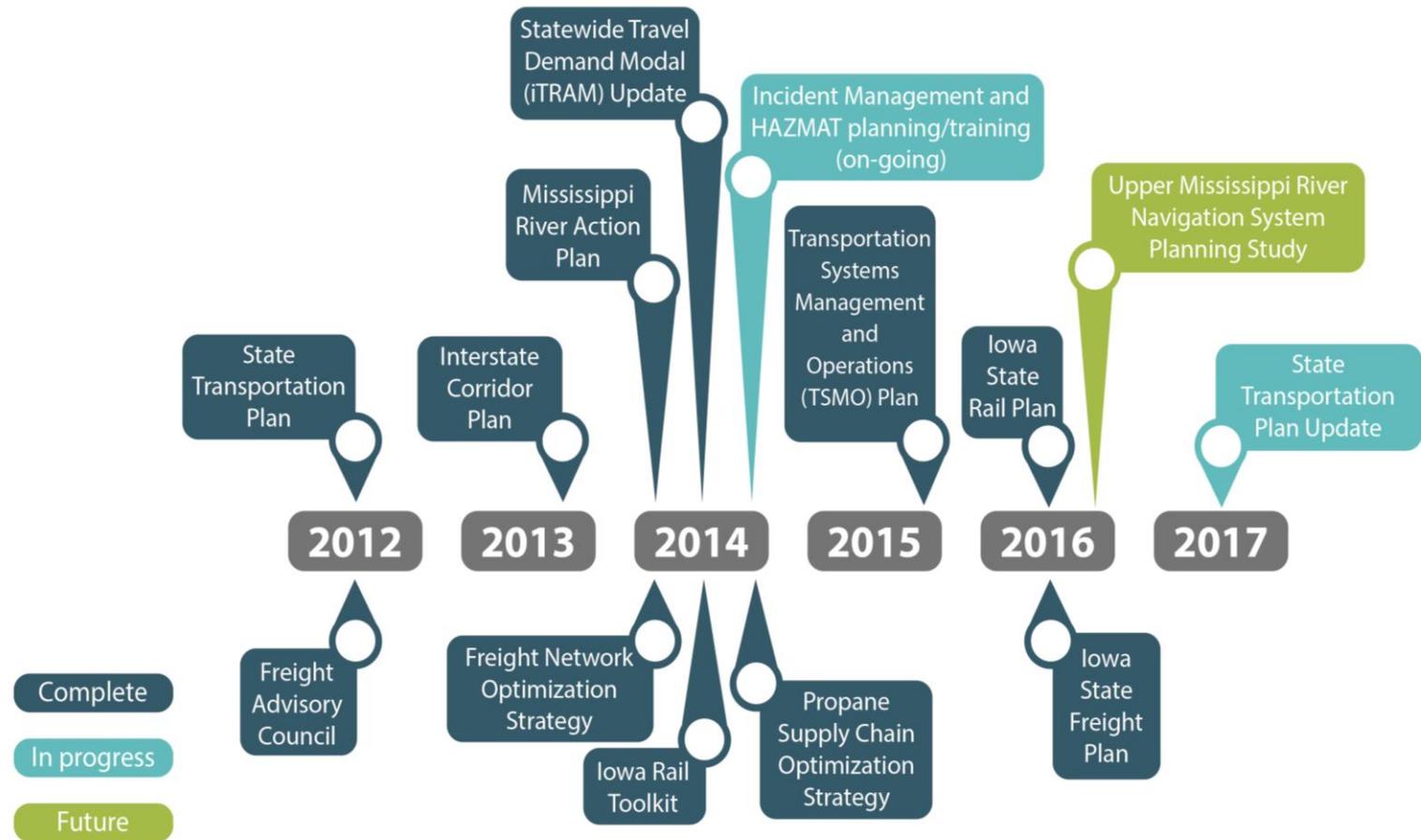
IOWA DOT
SMARTER | SIMPLER | CUSTOMER DRIVEN



Compliance with transportation legislation

- Moving Ahead for Progress in the 21st Century (MAP-21) Act
 - Signed into law on July 6, 2012
 - Section 1118 of MAP-21 directs the Secretary of Transportation to **encourage** each State to develop a comprehensive State Freight Plan that outlines immediate and long-range plans for freight-related transportation investments.
 - Freight projects must be identified in a state freight plan to qualify for an increased federal funding share
- Fixing America's Surface Transportation (FAST) Act
 - Signed into law on December 4, 2015
 - Each State that receives funding under section 167 of title 23 **shall develop** a freight plan that provides a comprehensive plan for immediate and long-range planning activities and investments of the State with respect to freight
 - A State shall **update** a State freight plan described in subsection (a) not less frequently than once **every 5 years**.
 - Other notable change: fiscal constraint through investment plan requirement

Linking state freight initiatives



State Freight Plan objectives

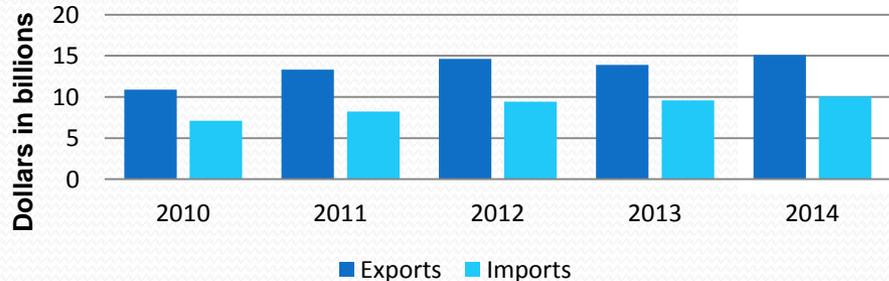
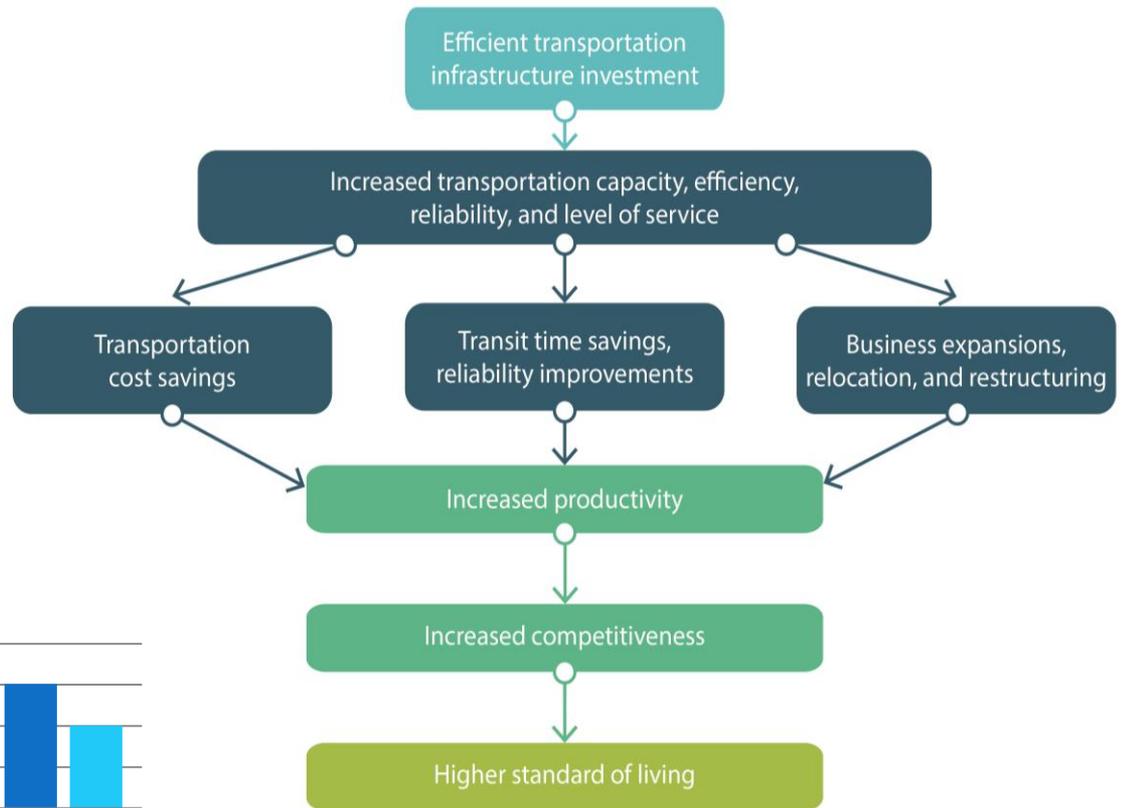
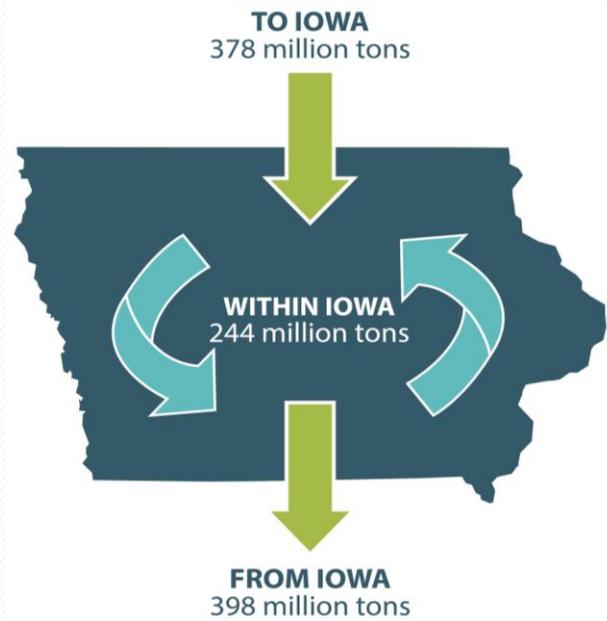
- Identify strategic goals
- Identify and document the economic importance of freight
- Document freight trends and issues
- Present freight-related forecasts
- Inventory existing assets
- Describe conditions of the system and develop performance measures
- Identify the State's decision making process
- Present freight strategies and improvements

Identify strategic goals

National Freight Goals

1. Improve the **contribution of the freight transportation** system to economic efficiency, productivity, and competitiveness.
2. Reduce **congestion** on the freight transportation system.
3. Improve the **safety, security, and resilience** of the freight transportation system.
4. Improve the **state of good repair** of the freight transportation system.
5. Use **advanced technology, performance management, innovation, competition, and accountability** in operating and maintaining the freight transportation system.
6. Reduce adverse **environmental and community impacts** of the freight system.

Identify and document the economic importance of freight

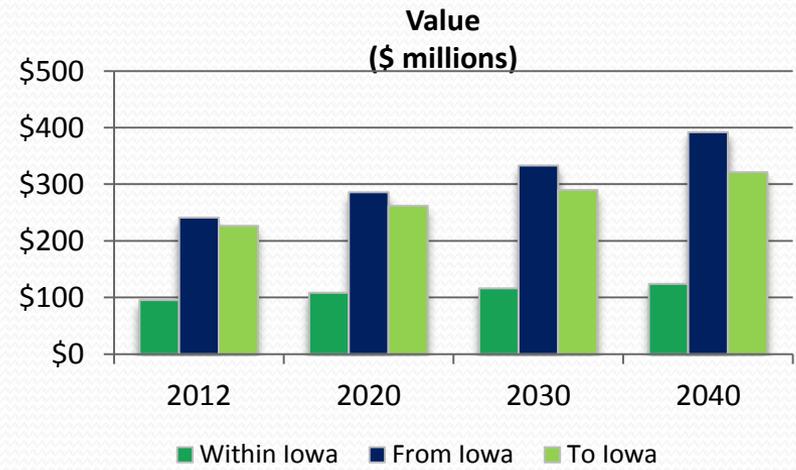
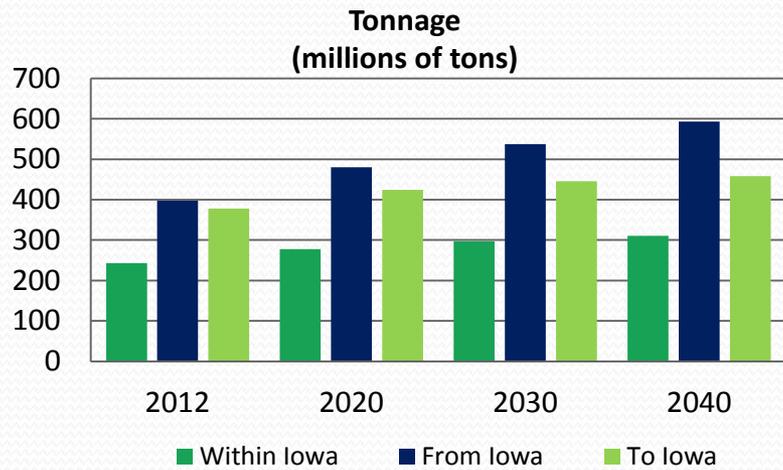


Document

freight trends and issues

- What we heard
 - Funding for all modes of freight transportation is a constant obstacle.
 - Freight industries want reliable transportation above all else.
 - There is a need for more intermodal connections.
 - Heavy truck traffic on I-80 in eastern Iowa is a concern.
 - The nation's locks and dams on the inland waterway system are in need of funding for maintenance and improvements.
 - All freight transportation modes are important and impact each other.
 - The State of Iowa should be thinking regionally, nationally, and internationally when considering freight movement.
 - Some state and federal regulations hinder freight movement.
 - Greater harmonization and standardization of rules in regulation between states is desired by shippers.

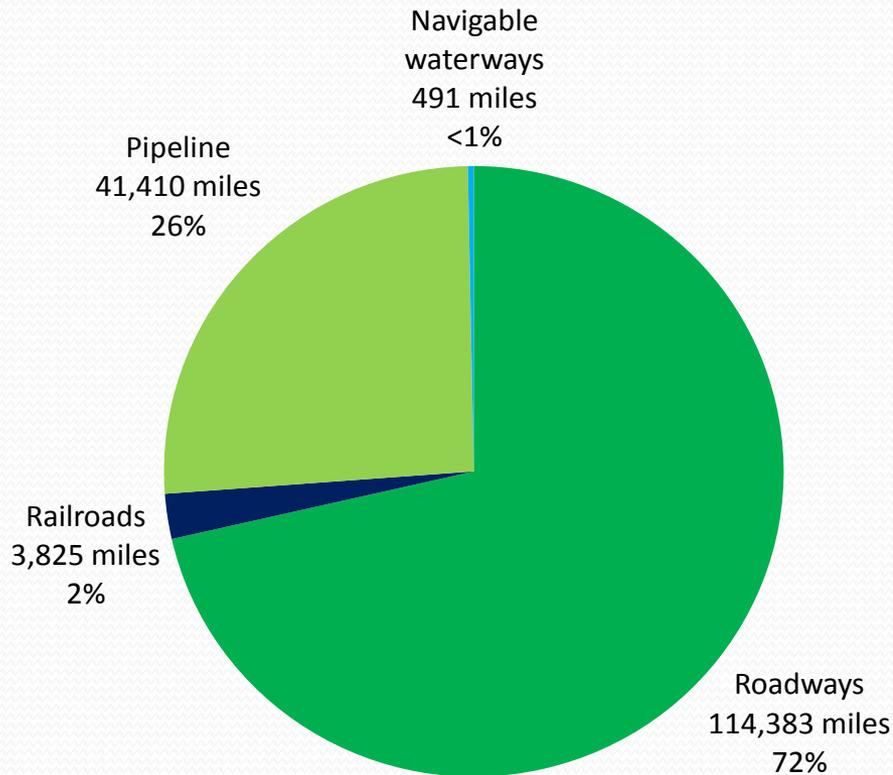
Present freight-related forecasts



	2012	2040	% change
Total	1018.1	1361.3	33.7
Truck	818.8	1083.9	32.4
Rail	97.3	123.1	26.5
Pipeline	77.0	103.0	33.7
Multiple modes and mail	18.6	37.3	100.8
Water	6.2	13.7	119.8
Air (include truck-air)	0.1	0.2	163.9
Other and unknown	0.0	0.1	271.7

	2012	2040	% change
Total	\$563,313	\$838,457	48.8
Truck	\$453,296	\$643,508	42.0
Multiple modes and mail	\$45,329	\$79,719	75.9
Rail	\$36,680	\$58,971	60.8
Pipeline	\$18,985	\$25,147	32.5
Water	\$5,230	\$16,648	218.3
Air (include truck-air)	\$3,595	\$13,574	277.6
Other and unknown	\$198	\$890	348.6

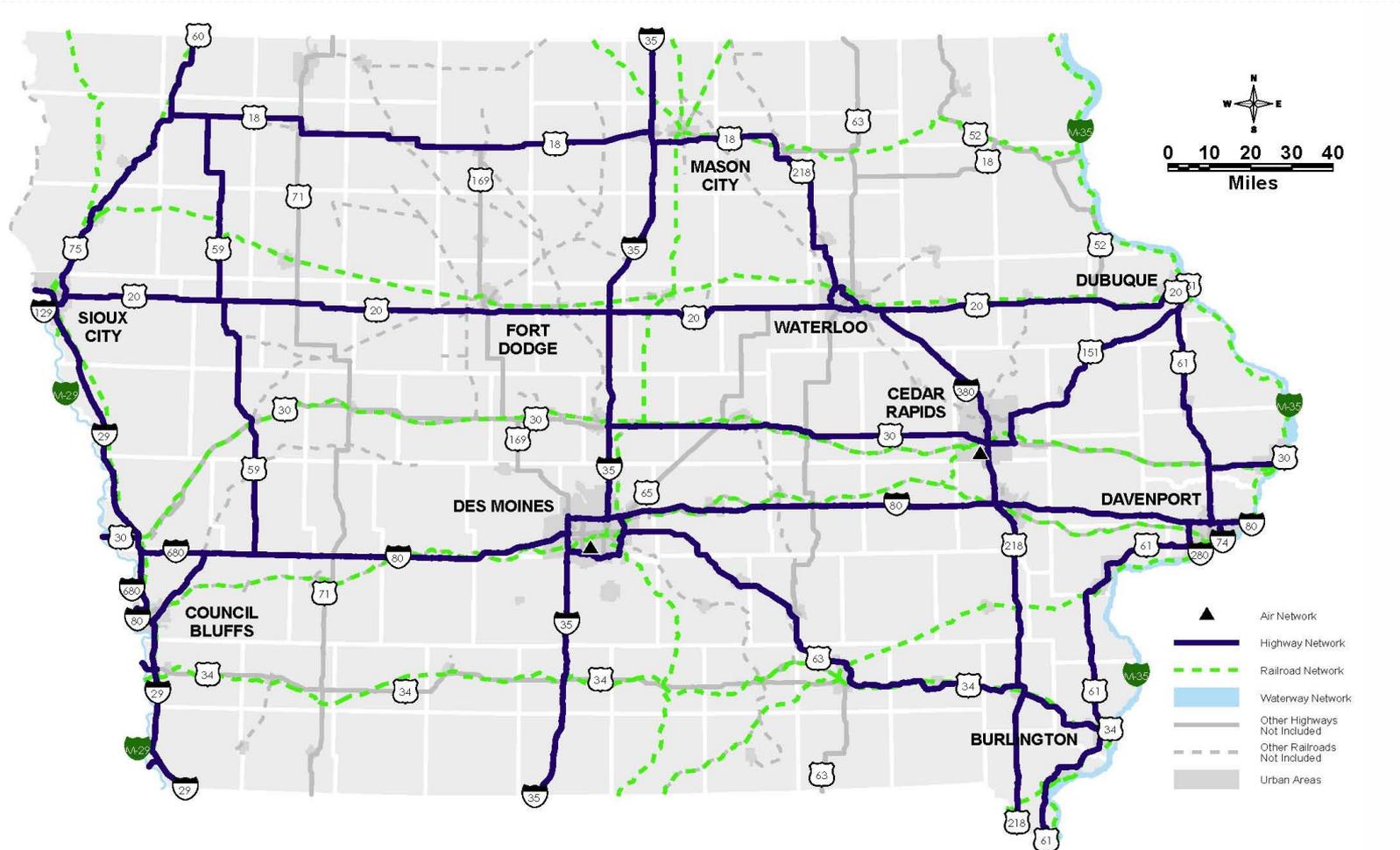
Inventory existing assets



SYSTEM HIGHLIGHTS

- **108** public airports
- **2,391-mile** Commercial & Industrial Network
- Over **25,000** bridges
- Nearly **20,000** trucking companies
- **84** pipeline operators
- **18** railroad companies
- **60** barge terminals
- **11** Lock and Dams
- **1** intermodal container facility
- **15** biodiesel plants
- **44** ethanol plants
- **811** licensed grain elevators
- Public warehouses
- Distribution centers
- Transload facilities

Iowa Multimodal Freight Network





Describe

conditions of the system

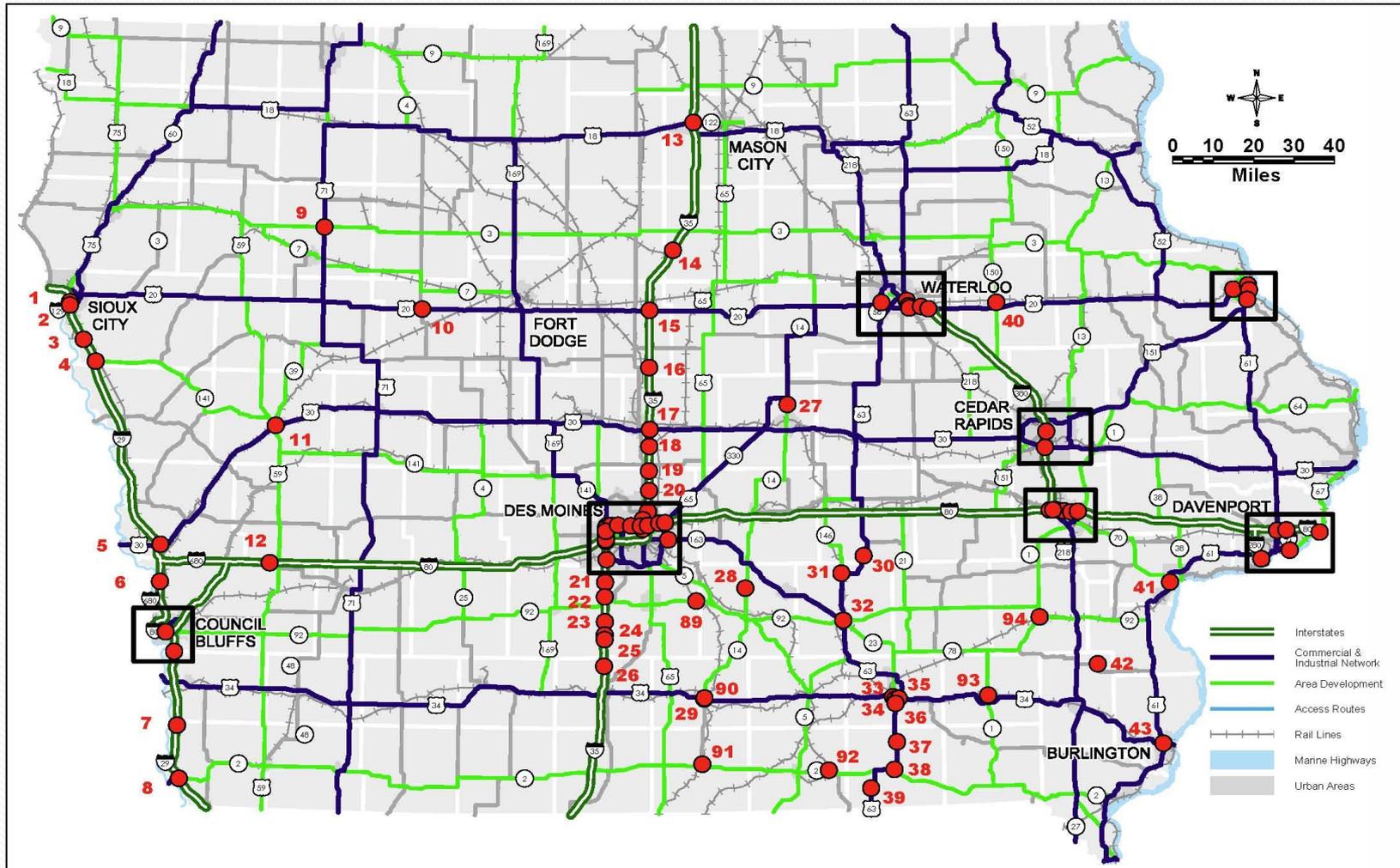
- Summary by mode
- Utilization
- Safety
- Bottlenecks
- Performance measures



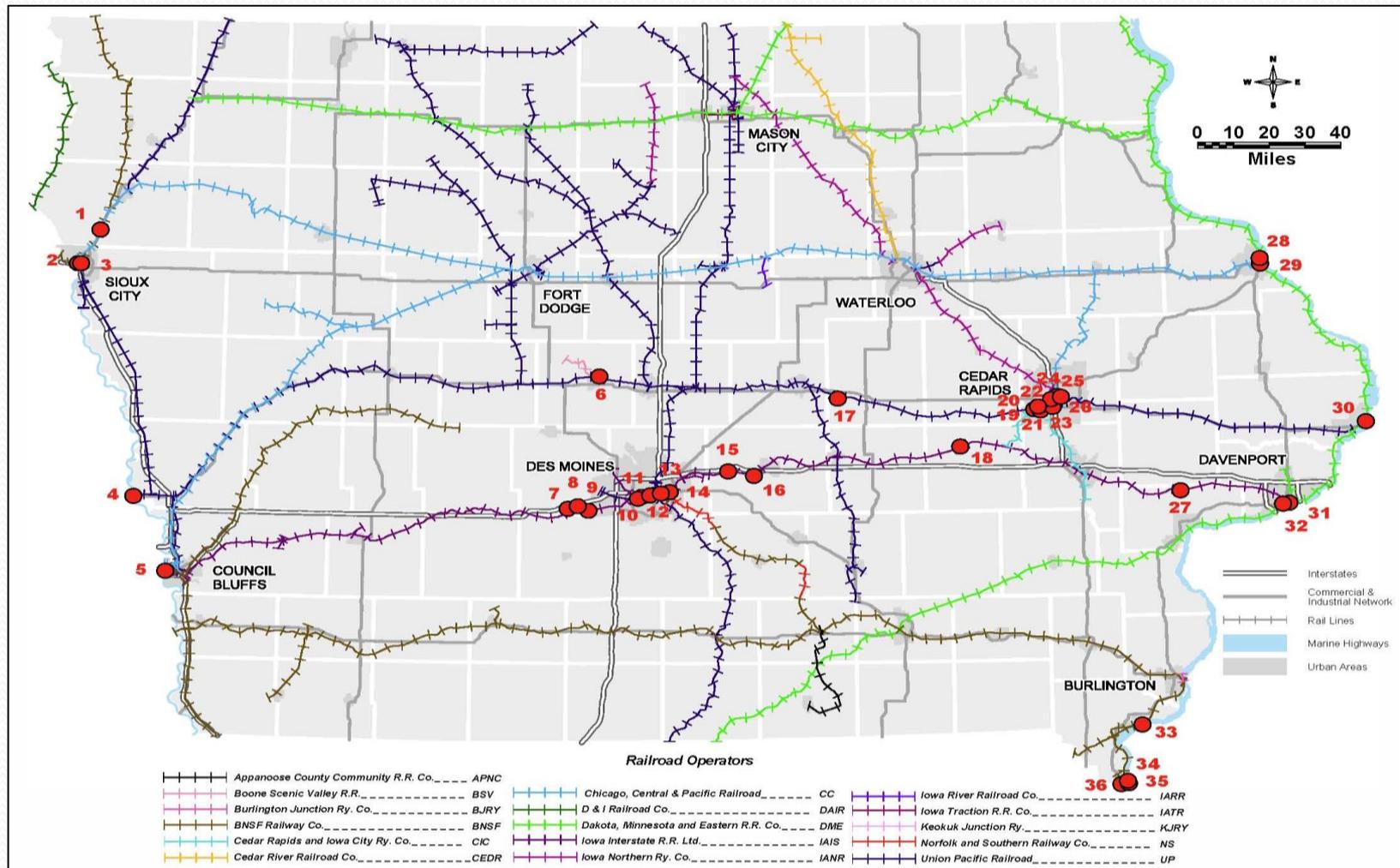
Identify bottlenecks

- Air
- Highway
- Railroad
- Waterway
- Operational and regulatory

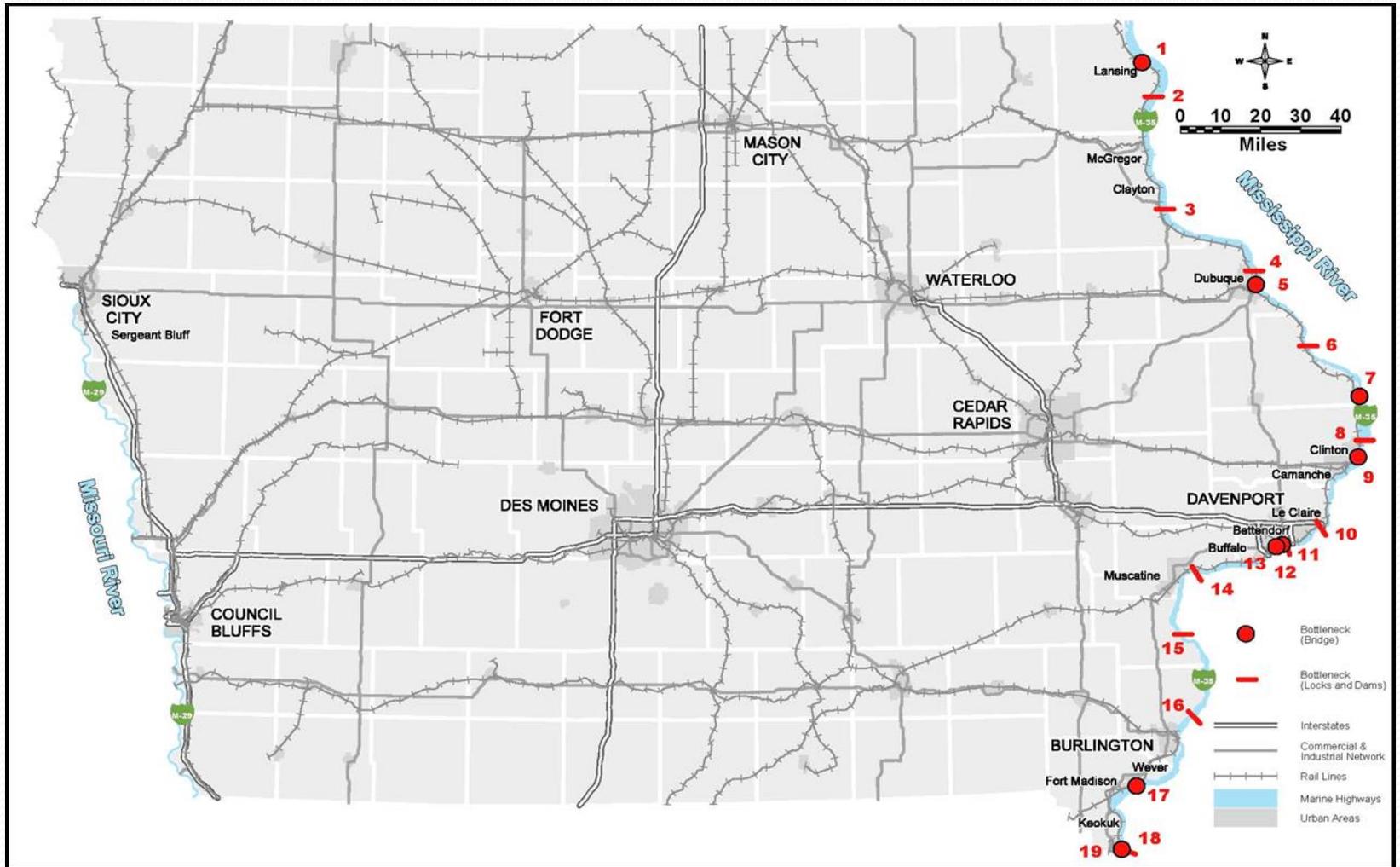
Highway bottlenecks



Railroad bottlenecks



Waterway bottlenecks



Develop performance measures

- Air
- Highway
- Pipeline
- Railroad
- Waterway

- Alignment with national freight goals

Identify the

State's decision-making process

- Stakeholder and public engagement
- Decision-making tools
- Coordination with states, freight-related groups, and institutions
- Funding mechanisms

Present freight strategies and improvements

- Strategies
 - Multimodal
 - Freight Advisory Council
 - Internal discussions
- Improvements
 - Air (Des Moines International and Eastern Iowa Airports)
 - Highway (Value, Condition, and Performance matrix)
 - Railroad (Iowa railroad companies)
 - Waterway (U.S. Army Corps. of Engineers)

Top 5 priority

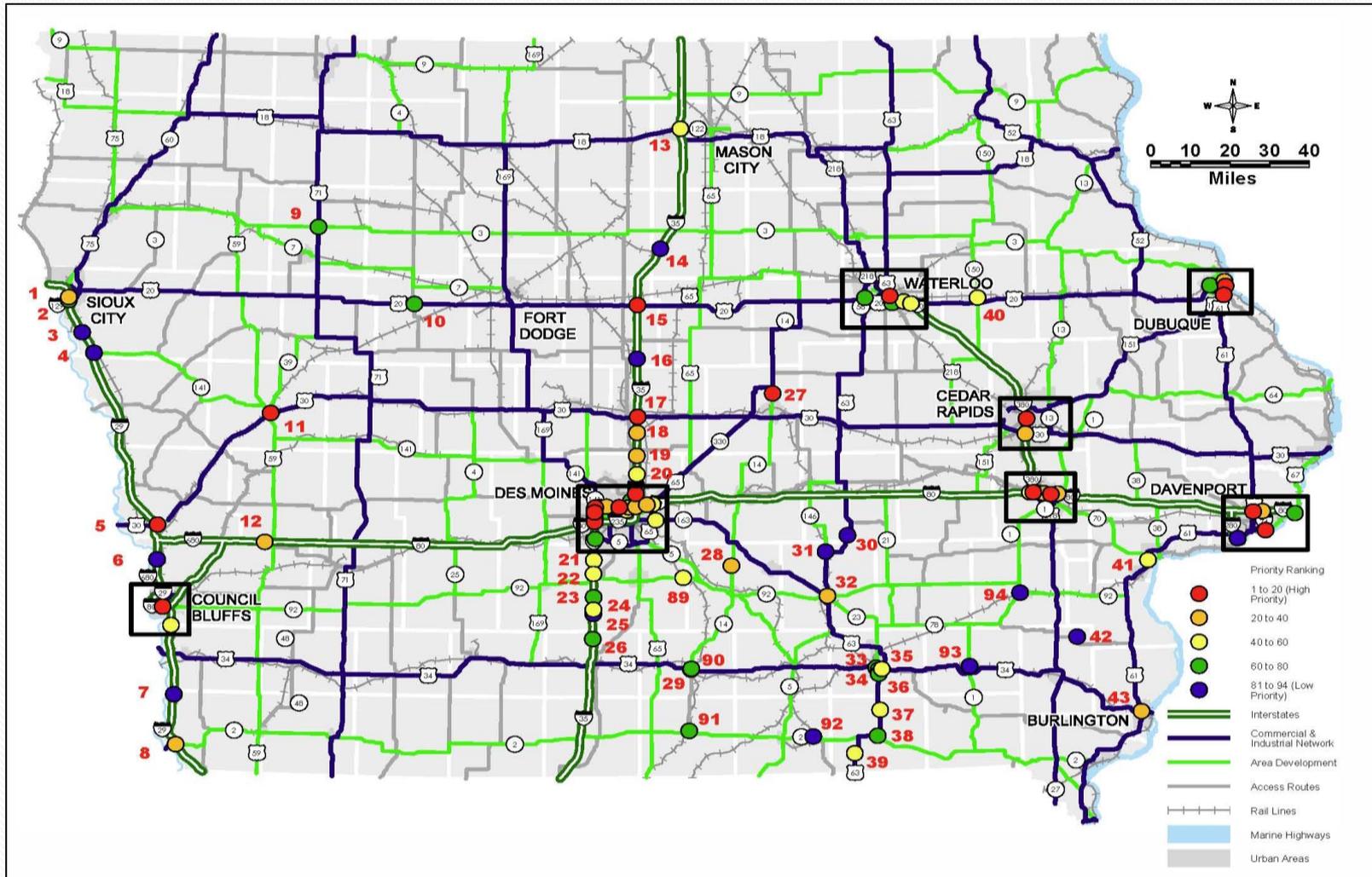
freight strategies

1. Optimize the freight transportation network to minimize cost and travel time and improve supply chain efficiency
2. Target investment on the interstate system at a level that reflects the importance of this system for moving freight
3. Advance a 21st century Farm-to-Market System that moves products seamlessly across road, rail, and water to global marketplaces
4. Explore opportunities for increasing value-added production within the state
5. Target investment to address mobility issues that impact freight movements

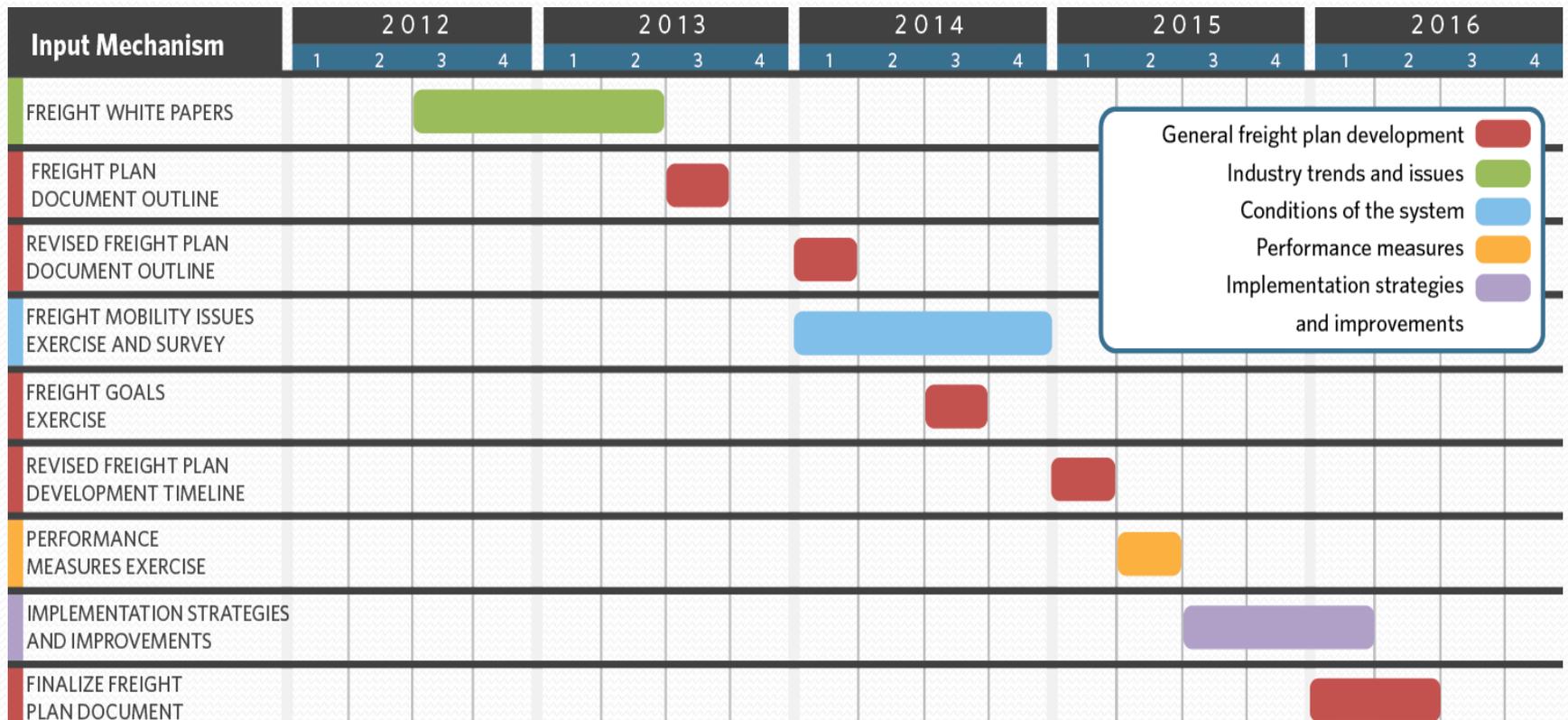
Value, Condition, and Performance matrix highway improvements

Map ID	Location	Value		Condition		Performance		Average ranking	Tie Truck volume	Priority rank
		iTRAM	"V" rank	ICE	"C" rank	INRIX	"P" rank			
48	I-80/29 N/S through Council Bluffs	60.79	32	52.82	2	374	16	16.67	13579	1
47	U.S.151 N/S @ Maquoketa Dr	53.29	38	57.36	6	1040	6	16.67	2115	2
87	I-74 @ Mississippi River	90.95	23	65.53	23	706	9	18.33	2908	3
57	I-35/80 N/S, E/W @ Iowa 141	49.26	43	61.17	13	2036	2	19.33	12761	4
76	I-380 N/S through Cedar Rapids	76.37	26	55.34	4	123	33	21.00	7226	5
5	U.S. 30 E/W through Missouri Valley	21.80	58	54.31	3	1563	4	21.67	993	6
79	I-380 N/S @ I-80/exit 0 and I-80 E/W @ I-380/exit 239	146.63	10	73.35	47	250	24	27.00	11161	7
15	I-35 N/S @ U.S. 20/exit 142 and U.S. 20 E/W @ I-35/exit 153	114.43	17	73.91	51	420	14	27.33	5559	8
55	I-35/80 N/S @ Douglas Ave	52.83	41	59.84	11	116	34	28.67	12884	9
6	Iowa 160 E/W @ I-35 and I-35 N/S @ Iowa 160/exit 90	108.67	18	69.29	36	114	35	29.67	8331	10
11	U.S. 30 E/W @ U.S. 59/Iowa 141	60.33	33	70.81	41	387	15	29.67	1377	11
84	U.S. 61 N/S @ I-80/exit 123 and I-80 E @ U.S. 61/Brady St/exit 295	53.65	36	69.57	37	368	17	30.00	11230	12
51	I-80/I-35/I-235 N/S,E/W @ southwest mixmaster	92.24	22	73.83	50	365	18	30.00	6870	13
71	I-380/U.S. 218 N/S from San Marnan Dr To W Ninth St	12.87	61	66.45	27	1764	3	30.33	2799	14
46	U.S. 20 E/W @ Iowa 946	55.22	35	58.80	8	79	48	30.33	2212	15
27	Iowa 14 N/S from Marshalltown north city limits to Iowa 330	11.10	63	62.08	17	576	12	30.67	542	16
17	I-35 N/S @ U.S. 30/exit 111 and U.S. 30 E/W @ I-35/exit 151	131.58	13	77.55	61	336	19	31.00	7633	17

Value, Condition, and Performance matrix highway improvements



Stakeholder and public engagement



Stakeholder and public engagement

Freight Mobility Issue Survey (targeted 6 groups)

- FAC
- MPOs
- RPAs
- DOT districts
- RAC
- Railroads

Freight Advisory Council (11 meetings)

- Nov. 6, 2012
- May 15, 2013
- Aug. 22, 2013
- Feb. 14, 2014
- June 20, 2014
- Mar. 27, 2015
- June 26, 2015
- Sept. 11, 2015
- Dec. 11, 2015
- March 4, 2016
- June 3, 2016

Rail Advisory Committee (2 meetings)

- May 15, 2014
- Oct. 28, 2015

Issue Based Workshop (1 meeting)

- Sept. 24, 2015

High Leverage Stakeholder Committee (2 meetings)

- Nov. 18, 2015
- Feb. 26, 2016

45-day Public Comment Period

- May 2, 2016 to June 15, 2016

Public Input Meeting (1 meeting)

- June 8, 2016

Iowa State Freight Plan compared to other state freight plans

State Freight Plan Content	IA	FL*	LA*	MI	MS*	MO*	PA*	SC*	UT*	WA	WY*
Plan development driven by FAC and designated stakeholder committees	Green	Green	Green	Light Green	Green	Green	Green	Green	Green	Green	Green
Detailed relationship between elements of planning/programming process	Green	Green	Green	Green	Green	Green	Green	Green	Light Green	Green	Green
Identification/description of major supply chains in the state	Green	Green	Green	Green	Light Green	Light Green	Green	Green	Light Green	Green	Green
Detailed FAC-identified freight issues and solutions	Green	Green	Green	Light Green	Light Green	Green	Green	Green	Light Green	Light Green	Green
Detailed asset inventory and condition summaries for each mode	Green	Green	Green	Green	Light Green	Green	Green	Green	Green	Green	Green
State-designated multimodal freight network	Green	Green	Green	Light Green	Green	Green	Light Green	Green	Green	Green	Light Green
Multi-tool highway condition evaluation	Green	Light Green	Green	Light Green							
OSOW utilization/permitting evaluation	Green	Light Green	Green	Green	Light Green	Light Green	Green	Light Green	Light Green	Light Green	Green
Freight-specific highway crash analysis	Green	Light Green	Green	Green	Green	Green	Green	Light Green	Light Green	Light Green	Green
Multimodal bottlenecks identification and analysis	Green	Green	Green	Light Green	Light Green	Green	Light Green	Light Green	Light Green	Green	Light Green
Multimodal freight strategies prioritized by stakeholders	Green	Green	Green	Light Green	Light Green	Green	Green	Green	Light Green	Green	Green
Multi-factor highway improvement identification and prioritization	Green	Green	Green	Light Green	Green	Green	Green	Green	Green	Green	Green
Multimodal freight improvements	Green	Green	Green	Green	Light Green	Green	Light Green	Light Green	Light Green	Green	Light Green

*consultant-led effort

Current status

- Public comment period held **May 2nd through June 15th**
www.iowadot.gov/iowainmotion/freight.html
- Public input meeting was held on **June 8th**
Greater Des Moines Botanical Center (Des Moines)
- Commission input on final draft
- Finalize plan
- Submit to FHWA
- Will inform freight components of long-range transportation plan

Questions

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