Iowa State Rail Plan Final

Appendix A

Profile of Iowa's Railroad Network

IOWA DOT

Contents

A.1 Introduction

The primary purpose of this appendix is to provide an inventory and description of the assets of the Iowa railroad network for railroads of all classes and for non-operating railroad owners that includes background and details about the physical and operating characteristics of each railroad and rail line segment in the state. This data is used to understand potential freight capacity, service velocity and versatility, and to ascertain potentially what types of business and levels of service can be accommodated over each line segment. Furthermore, this inventory will be used as a tool to later identify and prioritize potential rail infrastructure improvements that eliminate bottlenecks and operating and safety conflicts, expand capacity, promote rail access, enhance connectivity between railroads and between railroads and other transportation modes, and encourage growth in the railroad transportation sector that is consistent with the needs of Iowa's people, businesses, and industry and the vision of the Iowa State Rail Plan.

Included in the inventory for each railroad in the state, to the extent known during development of the Iowa State Rail Plan, are key physical and operating characteristics for each Iowa railroad subdivision or railroad line segment. This information, identified in the list below, was collected through coordination with Iowa's railroads in 2015, and via analysis of Iowa DOT data (including Iowa Railroad Annual Reports submitted by the state's railroads to Iowa DOT annually and rail maps generated by Iowa DOT), Class I Railroad Annual Report R-1s (submitted by the state's Class I railroads to the federal Surface Transportation Board annually), railroad timetables, and other publicly available data.

- **Railroad Subdivision and Division identification.**
- **Owner of the line.**
- **Operator of the line.**
- **Line Heritage** — identifies the historic railroad ownership of each subdivision.
- **Subdivision Route / Mileage** — identifies the subdivision endpoints and route mileage within Iowa. Note that railroad miles as portrayed in the railroad timetable and other public sources can vary from the route-mile calculations presented in the State Rail Plan.
- **FRA Track Class** — identifies the likely applicable Federal Railroad Administration (FRA) Class of Track designation on the main track(s) for each subdivision.
- **Track Configuration** — identifies the number of main tracks and the presence of sidings for train meet-pass events on each subdivision, within Iowa.
- **Maximum Authorized Speed for Freight Trains** — identifies the maximum speed freight trains can travel over each subdivision. Note that speeds may be further restricted owing to track geometry, bridge restrictions, limited sight distances, challenges of rail operations in urban and rail terminal areas, and other safety and operating considerations not identified in this inventory. Maximum authorized speeds for freight trains may also be lower than the maximum authorized speed by the FRA's Class of Track regulations.
- **Maximum Authorized Speed for Passenger Trains** — identifies the maximum speed passenger trains can travel over each subdivision; note that speeds may be further restricted owing to track geometry, bridge restrictions, limited sight distances, challenges of rail operations in urban and rail terminal areas, and other safety and operating considerations not identified in this inventory. Speeds are identified only for railroad subdivisions presently hosting Amtrak intercity and long-distance passenger trains in Iowa, and on other segments as designated by Iowa's railroads.
- **Wayside Signals** — indicates the presence of a wayside signal system on each subdivision (see operational authority below for wayside signal types), which is used to convey operating authority to trains and equipment and / or show occupation of main track(s) by trains and equipment.
- **Method of Operation** — identifies generally the railroad operating system or practice employed on each segment, to the extent known, including the presence of:
  - **Centralized Traffic Control (CTC)** — A train control system whereby a train dispatcher provides operational authority to trains remotely via a wayside signal system and radio communication.
  - **Automatic Train Control (ATC)** — A train control system integrated with a cab signaling system that applies train speed control. An alarm in the train locomotive notifies the engineer when the train has exceeded the maximum allowable speed for a given portion of track, and if the engineer fails to reduce

speed or apply the air brake system, a penalty brake application is made automatically by the ATC system. ATC typically exists as an overlay to a CTC system, which provides operational authority.
    - **Automatic Block Signals (ABS)** — A wayside signal system that indicates block occupancy (a block is a short, defined track segment) and minimizes the likelihood of collisions between trains. ABS is not controlled by a train dispatcher, but a train's entry to into a segment of ABS may be controlled by a train dispatcher. Typically requires that operational authority be provided as an overlay through a track warrant or track authority issued by a train dispatcher via radio communication.
    - **Track Warrant Control (TWC) or Track Authority (TA); designations may vary by railroad** — System of operational authority issued to trains remotely by a train dispatcher via radio communication.
    - **Restricted Limits (RL), Restricted Speed (RS), GCOR Rule 6.28, Yard Limits (YL), and Rule 520 (Non-Main Track); designations may vary by railroad** — Typically slow speed operations (not more than 20 mph, but may be much slower, depending upon designation, sight distance, congestion, and operating conditions) within and at the approach to railroad yards and on industrial leads and other trackage that does not require operational authority from a train dispatcher. Trains operating within these limits typically coordinate operations with the train dispatcher and other trains operating within the limits via radio communication.
- **Maximum Allowable Gross Weight** — identifies loaded railcar weight limitations, as dictated by the likely condition of mainline bridges and track.
- **Clearances** — identifies the known vertical clearance potential for accommodating specific types of railcar equipment and/or the vertical clearance above top of rail (ATR) in feet and inches. Reporting by railroad varies. Some equipment types identified include:
    - **Trailer on Flat Car (TOFC)** — railroad flat car on which a truck semi-trailer is transported; known also as piggyback.
    - **Container on Flat Car (COFC)/Double-Stack Car** — intermodal railcar that typically accommodates shipping containers of up to 53 feet in length stacked one or two high.
    - **Tri-Level/Hi-Trilevel** — railcar equipped with racks accommodating two or three decks of standard automobiles or light trucks.
    - **AutoMax** — automobile rack railcar with adjustable deck heights for accommodating bi-level or tri-level configurations.
- **Current Traffic Density (2014)** — identifies the rail traffic density by subdivision in annual Gross Ton-Miles (GTM) in millions. GTM includes the number of trailing tons in a train behind the locomotives (including railcars and lading, railroad company service equipment, and cabooses) times the distance moved in road freight trains. Traffic density for tenant railroads with trackage rights over subdivisions of an owning (or host) railroad are identified, if known.
- **Average Number of Trains per Day** — identifies a range of likely average daily train volumes for each subdivision.
- **Commodities Transported** — identifies typical commodities or commodity groups transported over each subdivision. Note that commodities and the rail routes they travel over can change at any time due to markets, rail capacity, and other considerations. A more detailed discussion of current traffic flows and primary commodities transported by rail in and through Iowa can be found in Chapter 2 of the Iowa State Rail Plan.
- **Industrial Leads** — identifies railroad-designated industrial leads (or spurs, as designated by some railroads) which are used to access rail customers off the subdivision mainline and extend the reach of rail service in Iowa; mileage of industrial leads (and spurs) is not included in route-mile calculations for the state owing to their designation. Industrial tracks not owned by the railroad (privately owned) are not identified in this inventory.
- **FRA Excepted Track** — identifies segments of FRA Excepted Track over which railroads operate under the following conditions: Trains will be operated at 10 mph or less; no occupied passenger trains will be operated; no freight train will be operated that contains more than five railcars required to be placarded as hazardous materials shipments; and track gage (distance between the rails) will not be more than 4 feet 10 ¼ inches (standard gage is 4 feet 8 ½"). FRA Excepted Track in Iowa is typically found on lightly used industrial leads.

Also identified in the context of each railroad's network in Iowa is the existence of trackage rights which provide authority for one railroad (a tenant) to operate over the line of another railroad (host); haulage rights which is an arrangement whereby one railroad markets service over a route owned by another, but does not operate its own trains over the host railroad; and connections (or interchanges) between railroads where railcars are exchanged. Major railroad yards/terminals and rail facilities as well as rail-port connections in the state are also identified.

Table A.1 below identifies Iowa's 18 railroads and two non-operating railroad owners that own a total of approximately 3,851 route miles in the state, and which are detailed in this appendix. The table also identifies by entity — railroad class (if applicable), standard alpha carrier code (an industry standard two- to four-letter abbreviation), total miles of railroad owned and operated in Iowa (including lines leased, operated under contract, trackage rights, and haulage rights, as applicable), and the percentage of the total Iowa rail network that each railroad ownership represents. Note that miles leased and/or operated under contract, miles operated under trackage rights, and miles operated under haulage rights are included in the total miles operated figures, allowing total miles operated to exceed total miles owned. Industrial railroads and private track ownership provide transportation service at industrial installations in Iowa, but, due to their classification, the mileage of privately owned industrial track is not included in calculations of the state's rail network. Similarly, the industrial track (including designated industrial leads and spurs) of Class I, II, and III rail carriers is also not included in the route-mile calculations.

Table A.1: Iowa Route Mileage by Railroad and Non-Operating Railroad Owner

RAILROAD	STANDARD CARRIER ALPHA CODE	RAILROAD CLASS	TOTAL MILES OWNED	PERCENT OF TOTAL IOWA RAIL NETWORK OWNED	MILES LEASED/ OPERATED UNDER CONTRACT	MILES OPERATED UNDER TRACKAGE RIGHTS	MILES OPERATED UNDER HAULAGE RIGHTS	TOTAL MILES OPERATED
BNSF Railway	BNSF	Class I	631	16.39%	33	42	0	706
Canadian National Railway (operates in Iowa via subsidiaries Chicago Central & Pacific [CCP] and Cedar River Railroad [CEDR])	CN	Class I	605	15.71%	0	3	0	608
Canadian Pacific Railway (operates in Iowa via subsidiary Dakota, Minnesota & Eastern Railroad [DME])	CP	Class I	654	16.98%	0	12	0	666
Kansas City Southern Railway	KCS	Class I	0	0.00%	0	0	55	55
Norfolk Southern Railway	NS	Class I	44	1.14%	4	0	386	395 See Note (a) below
Union Pacific Railroad	UP	Class I	1,291	33.52%	0	95	126	1,512
SUBTOTAL (CLASS I)			**3,225**	**83.74%**				
Iowa Interstate Railroad	IAIS	Class II	298	7.73%	6 See Note (b) below	21	0	325
SUBTOTAL (CLASS II)			**298**	**7.73%**				
Appanoose County Community Railroad	APNC	Class III	35	0.90%	0	0	0	35
Boone & Scenic Valley Railroad	BSV	Class III	2	0.05%	0	0	0	2
Burlington Junction Railway	BJRY	Class III	6	0.16%	0	0	0	6
CBEC Railway (CBEC operated by IAIS)	CBEC	Class III	6	0.16%	0	0	0	6
Cedar Rapids & Iowa City Railway	CIC	Class III	57	1.48%	0	0	0	57

D&I Railroad	DAIR	Class III	0	0.00%	35 See Note (c) below	7	0	42
D&W Railroad (DWRV operated by IANR)	DWRV	Class III	22	0.57%	0	6	0	28
Iowa Northern Railway	IANR	Class III	117	3.04%	50	60	0	227
Iowa River Railroad	IARR	Class III	9	0.24%	0	0	0	9
Iowa Traction Railway	IATR	Class III	10	0.26%	0	0	0	10
Keokuk Junction Railway	KJRY	Class III	1	0.03%	0	3	0	4
SUBTOTAL (CLASS III)			**265**	**6.89%**				
North Central Iowa Rail Corridor (NCIRC trackage operated by IANR)	N/A	Non-Operating Railroad Owner	28	0.73%	0	0	0	28
State of South Dakota (SD trackage operated by DAIR)	N/A	Non-Operating Railroad Owner	35	0.91%	0	0	0	35
SUBTOTAL (NON-OPERATING RAILROAD OWNERS)			**63**	**1.64%**				
Iowa Rail Network Total			**3,851**	**100.0%**	**128**	**249**	***567***	***4,756***

Source: Iowa DOT; Class I Railroad Annual Reports R-1 (2014); Iowa Class I, II, and III railroads

Notes:

a. NS presently operates on 9 miles in Iowa — 5 miles of NS trackage at Des Moines and 4 miles of BNSF trackage at Des Moines operated under contract. The remainder of the NS-owned trackage in Iowa has been leased to BNSF and IAIS for operations. Total Miles Operated figure represents miles in Iowa over which NS operates through ownership, under contract, and via haulage rights only.

b. IAIS also leases or operates under contract the 6-mile CBEC Railway at Council Bluffs, a 12-mile segment from NS between Des Moines and Grimes, and an 8-mile segment from CIC between Iowa City and Hills, totaling 24 miles. These miles are not included in IAIS route-mile calculations in the table above, as IAIS designates these segments as industrial leads, which are not included in route-mile calculations. IAIS operates over the 18 miles of CIC between Yocum Connection (near South Amana), Iowa, and Cedar Rapids, Iowa, via a marketing agreement with CIC.

c. State of South Dakota owned trackage in Iowa is leased to the Sioux Valley Regional Railroad Authority (SVRRA); DAIR provides service for SVRRA via an operating contract.

A.2 Class I Railroads in Iowa

The section describes Iowa's six Class I railroads. Included are data and operating subdivision tables for each railroad, showing such details as ownership, miles owned and operated, trackage and haulage rights, physical characteristics of operating subdivisions, facilities, commodities handled, connections with other railroads, and more. In 2015, Iowa's Class I railroads were asked to confirm much of the data appearing in this section and to provide additional input, as appropriate. Four of Iowa's six Class I railroads participated. No physical inspections of the Class I railroads were conducted during development of the Iowa State Rail Plan.

A.2.1 BNSF Railway (BNSF)

A summary of statistical information for BNSF Railway (BNSF) within Iowa is as follows:

- Line owned: 631 miles
- Line operated under lease: 27 miles
- Line operated under contract: 6 miles
- Line operated under trackage rights: 42 miles
- Line operated under haulage rights: 0 miles

- Total mileage operated: 706 miles
- Line owned, not operated, by respondent: 0 miles

BNSF Interchanges

Interchanges are locations where railroads intersect and exchange railcars. BNSF has the ability to interchange freight rail traffic with four Class I carriers (CN, CP, NS, UP), one Class II carrier (IAIS), and four Class III carriers (APNC, BJRY, DAIR, KJRY). Designated interchange point locations and connecting carriers are listed below:

- Albia — Appanoose County Community Railroad (APNC)
- Burlington — Burlington Junction Railway (BJRY)
- Clinton — Canadian Pacific Railway (CP)
- Council Bluffs — Canadian National Railway (CN), Iowa Interstate Railroad (IAIS), Union Pacific Railroad (UP)
- Davenport — CP
- Des Moines —IAIS, Norfolk Southern Railway (NS), UP
- Keokuk — KJRY
- Mount Pleasant — BJRY
- Ottumwa — BJRY, CP
- Sioux City — CN, D&I Railroad (DAIR), UP

BNSF Trackage Rights and Joint Trackage

BNSF has trackage rights over the following line segments and connecting railroads:

- Canadian Pacific Railway (CP) Davenport Subdivision between East Wye Switch (Davenport), Iowa, and Clinton, Iowa; approximately 35.4 miles.
- Union Pacific Railroad Omaha Subdivision between BN Junction (Council Bluffs), Iowa, and the Iowa / Nebraska state line at Council Bluffs, Iowa; approximately 3.0 miles.
- Private Track at Red Oak, Iowa; approximately 4.0 miles.

BNSF operates the following segments under lease:

- Norfolk Southern Railway (NS) between NW Junction (Des Moines), Iowa, and Swan, Iowa, and between Tracy, Iowa, and Hamilton, Iowa; approximately 26.8 miles.

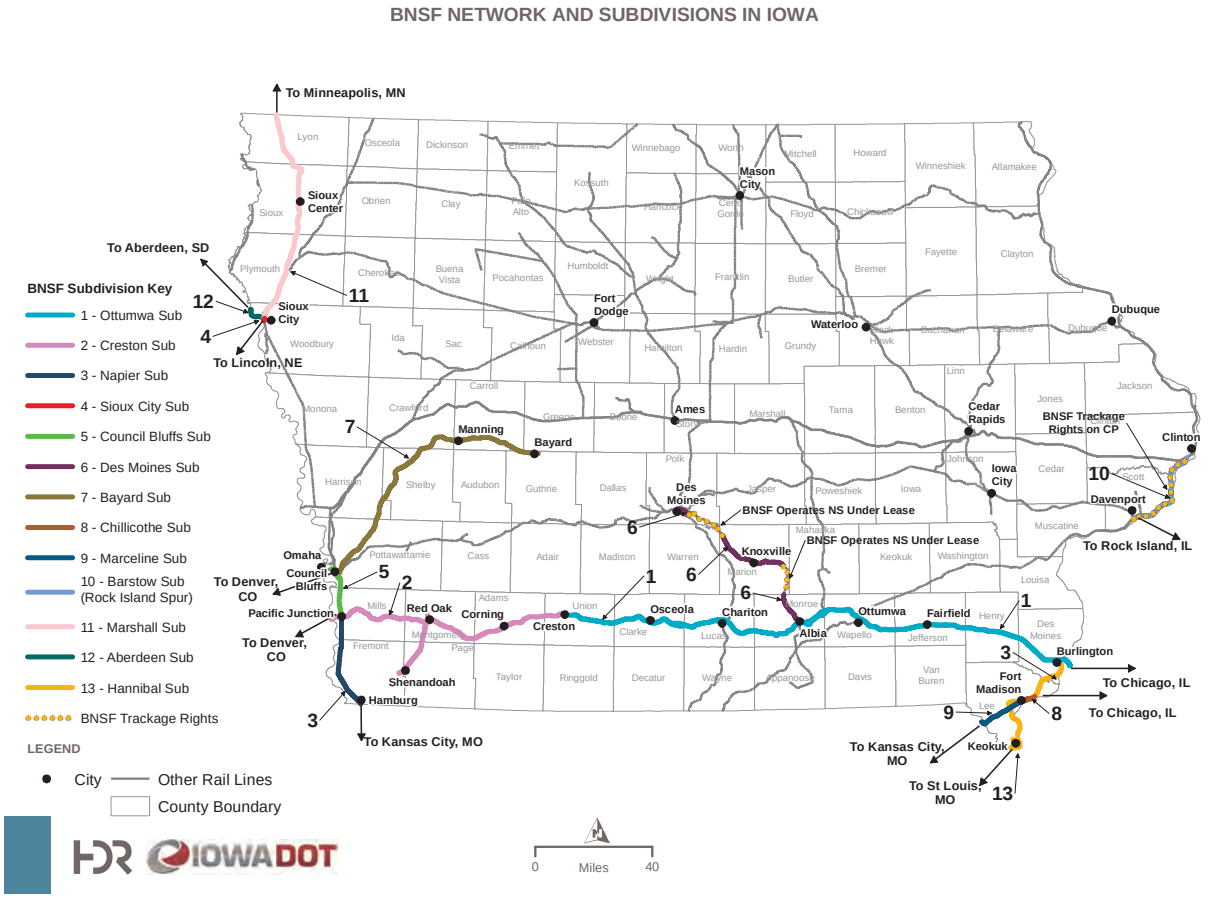
BNSF Divisions and Subdivisions in Iowa

BNSF's Iowa network is comprised of part of four operating divisions:

- Nebraska Division
- Chicago Division
- Twin Cities Division
- Springfield Division

BNSF's 13 operating subdivisions in Iowa are shown in Figure A.1 below. BNSF's Iowa subdivisions are presented by division and described in the tables below.

Figure A.1: BNSF Network and Subdivisions in Iowa



Source: BNSF and HDR

The Iowa subdivisions shown in Table A.2 below are components of the BNSF Nebraska Division.

Table A.2: Descriptions of BNSF Subdivisions in Iowa — Nebraska Division

SUBDIVISION: OTTUMWA SUBDIVISION	
Division	Nebraska
Owner	BNSF
Operator	BNSF
Line Heritage	Chicago, Burlington & Quincy Railroad (CB&Q)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Iowa / Illinois state line near Burlington, Iowa-Creston, Iowa; 188.1 miles
FRA Track Class	Class 4
Track Configuration	Two main tracks
Maximum Authorized Speed Freight	60 mph freight
Maximum Authorized Speed Passenger	79 mph passenger
Wayside Signals	Mixture of Centralized Traffic Control (CTC) and Automatic Block Signals (ABS)
Method of Operation	Mixture of Centralized Traffic Control (CTC), Track Warrant Control (TWC), and Yard Limits (YL)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Cleared for trailers (TOFC), double-stacks (COFC), hi-trilevel, and automax equipment

Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions)	• 76.0 GTM (Iowa / Illinois state line near Burlington-Burlington) • 109.0 GTM (Burlington-Ottumwa) • 113.0 GTM (Ottumwa-Albia) • 110.0 GTM (Albia-Creston)
Average Number of Trains per Day	40-45
Commodities Transported	Coal, farm products, food and kindred products, chemical and allied products, intermodal, ethanol, and general merchandise freight traffic
Industrial Leads	Cargill Spur: Cargill Spur, Iowa; approximately 3.0 miles (includes privately owned track); 286,000 lbs. maximum allowable gross weight
FRA Excepted Track	None

SUBDIVISION: CRESTON SUBDIVISION	
Division	Nebraska
Owner	BNSF
Operator	BNSF
Line Heritage	Chicago, Burlington & Quincy Railroad (CB&Q)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Creston, Iowa-Iowa / Nebraska state line near Pacific Junction, Iowa; 86.1 miles
FRA Track Class	Class 4
Track Configuration	Combination of two main tracks and one main track
Maximum Authorized Speed Freight	60 mph freight
Maximum Authorized Speed Passenger	79 mph passenger
Wayside Signals	Centralized Traffic Control (CTC)
Method of Operation	Centralized Traffic Control (CTC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Cleared for trailers (TOFC), double-stacks (COFC), hi-trilevel, and automax equipment
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions)	• 109.0 GTM (Creston-Pacific Junction) • 134.0 GTM (Pacific Junction-Iowa / Nebraska state line near Pacific Junction)
Average Number of Trains per Day	40-45
Commodities Transported	Coal, farm products, food and kindred products, chemical and allied products, intermodal, ethanol, and general merchandise freight traffic
Industrial Leads	• Shenandoah Industrial Lead: Red Oak, Iowa-Shenandoah, Iowa; approximately 21.2 miles (former Chicago, Burlington & Quincy Railroad); 286,000 lbs. maximum allowable gross weight (Red Oak-Coburg) and 268,000 lbs. maximum allowable gross weight (Coburg-Shenandoah); line density 0.05 GTM • Red Oak Industrial Lead: Red Oak, Iowa; approximately 3.1 miles (former Chicago, Burlington & Quincy Railroad); 286,000 lbs. maximum allowable gross weight
FRA Excepted Track	None

SUBDIVISION: NAPIER SUBDIVISION	
Division	Nebraska
Owner	BNSF
Operator	BNSF
Line Heritage	Chicago, Burlington & Quincy Railroad (CB&Q)

Subdivision Route / Mileage	Portion of Subdivision in Iowa: Pacific Junction, Iowa-Iowa / Missouri state line near Hamburg, Iowa; 33.0 miles
FRA Track Class	Class 4
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	49 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	• Restricted Limits (RL) at Pacific Junction, Iowa • Track Warrant Control (TWC) Pacific Junction, Iowa-Iowa / Missouri state line near Hamburg, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Cleared for trailers (TOFC), double-stacks (COFC), hi-trilevel, and automax equipment
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions)	20.0 GTM
Average Number of Trains per Day	14-18
Commodities Transported	Coal, farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: SIOUX CITY SUBDIVISION	
Division	Nebraska
Owner	BNSF
Operator	BNSF
Line Heritage	Chicago, Burlington and Quincy Railroad (CB&Q)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Sioux City, Iowa-Iowa / Nebraska state line near Sioux City, Iowa; 2.6 miles
FRA Track Class	Class 3
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	30 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	Track Warrant Control (TWC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Not cleared for double-stacks, hi-trilevel, and automax equipment
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions)	43.0 GTM
Average Number of Trains per Day	12-16
Commodities Transported	Coal, farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: COUNCIL BLUFFS SUBDIVISION	
Division	Nebraska
Owner	BNSF
Operator	BNSF
Line Heritage	Chicago, Burlington & Quincy Railroad (CB&Q)
Subdivision Route / Mileage	Pacific Junction, Iowa-BN Junction (Council Bluffs), Iowa; 18.4 miles
FRA Track Class	Class 2
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	25 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	• Restricted Limits (RL) at Pacific Junction, Iowa • Track Warrant Control (TWC) Pacific Junction, Iowa-Council Bluffs, Iowa • Yard Limits (YL) at Council Bluffs, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Cleared for trailers (TOFC), double-stacks (COFC), hi-trilevel, and automax equipment
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	13.0 GTM
Average Number of Trains per Day	2-4
Commodities Transported	Coal, farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	CBEC Railway: Council Bluffs, Iowa; approximately 6.0 miles owned by CBEC; operated by IAIS; BNSF and UP have operating rights over CBEC; 286,000 lbs. maximum allowable gross weight; line density 1.38 GTM
FRA Excepted Track	None

SUBDIVISION: DES MOINES SUBDIVISION	
Division	Nebraska
Owner	BNSF
Operator	BNSF
Line Heritage	Chicago, Burlington & Quincy Railroad (CB&Q)
Subdivision Route / Mileage	Albia, Iowa-Des Moines, Iowa; 67.8 miles (Note: The Des Moines (NW Junction)-Swan and Tracy-Hamilton segments, approximately 26.8 miles, are owned by NS and operated by BNSF under lease)
FRA Track Class	Class 3
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	35 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	• Restricted Limits (RL) at Albia, Iowa • Track Warrant Control (TWC) Albia, Iowa-Des Moines, Iowa • Restricted Limits (RL) at Des Moines, Iowa • Yard Limits (YL) at Des Moines, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Unknown
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	2.0 GTM

Average Number of Trains per Day	1-2
Commodities Transported	Farm products, food and kindred products, chemical and allied products, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: BAYARD SUBDIVISION	
Division	Nebraska
Owner	BNSF
Operator	BNSF
Line Heritage	Chicago, Milwaukee, St. Paul and Pacific Railroad (CMStP&P)
Subdivision Route / Mileage	Council Bluffs, Iowa-Bayard, Iowa; 100.0 miles
FRA Track Class	Class 2
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	25 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	• Yard Limits (YL) at Council Bluffs, Iowa • Track Warrant Control (TWC) Council Bluffs, Iowa-Bayard, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Unknown
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	2.0 GTM
Average Number of Trains per Day	0-1
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

The Iowa subdivisions shown in Table A.3 below are components of the BNSF Chicago Division.

Table A.3: Descriptions of BNSF Subdivisions in Iowa — Chicago Division

SUBDIVISION: CHILLICOTHE SUBDIVISION	
Division	Chicago
Owner	BNSF
Operator	BNSF
Line Heritage	Atchison, Topeka & Santa Fe Railway (AT&SF)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Iowa / Illinois state line near Fort Madison, Iowa-Fort Madison, Iowa; 2.5 miles
FRA Track Class	Class 4
Track Configuration	Two main tracks
Maximum Authorized Speed Freight	55 mph freight
Maximum Authorized Speed Passenger	79 mph passenger
Wayside Signals	Centralized Traffic Control (CTC)
Method of Operation	Centralized Traffic Control (CTC)
Maximum Allowable Gross Weight	286,000 lbs.

Clearances	Cleared for trailers (TOFC), double-stacks (COFC), hi-trilevel, and automax equipment
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	• 139.0 GTM — BNSF • 12.5 GTM — UP
Average Number of Trains per Day	60-65
Commodities Transported	Intermodal, automobiles, coal, farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: MARCELINE SUBDIVISION	
Division	Chicago
Owner	BNSF
Operator	BNSF
Line Heritage	Atchison, Topeka & Santa Fe Railway (AT&SF)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Fort Madison, Iowa-Iowa / Missouri state line near Argyle, Iowa; 17.7 miles
FRA Track Class	Class 5
Track Configuration	Two main tracks
Maximum Authorized Speed Freight	70 mph freight
Maximum Authorized Speed Passenger	90 mph passenger
Wayside Signals	Centralized Traffic Control (CTC) and Automatic Train Stop (ATS)
Method of Operation	Centralized Traffic Control (CTC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Cleared for trailers (TOFC), double-stacks (COFC), hi-trilevel, and automax equipment
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	• 141.0 GTM — BNSF • 17.1 GTM — UP
Average Number of Trains per Day	70-75
Commodities Transported	Intermodal, automobiles, coal, farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	Fort Madison, Iowa: Track 124 (yard track) and Track 302 (industry track)

SUBDIVISION: BARSTOW SUBDIVISION (ROCK ISLAND SPUR)	
Division	Chicago
Owner	BNSF
Operator	BNSF
Line Heritage	Davenport, Rock Island & Northwestern Railway (DRI&NW)
Subdivision Route / Mileage	Barstow Subdivision — Rock Island Spur in Iowa only, as identified under Industrial Leads below
FRA Track Class	Class 1
Track Configuration	One main track
Maximum Authorized Speed Freight	10 mph freight

Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	GCOR Rule 6.28
Maximum Allowable Gross Weight	263,000 lbs.
Clearances	18' 6" Above Top of Rail; can accommodate TOFC equipment and COFC equipment only one container high
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	Unknown
Average Number of Trains per Day	1-2
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	Rock Island Spur Segment in Iowa Only: Iowa / Illinois state line at Rock Island, Illinois-East Wye Switch (Davenport), Iowa; approximately 0.7 miles (former Davenport, Rock Island & Northwestern Railway)
FRA Excepted Track	None

The Iowa subdivisions shown in Table A.4 below are components of the BNSF Twin Cities Division.

Table A.4: Descriptions of BNSF Subdivisions in Iowa — Twin Cities Division

SUBDIVISION: MARSHALL SUBDIVISION	
Division	Twin Cities
Owner	BNSF
Operator	BNSF
Line Heritage	Great Northern Railway (GN)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Iowa / Minnesota state line near Lester, Iowa-Sioux City, Iowa; 75.7 miles
FRA Track Class	Class 4
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	49 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	Track Warrant Control (TWC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Cleared for trailer (TOFC) and double-stack (COFC) equipment
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	38.0 GTM
Average Number of Trains per Day	10-14
Commodities Transported	Coal, farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION:	ABERDEEN SUBDIVISION
Division	Twin Cities
Owner	BNSF
Operator	BNSF
Line Heritage	Chicago, Milwaukee, St. Paul and Pacific (CMStP&P)

Subdivision Route / Mileage	Portion of Subdivision in Iowa: Sioux City, Iowa-Iowa / South Dakota state line near North Sioux City, South Dakota; 7.1 miles
FRA Track Class	Class 2 / Class 3
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	40 mph freight on Aberdeen Subdivision; but Restricted Speed (RS) over segment in Iowa
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	Restricted Limits (RL)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Unknown
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	• 2.0 GTM — BNSF • 2.12 GTM — DAIR
Average Number of Trains per Day	2-4 BNSF
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

The Iowa subdivision shown in Table A.5 below is a component of the BNSF Springfield Division.

Table A.5: Description of BNSF Subdivisions in Iowa — Springfield Division

SUBDIVISION: HANNIBAL SUBDIVISION	
Division	Springfield
Owner	BNSF
Operator	BNSF
Line Heritage	Chicago, Burlington & Quincy Railroad (CB&Q)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Burlington, Iowa-Iowa / Missouri state line near Keokuk, Iowa; 44.4 miles
FRA Track Class	Class 3
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	40 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	Track Warrant Control (TWC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Clearance Above Top of Rail unknown; not cleared for double-stacks, hi-trilevel, and automax equipment
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	33.0 GTM
Average Number of Trains per Day	12-16
Commodities Transported	Farm products, food and kindred products, chemical and allied products, coal, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

A.2.2 Canadian National Railway (CN)

Canadian National Railway (CN) operates in Iowa via two subsidiaries — the Chicago Central & Pacific Railway (CCP) and the Cedar River Railroad (CEDR). The combined CCP / CEDR network connects Iowa with the rest of the CN network at Munger (Wayne) and Chicago, Illinois.

A summary of statistical information for CN within Iowa is as follows:

- Line owned: 605 miles
- Line operated under lease: 0 miles
- Line operated under contract: 0 miles
- Line operated under trackage rights: 3 miles
- Line operated under haulage rights: 0 miles
- Total mileage operated: 608 miles
- Line owned, not operated, by respondent: 0 miles

CN Interchanges

Interchanges are locations where railroads intersect and exchange railcars. CN has the ability to interchange freight rail traffic with three Class I carriers (BNSF, CP, UP), one Class II carrier (IAIS), and four Class III carriers (CIC, DAIR, IANR, IARR) in Iowa. Designated interchange point locations and connecting carriers in Iowa are listed below:

- Ackley — Iowa River Railroad (IARR)
- Cedar Rapids — Cedar Rapids & Iowa City Railway (CIC), Iowa Northern Railway (IANR)
- Charles City — Canadian Pacific (CP)
- Council Bluffs — BNSF Railway (BNSF), IAIS, UP
- Dubuque — CP
- Iowa Falls — UP
- Sioux City —BNSF, D&I Railroad (DAIR), UP
- Waterloo — IANR, UP

CN Trackage Rights and Joint Trackage

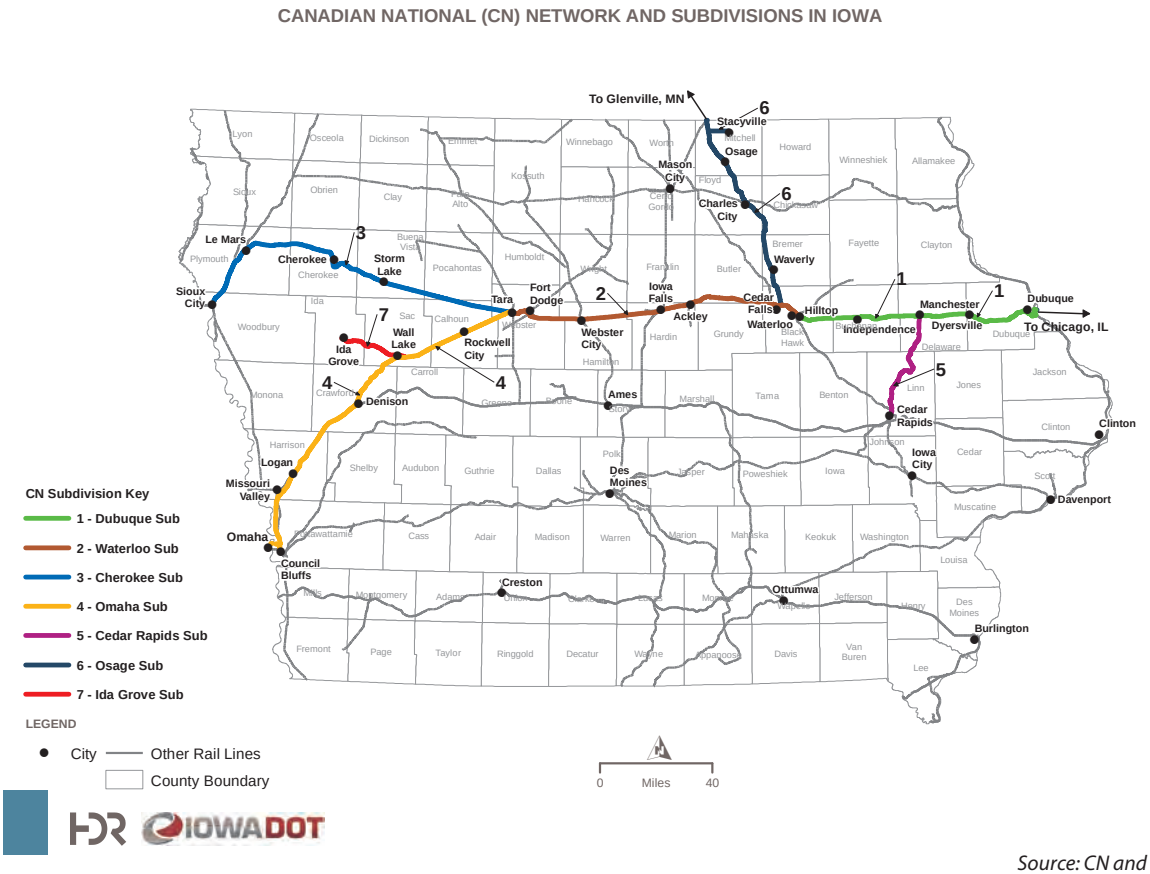
CN has trackage rights over the following line segments and connecting railroads:

- Union Pacific Railroad (UP) Omaha Subdivision between Council Bluffs, Iowa, and the Iowa / Nebraska state line at Council Bluffs, Iowa; approximately 2.9 miles.

CN Divisions and Subdivisions in Iowa

CN's Iowa network is comprised of part of one operating division: the North Division-Iowa Zone. CN's seven operating subdivisions in Iowa are shown in Figure A.2 below. Each subdivision is described in the tables below.

Figure A.2: CN Network and Subdivisions in Iowa



Source: CN and HDR

The Iowa subdivisions shown in Table A.6 below are components of the CN North Division-Iowa Zone.

Table A.6: Descriptions of CN Subdivisions in Iowa

SUBDIVISION: DUBUQUE SUBDIVISION	
Division	North Division — Iowa Zone
Owner	CN (CCP)
Operator	CN
Line Heritage	Illinois Central Railroad (IC)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Iowa / Illinois state line (Dubuque, Iowa)-Hilltop, Iowa; 90.0 miles
FRA Track Class	Class 4
Track Configurations	One main track with passing sidings
Maximum Authorized Speed Freight	50 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	Centralized Traffic Control (CTC)
Method of Operation	Centralized Traffic Control (CTC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Height above top of rail unknown; subdivision can accommodate Trailer on Flat Car (TOFC) equipment

Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	12.30 GTM
Average Number of Trains per Day	4-6
Commodities Transported	Farm products, chemical and allied products, food and kindred products, ethanol, coal, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: WATERLOO SUBDIVISION	
Division	North Division — Iowa Zone
Owner	CN (CCP)
Operator	CN
Line Heritage	Illinois Central Railroad (IC)
Subdivision Route / Mileage	Hilltop, Iowa-Tara, Iowa; 109.2 miles
FRA Track Class	Class 4
Track Configuration	One main track with passing sidings and sections of two main tracks
Maximum Authorized Speed Freight	50 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	• Centralized Traffic Control (CTC) Hilltop, Iowa-Waterloo, Iowa • Automatic Block Signals (ABS) at Waterloo, Iowa • Centralized Traffic Control (CTC) Waterloo, Iowa-Tara, Iowa
Method of Operation	• Centralized Traffic Control (CTC) Hilltop, Iowa-Waterloo, Iowa • Yard Limits (YL) at Waterloo, Iowa • Centralized Traffic Control (CTC) Waterloo, Iowa-Tara, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Height above top of rail unknown; subdivision can accommodate Trailer on Flat Car (TOFC) equipment
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	8.11 GTM
Average Number of Trains per Day	3-4
Commodities Transported	Farm products, chemical and allied products, food and kindred products, ethanol, coal, and general merchandise freight traffic
Industrial Leads	North Waterloo Industrial Lead: West Waterloo, Iowa-Waterloo, Iowa; approximately 2.7 miles (former Waterloo, Cedar Falls and Northern Railway); 286,000 lbs. maximum allowable gross weight
FRA Excepted Track	None

SUBDIVISION: CHEROKEE SUBDIVISION	
Division	North Division — Iowa Zone
Owner	CN (CCP)
Operator	CN
Line Heritage	Illinois Central Railroad (IC)
Subdivision Route / Mileage	Tara, Iowa-Sioux City, Iowa; 127.6 miles
FRA Track Class	• Class 3 (Tara-Le Mars) • Class 4 (Le Mars-Sioux City)
Track Configuration	One main track with passing sidings

Maximum Authorized Speed Freight	• 40 mph freight (Tara-LeMars) • 49 mph freight (Le Mars-Sioux City)
Maximum Authorized Speed Passenger	N/A
Wayside Signals	Automatic Block Signals (ABS) Le Mars, Iowa-Sioux City, Iowa
Method of Operation	• Yard Limits (YL) at Tara, Iowa • Track Authority (TA) Tara, Iowa-Le Mars, Iowa • Track Warrant Control (TWC) Le Mars, Iowa-Sioux City, Iowa • Rule 520 (Non-Main Track) at Sioux City, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Height above top of rail unknown; subdivision can accommodate Trailer on Flat Car (TOFC) equipment
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	• 4.83 GTM — CN (Tara — Le Mars) • 4.85 GTM — CN (Le Mars — Sioux City) • 12.90 GTM — UP (Le Mars — Sioux City)
Average Number of Trains per Day	2-4
Commodities Transported	Farm products, chemical and allied products, food and kindred products, ethanol, coal, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: OMAHA SUBDIVISION	
Division	North Division — Iowa Zone
Owner	CN (CCP)
Operator	CN
Line Heritage	Illinois Central Railroad (IC)
Subdivision Route / Mileage	Tara, Iowa-Council Bluffs, Iowa; 130.2 miles
FRA Track Class	Class 3
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	40 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	• Centralized Traffic Control (CTC) at Tara, Iowa • Centralized Traffic Control (CTC) at Ida, Iowa
Method of Operation	• Track Authority (TA) Tara, Iowa-Council Bluffs, Iowa • Rule 520 (Non-Main Track) at Council Bluffs, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Height above top of rail unknown; subdivision can accommodate Trailer on Flat Car (TOFC) equipment
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	1.80 GTM
Average Number of Trains per Day	2-3
Commodities Transported	Farm products, chemical and allied products, food and kindred products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: CEDAR RAPIDS SUBDIVISION	
Division	North Division — Iowa Zone
Owner	CN (CCP)

Operator	CN
Line Heritage	Illinois Central Railroad (IC)
Subdivision Route / Mileage	Manchester, Iowa-Cedar Rapids, Iowa; 41.6 miles
FRA Track Class	Class 3 / Class 2 (varies by segment)
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	40 mph freight / 25 mph freight (varies by segment)
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	• Rule 520 (Non-Main Track) at Manchester, Iowa • Track Authority (TA) Manchester, Iowa-Cedar Rapids, Iowa • Rule 520 (Non-Main Track) at Cedar Rapids, Iowa
Maximum Allowable Gross Weight	286,000 lbs. (Manchester-Cedar Rapids)
Clearances	Height above top of rail unknown; subdivision can accommodate Trailer on Flat Car (TOFC) equipment
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	2.02 GTM
Average Number of Trains per Day	1-2
Commodities Transported	Farm products, chemical and allied products, food and kindred products, ethanol, and general merchandise freight traffic
Industrial Leads	Louisa Spur: Cedar Rapids, Iowa-Louisa, Iowa; approximately 2.0 miles (former Chicago, Milwaukee, St. Paul & Pacific Railroad); 268,000 lbs. maximum allowable gross weight
FRA Excepted Track	None

SUBDIVISION: OSAGE SUBDIVISION	
Division	North Division — Iowa Zone
Owner	CN (CEDR)
Operator	CN
Line Heritage	Illinois Central Railroad (IC)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Mona Junction, Iowa-Iowa / Minnesota state line at Lyle, Minnesota; 75.6 miles
FRA Track Class	Class 3
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	40 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	Track Authority (TA)
Maximum Allowable Gross Weight	268,000 lbs.
Clearances	Unknown
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	0.98 GTM
Average Number of Trains per Day	0-1
Commodities Transported	Farm products, chemical and allied products, food and kindred products, ethanol, and general merchandise freight traffic

Industrial Leads	• Waverly Spur: Readlyn Junction, Iowa-Waverly, Iowa; approximately 1.3 miles (former Chicago Great Western Railway); 268,000 lbs. maximum allowable gross weight • Stacyville Spur: Stacyville Junction, Iowa-Stacyville, Iowa; 7.8 miles (former Illinois Central Railroad); 263,000 lbs. maximum allowable gross weight
FRA Excepted Track	None

SUBDIVISION: IDA GROVE SUBDIVISION	
Division	North Division — Iowa Zone
Owner	CN (CCP)
Operator	CN
Line Heritage	Chicago & North Western Railway (C&NW)
Subdivision Route / Mileage	Ida, Iowa-Ida Grove, Iowa; 24.5 miles
FRA Track Class	Class 2
Track Coinfiguration	One main track with passing sidings
Maximum Authorized Speed Freight	25 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	Centralized Traffic Control (CTC) at Ida, Iowa
Method of Operation	Track Authority (TA)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Unknown
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	1.59 GTM
Average Number of Trains per Day	0-1
Commodities Transported	Farm products, ethanol, chemical and allied products, and food and kindred products
Industrial Leads	None
FRA Excepted Track	None

A.2.3 Canadian Pacific Railway (CP)

Canadian Pacific Railway (CP) has one operating subsidiary in Iowa — the Dakota, Minnesota & Eastern Railroad (DM&E). The DM&E connects Iowa with the rest of the CP network at Chicago, Illinois, and La Crescent, Minnesota (near La Crosse, Wisconsin).

A summary of statistical information for CP within Iowa is as follows:

- Line owned: 654 miles
- Line operated under lease: 0 miles
- Line operated under contract: 0 miles
- Line operated under trackage rights: 12 miles
- Line operated under haulage rights: 0 miles
- Total mileage operated: 666 miles
- Line owned, not operated, by respondent: 0 miles

CP Interchanges

Interchanges are locations where railroads intersect and exchange railcars. CP has the ability to interchange freight rail traffic with three Class I carriers (BNSF, CN, UP), one Class II carrier (IAIS), and three Class III carriers (APNC, IANR, IATR) in Iowa. Designated interchange point locations and connecting carriers in Iowa are listed below:

- Charles City — Canadian National Railway (CN)
- Clinton — BNSF Railway (BNSF), Union Pacific Railroad (UP)
- Davenport — BNSF, Iowa Interstate Railroad (IAIS)
- Dubuque — CN
- Emmetsburg — UP
- Mason City — Iowa Traction Railway (IATR), UP
- Moravia — Appanoose County Community Railroad (APNC)
- Nora Springs — Iowa Northern Railway (IANR)
- Ottumwa — BNSF
- Plymouth — IANR
- Sheldon — UP

CP Trackage Rights and Joint Trackage

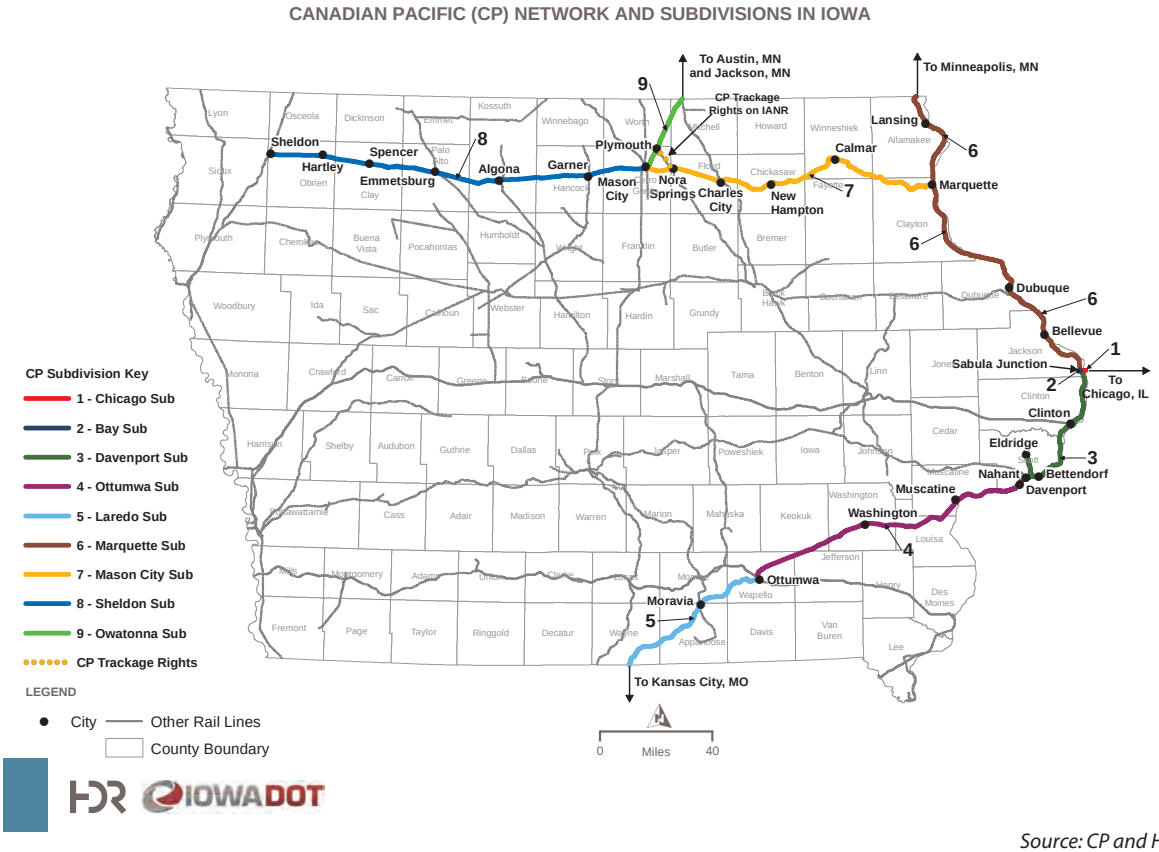
CP has trackage rights over the following line segments and connecting railroads:

- Canadian National Railway (CN) Dubuque Subdivision between Wood, Iowa, and Dubuque Junction, Iowa (at Dubuque, Iowa); approximately 1.9 miles.
- Iowa Northern Railway (IANR) Manly Subdivision between Nora Springs, Iowa, and Plymouth, Iowa; approximately 8.7 miles.
- BNSF Railway Barstow Subdivision (Rock Island Spur) between East Wye Switch (Davenport), Iowa, and the Iowa / Illinois state line at Rock Island, Illinois; approximately 0.7 miles.

CP Divisions and Subdivisions in Iowa

CP's Iowa network is comprised of part of one operating division: the U.S. Southern Region. CP's nine operating subdivisions in Iowa are shown in Figure A.3 below. Each subdivision is described in the tables below.

Figure A.3: CP Network and Subdivisions in Iowa



Source: CP and HDR

The Iowa subdivisions shown in Table A.7 below are components of the CP U.S. Southern Region:

Table A.7: Descriptions of CP Subdivisions in Iowa

SUBDIVISION: CHICAGO SUBDIVISION	
Division	U.S. Southern Region
Owner	CP (DME)
Operator	CP
Line Heritage	Chicago, Milwaukee, St. Paul and Pacific Railroad (CMStP&P)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Iowa / Illinois state line at Sabula, Iowa-Sabula Junction, Iowa; approximately 1.0 mile
FRA Track Class	Class 3
Track Configuration	One main track
Maximum Authorized Speed Freight	25 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	Centralized Traffic Control (CTC) Illinois / Iowa state line at Sabula, Iowa-Sabula Junction, Iowa
Method of Operation	Centralized Traffic Control (CTC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Accommodates multi-level intermodal and automotive rail equipment that does not exceed 19' 1" Above Top of Rail
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	10.88 GTM
Average Number of Trains per Day	6-8
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, intermodal, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: BAY SUBDIVISION	
Division	U.S. Southern Region
Owner	CP (DME)
Operator	CP
Line Heritage	Chicago, Milwaukee, St. Paul and Pacific Railroad (CMStP&P)
Subdivision Route / Mileage	Island, Iowa-Lake, Iowa (at Sabula Junction, Iowa); 0.3 mile
FRA Track Class	Unknown
Track Configuration	One main track
Maximum Authorized Speed Freight	10 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	Centralized Traffic Control (CTC)
Method of Operation	Centralized Traffic Control (CTC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Accommodates multi-level intermodal and automotive rail equipment that does not exceed 19' 1" Above Top of Rail
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	Unknown
Average Number of Trains per Day	Unknown

Commodities Transported	Intermodal, automobiles, coal, farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: DAVENPORT SUBDIVISION	
Division	U.S. Southern Region
Owner	CP (DME)
Operator	CP
Line Heritage	• Chicago, Milwaukee, St. Paul and Pacific Railroad (CMStP&P) Sabula Junction, Iowa-Clinton, Iowa • Davenport, Rock Island & Northwestern Railway (DRI&NW) Clinton, Iowa-West Davenport, Iowa • Chicago, Milwaukee, St. Paul and Pacific Railroad (CMStP&P) West Davenport, Iowa-Nahant, Iowa
Subdivision Route / Mileage	Sabula Junction, Iowa-Nahant, Iowa; 54.2 miles
FRA Track Class	Class 3
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	40 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	• Centralized Traffic Control (CTC) Sabula Junction, Iowa-Deer Creek, Iowa • Automatic Block Signals (ABS) North Wye Switch (Davenport), Iowa-Nahant, Iowa
Method of Operation	• Centralized Traffic Control (CTC) Sabula Junction, Iowa-Deer Creek, Iowa • Track Warrant Control (TWC) Deer Creek, Iowa-North Wye Switch (Davenport), Iowa • Yard Limits (YL) North Wye Switch (Davenport), Iowa-Nahant, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Accommodates multi-level intermodal and automotive rail equipment that does not exceed 19' 1" Above Top of Rail
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	• 22.14 GTM (Sabula Junction-Clinton) • 15.50 GTM (Clinton-Nahant)
Average Number of Trains per Day	6-8
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, intermodal, coal, and general merchandise freight traffic
Industrial Leads	• Eldridge Spur: Waterworks (Davenport), Iowa-Eldridge, Iowa; 9.7 miles (former Chicago, Milwaukee, St. Paul and Pacific Railroad); 263,000-lbs. maximum allowable gross weight; line density 0.07 GTM • Nahant Industry Track: West Davenport, Iowa-Nahant, Iowa; maximum allowable gross weight unknown
FRA Excepted Track	Eldridge Spur: At Eldridge, Iowa; approximately 2.7 miles

SUBDIVISION: OTTUMWA SUBDIVISION	
Division	U.S. Southern Region
Owner	CP (DME)
Operator	CP

Line Heritage	• Joint Chicago, Milwaukee, St. Paul and Pacific Railroad (CMStP&P) and Chicago, Rock Island & Pacific Railroad (CRI&P) Nahant, Iowa-Culver, Iowa • Chicago, Rock Island & Pacific Railroad (CRI&P) Culver, Iowa-Washington, Iowa • Chicago, Milwaukee, St. Paul and Pacific Railroad (CMStP&P) Washington, Iowa-Ottumwa, Iowa
Subdivision Route / Mileage	Nahant, Iowa-Ottumwa, Iowa; 107.1 miles
FRA Track Class	Class 3/4
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	• 49 mph freight (Nahant-Muscatine) • 40 mph freight (Muscatine-Ottumwa)
Maximum Authorized Speed Passenger	N/A
Wayside Signals	• Centralized Traffic Control (CTC) Montpelier, Iowa-Heinz, Iowa; Fruitland, Iowa-Cotter, Iowa; Rutledge, Iowa-Ottumwa, Iowa • Automatic Block System (ABS) Nahant, Iowa-Montpelier, Iowa; Heinz, Iowa-Fruitland, Iowa
Method of Operation	• Yard Limits (YL) at Nahant, Iowa • Centralized Traffic Control (CTC) Montpelier, Iowa-Heinz, Iowa; Fruitland, Iowa-Cotter, Iowa; Rutledge, Iowa-Ottumwa, Iowa • Track Warrant Control (TWC) Nahant, Iowa-Montpelier, Iowa; Heinz, Iowa-Fruitland, Iowa; Cotter, Iowa-Rutledge, Iowa • Yard Limits (YL) at Ottumwa, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Accommodates multi-level intermodal and automotive rail equipment that does not exceed 19' 1" Above Top of Rail
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	12.10-14.30 GTM (varies by segment)
Average Number of Trains per Day	6-8
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, intermodal, coal, and general merchandise freight traffic
Industrial Leads	IPSCO Spur: Montpelier, Iowa; length of spur unknown; maximum allowable gross weight unknown
FRA Excepted Track	None

SUBDIVISION: LAREDO SUBDIVISION	
Division	U.S. Southern Region
Owner	CP (DME)
Operator	CP
Line Heritage	Chicago, Milwaukee, St. Paul and Pacific Railroad (CMStP&P)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Ottumwa, Iowa-Iowa / Missouri state line near Sewal, Iowa; 61.2 miles
FRA Track Class	Class 3
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	40 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	• Yard Limits (YL) at Ottumwa, Iowa • Track Warrant Control (TWC) Ottumwa, Iowa-Iowa / Minnesota state line near Sewal, Iowa

Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Accommodates multi-level intermodal and automotive rail equipment that does not exceed 19' 1" Above Top of Rail
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	9.80 GTM
Average Number of Trains per Day	6-8
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, intermodal, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: MARQUETTE SUBDIVISION	
Division	U.S. Southern Region
Owner	CP (DME)
Operator	CP
Line Heritage	Chicago, Milwaukee, St. Paul and Pacific Railroad (CMStP&P)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Sabula Junction, Iowa-Iowa / Minnesota state line at New Albin, Iowa; 136.5 miles
FRA Track Class	Class 3
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	40 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	Centralized Traffic Control (CTC) Sabula Junction, Iowa-Lake, Iowa
Method of Operation	• Centralized Traffic Control (CTC) Sabula Junction, Iowa-Lake, Iowa • Track Warrant Control (TWC) Lake, Iowa-Wood (Dubuque), Iowa; Dubuque Junction, Iowa-Iowa / Minnesota state line at New Albin, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Accommodates multi-level intermodal and automotive rail equipment that does not exceed 19' 1" Above Top of Rail
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	• 19.10 GTM (Sabula Junction-Marquette) • 9.10 GTM (Marquette-Iowa / Minnesota state line at New Albin, Iowa)
Average Number of Trains per Day	6-8
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, intermodal, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: MASON CITY SUBDIVISION	
Division	U.S. Southern Region
Owner	CP (DME)
Operator	CP
Line Heritage	Chicago, Milwaukee, St. Paul and Pacific Railroad (CMStP&P)
Subdivision Route / Mileage	Marquette, Iowa-Mason City, Iowa; 116.7 miles
FRA Track Class	Class 3
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	40 mph freight

Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	• Yard Limits (YL) at Marquette, Iowa • Track Warrant Control (TWC) Marquette, Iowa-Mason City, Iowa • Yard Limits (YL) at Mason City, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Accommodates trailer (TOFC) equipment not exceeding 17' 6" Above Top of Rail
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	11.34 GTM
Average Number of Trains per Day	2-4
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: SHELDON SUBDIVISION	
Division	U.S. Southern Region
Owner	CP (DME)
Operator	CP
Line Heritage	Chicago, Milwaukee, St. Paul and Pacific Railroad (CMStP&P)
Subdivision Route / Mileage	Mason City, Iowa-Sheldon, Iowa; 136.7 miles
FRA Track Class	Class 2
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	25 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	• Yard Limits (YL) at Mason City, Iowa • Track Warrant Control (TWC) Mason City, Iowa-Sheldon, Iowa • Yard Limits (YL) at Sheldon, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Accommodates trailer (TOFC) equipment not exceeding 17' 6" Above Top of Rail
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	• 1.91 GTM — CP (Mason City-Sheldon) • 0.27 GTM — UP (Emmetsburg-Hartley)
Average Number of Trains per Day	1-2
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: OWATONNA SUBDIVISION	
Division	U.S. Southern Region
Owner	CP (DME)
Operator	CP
Line Heritage	Chicago, Milwaukee, St. Paul and Pacific Railroad (CMStP&P)

Subdivision Route / Mileage	Portion of Subdivision in Iowa: Mason City, Iowa-Iowa / Minnesota state line at Lyle, Minnesota; 28.2 miles
FRA Track Class	Class 3
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	40 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	• Yard Limits (YL) at Mason City, Iowa • Track Warrant Control (TWC) Mason City, Iowa-Iowa / Minnesota state line at Lyle, Minnesota
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Accommodates trailer (TOFC) equipment not exceeding 17' 6" Above Top of Rail
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	7.82 GTM
Average Number of Trains per Day	1-2
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

A.2.4 Kansas City Southern Railway (KCS)

Kansas City Southern Railway (KCS) does not own any track or possess any trackage rights in Iowa. KCS accesses the state via haulage rights between its principal terminal at Kansas City, Missouri, and Council Bluffs, Iowa, acquired over Union Pacific Railroad (UP) in 1988 and over BNSF Railway (BNSF) by 2003. KCS haulage rights in Iowa totals approximately 55 miles.

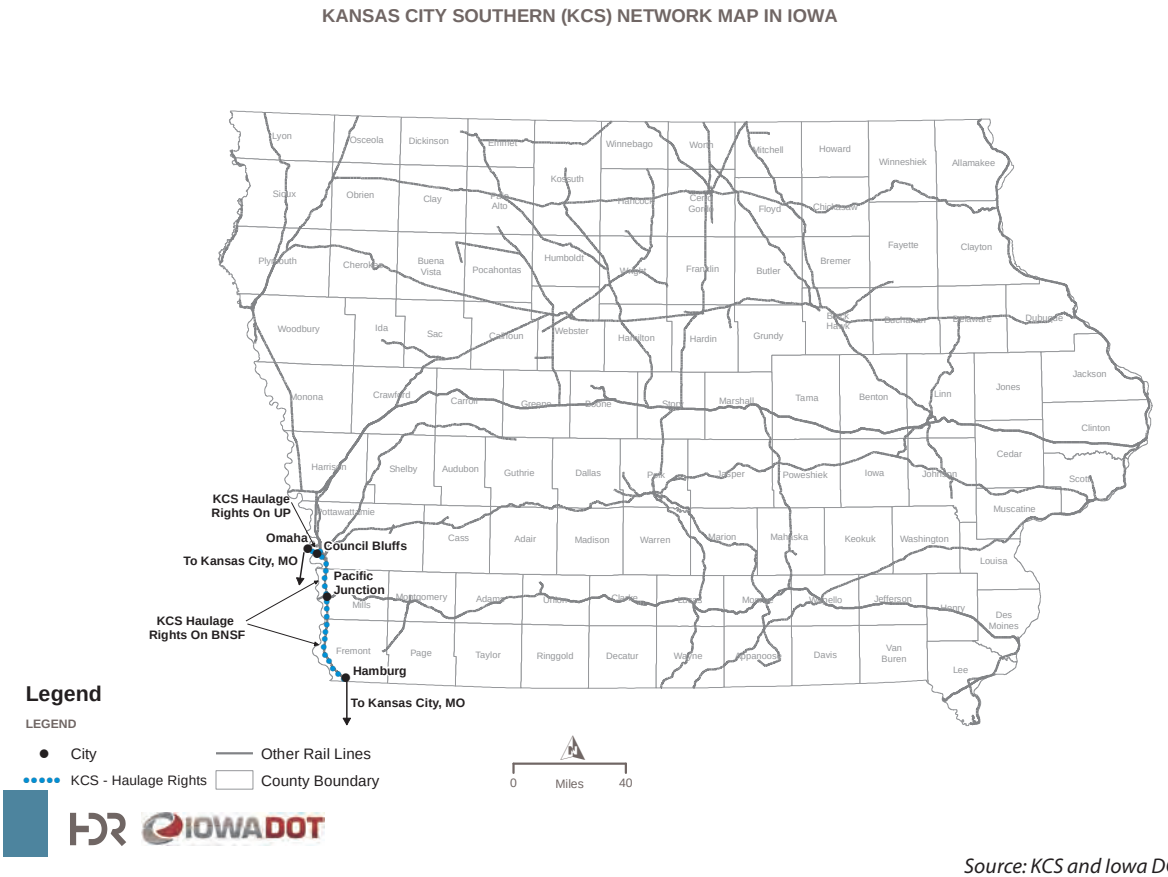
KCS has haulage rights over the following railroad segments in Iowa:

- Union Pacific Railroad (UP) Omaha Subdivision between the Iowa/Nebraska state line at Council Bluffs, Iowa, and Council Bluffs, Iowa; approximately 4.0 miles.
- BNSF Railway (BNSF) Council Bluffs Subdivision between BN Junction (Council Bluffs), Iowa, and Pacific Junction, Iowa; approximately 18.4 miles.
- BNSF Railway (BNSF) Napier Subdivision between Pacific Junction, Iowa, and the Iowa/Missouri state line near Hamburg, Iowa; approximately 33.0 miles.

KCS haulage traffic consists principally of grains and other agricultural products that originate in Council Bluffs and other locations in western Iowa. Interchanges are locations where railroads intersect and exchange railcars. KCS' sole interchange in Iowa is at Council Bluffs — with BNSF, Iowa Interstate Railroad (IAIS), and UP.

KCS does not have any operating divisions or subdivisions in Iowa. Figure A.4 below shows the routes in Iowa over which KCS has haulage rights.

Figure A.4: KCS Network in Iowa



Source: KCS and Iowa DOT

A.2.5 Norfolk Southern Railway (NS)

A summary of statistical information for Norfolk Southern Railway (NS) within Iowa is as follows:

- Line owned: 44 miles
- Line operated under lease: 0 miles
- Line operated under contract: 4 miles
- Line operated under trackage rights: 0 miles
- Line operated under haulage rights: 386 miles
- Total mileage operated: 395 miles (includes 9 miles operated by NS and 386 miles of NS haulage rights)
- Line owned, not operated, by respondent: 39 miles

NS Interchanges

Interchanges are locations where railroads intersect and exchange railcars. NS has the ability to interchange freight rail traffic with two Class I carriers (BNSF, UP), one Class II carrier (IAIS), and one Class III carrier (APNC) in Iowa. Designated interchange point locations and connecting carriers in Iowa are listed below:

- Albia — BNSF Railway (BNSF), Appanoose County Community Railroad (APNC)
- Des Moines — BNSF, Iowa Interstate Railroad (IAIS), Union Pacific Railroad (UP)

NS Trackage Rights, Haulage Rights, and Joint Trackage

NS operates on approximately 9 miles of trackage at its terminal in Des Moines, Iowa — including 5 miles NS owns and a 4-mile BNSF segment that NS operates under contract. NS maintains approximately 386 miles of haulage rights over two connecting railroads (BNSF and IAIS) from Des Moines, Iowa, to access the rest of the NS network at St Louis, Missouri, and Peoria, Illinois. NS owns an additional 39 route miles in Iowa, and leases

these segments to other railroads, as identified in Table A.8 below. NS does not presently have any active trackage rights operations in Iowa.

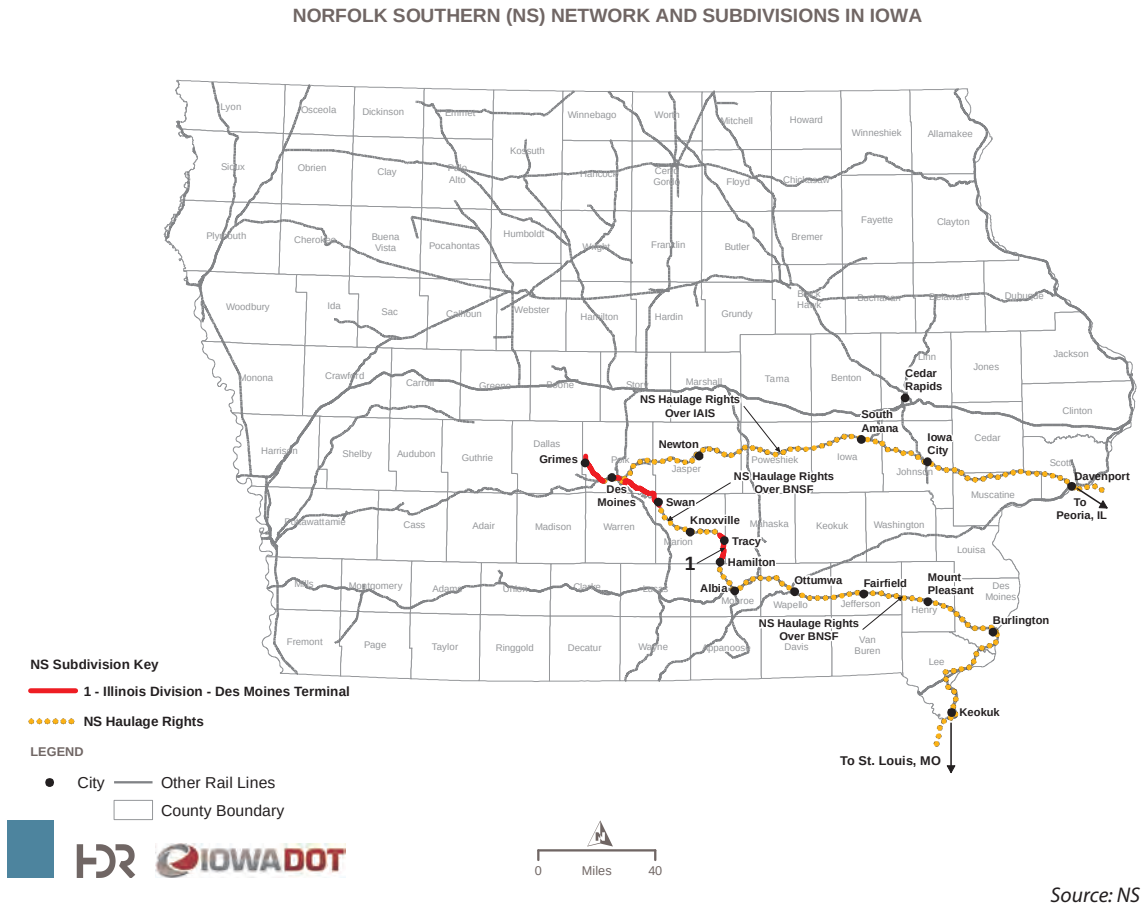
NS haulage rights in Iowa are maintained over the following line segments and connecting railroads:

- BNSF Railway (BNSF) Des Moines Subdivision between Des Moines, Iowa, and Albia, Iowa; approximately 67.8 miles.
- BNSF Railway (BNSF) Ottumwa Subdivision between Albia, Iowa, and Burlington, Iowa; approximately 98.6 miles.
- BNSF Railway (BNSF) Hannibal Subdivision between Ottumwa, Iowa, and the Iowa/Missouri state line near Keokuk, Iowa; approximately 44.4 miles.
- Iowa Interstate Railroad (IAIS) Newton Subdivision between Des Moines, Iowa, and South Amana, Iowa; approximately 97 miles (this segment includes NS haulage rights over a 3-mile-long segment in Des Moines, Iowa, on which IAIS has trackage rights over the UP Perry Subdivision).
- Iowa Interstate Railroad (IAIS) Iowa City Subdivision between South Amana, Iowa, and the Iowa/Illinois state line at Davenport, Iowa; approximately 78 miles.

NS Divisions and Subdivisions in Iowa

NS' Iowa network is comprised of one operating division: the Illinois Division — Des Moines Terminal. NS' Iowa network, including its haulage rights, is shown in Figure A.5 below.

Figure A.5: NS Network and Subdivisions in Iowa



Source: NS and HDR

The Iowa subdivision shown in Table A.8 below is a component of the NS Illinois Division.

Table A.8: Description of NS Subdivision in Iowa

SUBDIVISION: DES MOINES TERMINAL	
Division	Illinois
Owner	NS
Operator	See Subdivision Route / Mileage below for operator by line segment
Line Heritage	• Wabash Railroad (WAB) Tracy, Iowa-Hamilton, Iowa • Wabash Railroad (WAB) Swan, Iowa-Des Moines (NW Junction), Iowa • Wabash Railroad (WAB) / Des Moines Union Railway (DMU) at Des Moines, Iowa • Chicago, Milwaukee, St. Paul and Pacific Railroad (CMStP&P) Des Moines, Iowa-Grimes, Iowa
Subdivision Route / Mileage	Total miles of NS-owned trackage in Iowa: Approximately 44.0 miles, as follows: • Tracy, Iowa-Hamilton, Iowa; operated by BNSF as part of the BNSF Des Moines Subdivision (approximately 11.0 miles) • Swan, Iowa-Des Moines, Iowa; operated by BNSF as part of the BNSF Des Moines Subdivision (approximately 16.0 miles) • Des Moines, Iowa; operated by NS as the NS Des Moines Terminal (approximately 5.0 miles) • Des Moines, Iowa-Grimes, Iowa; operated by IAIS as the IAIS Grimes Industrial Spur and related trackage (approximately 12.0 miles)
FRA Track Class	• Class 2 (Tracy-Hamilton) • Class 2 (Swan-Des Moines) • Class 1 (Des Moines-Grimes)
Track Configuration	One main track
Maximum Authorized Speed Freight	• 25 mph freight (Tracy-Hamilton) • 25 mph freight (Swan-Des Moines) • 10 mph freight (Des Moines) • 10 mph freight (Des Moines-Grimes)
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	• Track Warrant Control (TWC) Tracy, Iowa-Hamilton, Iowa; dispatched by BNSF • Track Warrant Control (TWC) Swan, Iowa-Des Moines, Iowa; dispatched by BNSF • Restricted Speed (RS) at Des Moines, Iowa • Yard Limits (YL) at Des Moines, Iowa • GCOR Rule 6.28 Des Moines, Iowa-Grimes, Iowa; dispatched by IAIS
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	• Unknown for NS-operated trackage in Des Moines. • Clearances on routes in Iowa over which NS has haulage rights are established by host railroads, BNSF and IAIS.
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	Less than 2.00 GTM
Average Number of Trains per Day	0-1
Commodities Transported	Farm products, food and kindred products, scrap materials, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	Des Moines Terminal trackage in Des Moines, Iowa

A.2.6 Union Pacific Railroad (UP)

A summary of statistical information for Union Pacific Railroad (UP) within Iowa is as follows:

- Line owned: 1,291 miles
- Line operated under lease: 0 miles
- Line operated under contract: 0 miles
- Line operated under trackage rights: 95 miles
- Line operated under haulage rights: 126 miles
- Total mileage operated: 1,512 miles
- Line owned, not operated, by respondent: 6 miles

UP Interchanges

Interchanges are locations where railroads intersect and exchange railcars. UP has the ability to interchange freight rail traffic with five Class I carriers (BNSF, CN, CP, KCS, NS), one Class II carrier (IAIS), and six Class III carriers (BSV, CIC, DAIR, IANR, IATR, KJRY) in Iowa. Designated interchange point locations and connecting carriers in Iowa are listed below:

- Boone — Boone & Scenic Valley Railroad (BSV)
- Cedar Rapids — Canadian National Railway (CN), Cedar Rapids & Iowa City Railway (CIC), Iowa Northern Railway (IANR)
- Clinton — Canadian Pacific Railway (CP)
- Council Bluffs — BNSF Railway (BNSF), CN, Iowa Interstate Railroad (IAIS), Kansas City Southern Railway (KCS)
- Des Moines — BNSF, IAIS, Norfolk Southern Railway (NS)
- Emmetsburg — CP
- Fort Madison — Keokuk Junction Railway (KJRY)
- Iowa Falls — CN
- Manly — IANR
- Mason City — CP, Iowa Traction Railroad (IATR)
- Sheldon — CP
- Sioux City — BNSF, CN, D&I Railroad (DAIR)
- Waterloo — CN, IANR

UP Trackage Rights and Joint Trackage

UP has trackage rights over the following line segments and connecting railroads:

- BNSF Railway (BNSF) Chillicothe Subdivision between the Iowa / Illinois state line and Fort Madison, Iowa; approximately 2.5 miles.
- BNSF Railway (BNSF) Marceline Subdivision between Fort Madison, Iowa, and the Iowa / Missouri state line; approximately 17.7 miles.
- BNSF Railway (BNSF) Sioux City Subdivision between Floyd, Iowa, and the Iowa / Nebraska state line near Sioux City, Iowa; approximately 1.4 miles.
- Canadian National Railway (CN) Cherokee Subdivision between Le Mars, Iowa, and Sioux City, Iowa; approximately 22.5 miles.
- Canadian Pacific Railway (CP) Sheldon Subdivision between Emmetsburg, Iowa, and Hartley, Iowa; approximately 41.6 miles.
- Iowa Interstate Railroad (IAIS) Council Bluffs Subdivision between Short Line Junction (Des Moines), Iowa, and West Des Moines, Iowa, various segments totaling approximately 9.1 miles. Note that UP owns 6.4 miles of this trackage, leases it to IAIS, and operates over it on trackage rights.

UP has haulage rights over the following line segments and connecting railroads:

- Iowa Northern Railway (IANR) Cedar Rapids Subdivision between Cedar Rapids, Iowa, and Waterloo, Iowa; approximately 50 miles.

- Iowa Northern Railway (IANR) Manly Subdivision between Cedar Falls Junction, Iowa, and Manly, Iowa; approximately 76 miles (this segment includes UP haulage rights over a 9-mile segment between Waterloo and Cedar Falls Junction, Iowa, on which IANR has trackage rights over the CN North Waterloo Industrial Lead and CN Waterloo Subdivision).

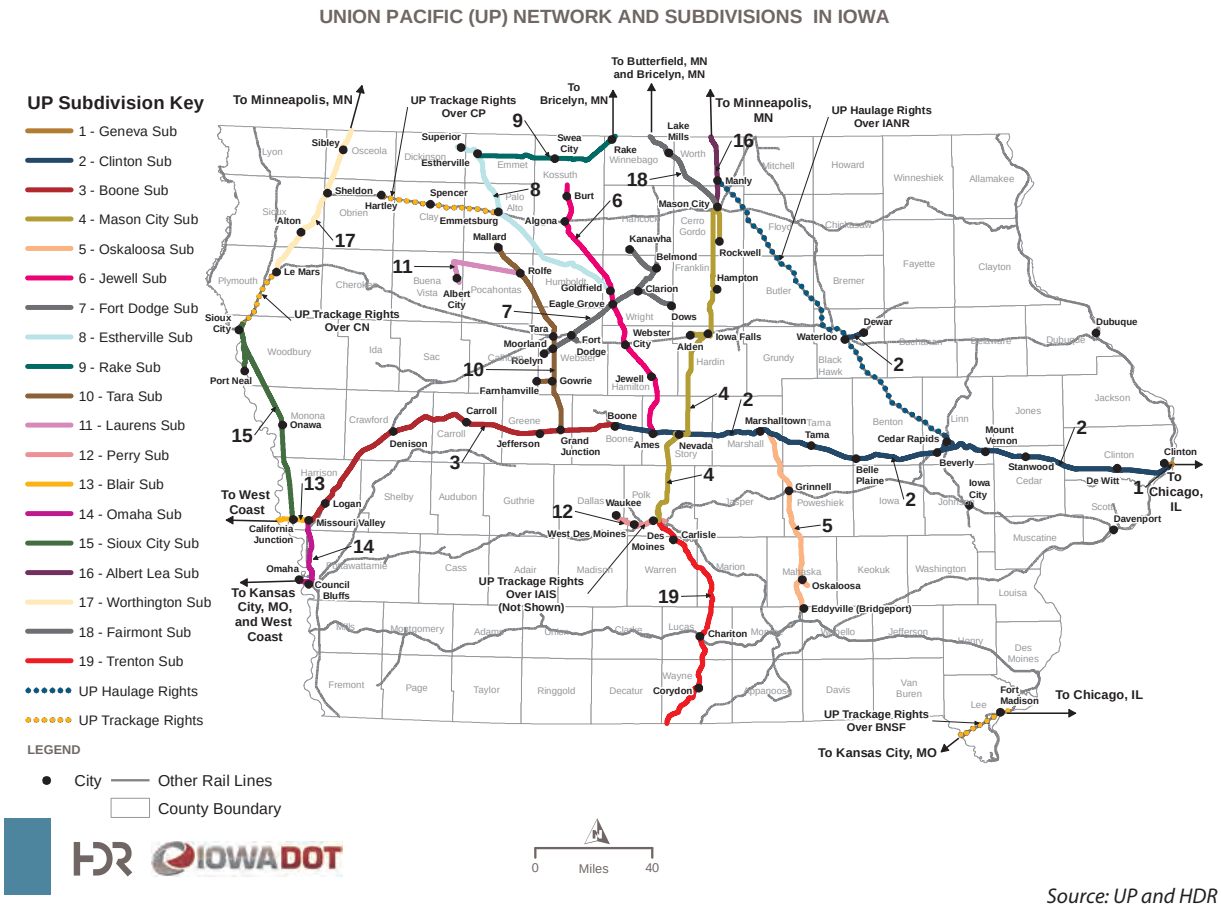
UP Divisions and Subdivisions in Iowa

UP's Iowa network is comprised of all or part of five operating divisions:

- Chicago Area
- Iowa Area
- Council Bluffs Area
- Twin Cities Area
- Kansas City Area

UP's 19 operating subdivisions in Iowa are shown in Figure A.6 below. UP's Iowa subdivisions are presented by division and described in the tables below.

Figure A.6: UP Network and Subdivisions in Iowa



Source: UP and HDR

The Iowa subdivision shown in Table A.9 below is a component of the UP Chicago Area.

Table A.9: Descriptions of UP Subdivisions in Iowa — Chicago Area

SUBDIVISION: GENEVA SUBDIVISION	
Division	Chicago Area
Owner	UP
Operator	UP
Line Heritage	Chicago & North Western Railway (C&NW)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Iowa / Illinois state line at Clinton, Iowa-Clinton, Iowa; 2.1 miles
FRA Track Class	Class 5
Track Configuration	Two main tracks
Maximum Authorized Speed Freight	70 mph freight
Maximum Authorized Speed Passenger	70 mph passenger
Wayside Signals	Centralized Traffic Control (CTC) and Automatic Train Control (ATC) Illinois / Iowa state line at Clinton, Iowa-Clinton, Iowa
Method of Operation	Centralized Traffic Control (CTC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Approximately 20' 2" Above Top of Rail
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	116.7 GTM
Average Number of Trains per Day	65-75
Commodities Transported	Intermodal, automobiles, coal, farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

The Iowa subdivisions shown in Table A.10 below are a component of the UP Iowa Area.

Table A.10: Descriptions of UP Subdivisions in Iowa — Iowa Area

SUBDIVISION: CLINTON SUBDIVISION	
Division	Iowa Area
Owner	UP
Operator	UP
Line Heritage	Chicago & North Western Railway (C&NW)
Subdivision Route / Mileage	Clinton, Iowa-Boone, Iowa; 196.6 miles
FRA Track Class	Class 5
Track Configuration	Two main tracks
Maximum Authorized Speed Freight	70 mph freight
Maximum Authorized Speed Passenger	70 mph passenger
Wayside Signals	Centralized Traffic Control (CTC) and Automatic Train Control (ATC) Clinton, Iowa-Boone, Iowa
Method of Operation	Centralized Traffic Control (CTC)
Maximum Allowable Gross Weight	286,000 lbs. (Clinton-Boone)
Clearances	Approximately 20' 2" Above Top of Rail (nine bridges on the subdivision will not clear 21' 6" Above Top of Rail)

Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	• 124.5 GTM (Clinton-Cedar Rapids) • 123.1 GTM (Cedar Rapids-Marshalltown) • 176.6 GTM (Marshalltown-Nevada) • 162.1 GTM (Nevada-Boone)
Average Number of Trains per Day	65-75
Commodities Transported	Intermodal, automobiles, coal, farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	• Cedar Rapids Industrial Lead: Beverly, Iowa-Otis, Iowa; 8.6 miles (former Chicago & North Western Railway); maximum allowable gross weight unknown; line density under 1.00 GTM • Waterloo Industrial Lead: Waterloo, Iowa-Dewar, Iowa; approximately 6.9 miles (former Chicago Great Western Railway); 268,000 lbs. maximum allowable gross weight (Dewar-Waterloo [UP Linden Yard]) and 286,000 lbs. maximum allowable gross weight (Waterloo [UP Linden Yard]-Waterloo [IANR Cedar Rapids Subdivision connection]); line density 0.06 GTM (UP) • Powerville Industrial Lead: Marshalltown, Iowa; 3.2 miles; maximum gross weight unknown
FRA Excepted Track	None

SUBDIVISION: BOONE SUBDIVISION	
Division	Iowa Area
Owner	UP
Operator	UP
Line Heritage	Chicago & North Western Railway (C&NW)
Subdivision Route / Mileage	Boone, Iowa-East Missouri Valley, Iowa; 121.0 miles
FRA Track Class	Class 5
Track Configuration	Two main tracks
Maximum Authorized Speed Freight	70 mph freight
Maximum Authorized Speed Passenger	70 mph passenger
Wayside Signals	Centralized Traffic Control (CTC) and Automatic Train Control (ATC) Boone, Iowa-East Missouri Valley, Iowa
Method of Operation	Centralized Traffic Control (CTC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Approximately 20' 2" Above Top of Rail (four bridges on the subdivision in Iowa will not clear 21' 6" Above Top of Rail)
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	137.0 GTM
Average Number of Trains per Day	65-75
Commodities Transported	Intermodal, automobiles, coal, farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: MASON CITY SUBDIVISION	
Division	Iowa Area
Owner	UP

Operator	UP
Line Heritage	Chicago, Rock Island & Pacific Railroad (CRI&P)
Subdivision Route / Mileage	Des Moines, Iowa-Mason City, Iowa; 119.5 miles
FRA Track Class	Class 4
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	60 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	• Centralized Traffic Control (CTC) Des Moines, Iowa-Nevada, Iowa • Automatic Block Signals (ABS) Nevada, Iowa-Mason City, Iowa
Method of Operation	• Centralized Traffic Control (CTC) Des Moines, Iowa-Nevada, Iowa • Track Warrant Control (TWC) Nevada, Iowa-Flint, Iowa • Yard Limits (YL) Flint, Iowa-Mason City, Iowa
Maximum Allowable Gross Weight	286,000 lbs. (Des Moines-Mason City)
Clearances	Approximately 20' 2" Above Top of Rail (one bridge on the subdivision in Iowa will not clear 21' 6" Above Top of Rail)
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	137.0 GTM
Average Number of Trains per Day	10-16
Commodities Transported	Intermodal, automobiles, coal, farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	• Hull Avenue Industrial Lead: Des Moines, Iowa; approximately 7.1 miles (former Fort, Dodge, Des Moines & Southern Railway); 286,000 lbs. maximum allowable gross weight • Highland Park Industrial Lead: Highland Junction, Iowa; approximately 1.8 miles (former Des Moines & Central Iowa Railroad); 268,000 lbs. maximum allowable gross weight • Alden Industrial Lead: Iowa Falls, Iowa-Alden, Iowa; 5.3 miles (former Chicago & North Western Railway); 250,000 lbs. maximum allowable gross weight; line density 0.08 GTM • Flint Industrial Lead: Flint (Mason City), Iowa; approximately 1.7 miles (former Chicago Great Western Railway); 268,000 lbs. maximum allowable gross weight • Rockwell Industrial Lead: Mason City, Iowa-Rockwell, Iowa; 11.4 miles (former Minneapolis & St. Louis Railway); 268,000 lbs. maximum allowable gross weight; line density 0.06 GTM
FRA Excepted Track	• Des Moines, Iowa: Georgia Pacific Lumber Business Track • Des Moines, Iowa: Highland Yard Lead (Track 110) and Track 108 • Alden Industrial Lead: Iowa Falls, Iowa-Alden, Iowa; 5.3 miles • Hampton, Iowa: Business Track 747 • Rockwell Industrial Lead: Between South Swifts (Mason City), Iowa, and Rockwell, Iowa; 8.6 miles

SUBDIVISION: OSKALOOSA SUBDIVISION	
Division	Iowa Area
Owner	UP
Operator	UP
Line Heritage	Minneapolis & St. Louis Railway (M&StL)
Subdivision Route / Mileage	Marshalltown, Iowa-Bridgeport, Iowa; 68.7 miles
FRA Track Class	Class 2
Track Configuration	One main track with passing sidings

Maximum Authorized Speed Freight	25 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	• Yard Limits (YL) at Marshalltown, Iowa • Track Warrant Control (TWC) Marshalltown, Iowa-Oskaloosa, Iowa • Yard Limits (YL) at Oskaloosa, Iowa • Track Warrant Control (TWC) Oskaloosa, Iowa-Bridgeport, Iowa • Yard Limits (YL) at Bridgeport, Iowa
Maximum Allowable Gross Weight	286,000 lbs. (Marshalltown-Bridgeport)
Clearances	Height Above Top of Rail unknown (six bridges on the subdivision in Iowa will not clear 21' 6" Above Top of Rail)
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	0.98 GTM
Average Number of Trains per Day	0-2
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: JEWELL SUBDIVISION	
Division	Iowa Area
Owner	UP
Operator	UP
Line Heritage	Chicago & North Western Railway (C&NW)
Subdivision Route / Mileage	West Ames, Iowa-North Burt, Iowa; 97.2 miles
FRA Track Class	Class 3
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	• 40 mph freight (West Ames-Eagle Grove) • 30 mph freight (Eagle Grove-North Burt)
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	• Track Warrant Control (TWC) West Ames, Iowa-Eagle Grove, Iowa • Yard Limits (YL) at Eagle Grove, Iowa • Track Warrant Control (TWC) Eagle Grove, Iowa-North Burt, Iowa
Maximum Allowable Gross Weight	286,000 lbs. (West Ames-North Burt)
Clearances	Approximate height Above Top of Rail is 20' 9"
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	• 4.60 GTM (West Ames-Eagle Grove) • 1.87 GTM (Eagle Grove-Goldfield) • 0.24 GTM (Goldfield-North Burt)
Average Number of Trains per Day	2-4
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: FORT DODGE SUBDIVISION	
Division	Iowa Area

Owner	UP
Operator	UP
Line Heritage	• Chicago Great Western Railway (CGW) Moorland, Iowa-Belmond, Iowa • Chicago, Rock Island & Pacific Railroad (CRI&P) at Belmond, Iowa
Subdivision Route / Mileage	Moorland, Iowa-Belmond, Iowa; 48.1 miles
FRA Track Class	• Class 4 (Moorland-Eagle Grove) • Class 3 (Eagle Grove-Belmond)
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	• 49 mph freight (Moorland-Eagle Grove) • 40 mph freight (Eagle Grove-Belmond)
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	• Track Warrant Control (TWC) Moorland, Iowa-Eagle Grove, Iowa • Yard Limits (YL) at Eagle Grove, Iowa • Track Warrant Control (TWC) Eagle Grove, Iowa-Belmond, Iowa
Maximum Allowable Gross Weight	• 286,000 lbs. (Moorland-South Fort Dodge) • 268,000 lbs. (South Fort Dodge-Vincent) • 286,000 lbs. (Vincent-Eagle Grove) • 268,000 lbs. (Eagle Grove-Belmond)
Clearances	• Approximate height Above Top of Rail is 20' 9" (Belmond-Eagle Grove) • Height above Top of Rail unknown (Eagle Grove-Moorland)
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	• 2.20 GTM (Moorland-Eagle Grove) • 0.42 GTM (Eagle Grove-Clarion) • 0.22 GTM (Clarion-Belmond)
Average Number of Trains per Day	1-3
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	• Roelyn Industrial Lead: Moorland, Iowa-Roelyn, Iowa; 5.2 miles (former Chicago Great Western Railway); 286,000 lbs. maximum allowable gross weight; line density 0.16 GTM • Fort Dodge Industrial Lead: Fort Dodge, Iowa; 1.5 miles (former Fort Dodge, Des Moines & Southern Railway); 268,000 lbs. maximum allowable gross weight; line density under 1.00 GTM • Dows Industrial Lead: Clarion, Iowa-Dows, Iowa; 14.5 miles (former Chicago, Rock Island & Pacific Railroad); 268,000 lbs. maximum allowable gross weight; line density 0.18 GTM • Kanawha Industrial Lead: Belmond, Iowa-Kanawha, Iowa; 12.2 miles (former Minneapolis & St. Louis Railway); 268,000 lbs. maximum allowable gross weight; line density 0.01 GTM
FRA Excepted Track	None

SUBDIVISION: ESTHERVILLE SUBDIVISION	
Division	Iowa Area
Owner	UP
Operator	UP
Line Heritage	Chicago, Rock Island & Pacific Railroad (CRI&P)
Subdivision Route / Mileage	Goldfield, Iowa-Superior, Iowa; 79.3 miles
FRA Track Class	Class 4
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	49 mph freight

Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	Track Warrant Control (TWC)
Maximum Allowable Gross Weight	• 286,000 lbs. (Goldfield-Emmetsburg) • 268,000 lbs. (Emmetsburg-Superior)
Clearances	Unknown
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	• 1.32 GTM (Goldfield-Emmetsburg) • 0.46 GTM (Emmetsburg-Estherville) • 0.07 GTM (Estherville-Superior)
Average Number of Trains per Day	0-2
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	Hartley Industrial Lead: Emmetsburg, Iowa-Hartley, Iowa; 41.6 miles of UP trackage rights over CP Sheldon Subdivision (former Chicago, Milwaukee, St. Paul & Pacific Railway); 286,000 lbs. maximum allowable gross weight; line density 0.27 GTM (UP)
FRA Excepted Track	None

SUBDIVISION: RAKE SUBDIVISION	
Division	Iowa Area
Owner	UP
Operator	UP
Line Heritage	Chicago, Rock Island & Pacific Railroad (CRI&P)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Estherville, Iowa-Iowa/Minnesota state line near Rake, Iowa; 51.9 miles
FRA Track Class	Class 3
Track Configuration	One main track
Maximum Authorized Speed Freight	40 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	Track Warrant Control (TWC)
Maximum Allowable Gross Weight	• 268,000 lbs. (Estherville-Rake) • 286,000 lbs. (Rake-Iowa/Minnesota state line near Rake, Iowa)
Clearances	Unknown
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	0.39 GTM
Average Number of Trains per Day	0-1
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: TARA SUBDIVISION	
Division	Iowa Area
Owner	UP
Operator	UP
Line Heritage	Minneapolis & St. Louis Railway (M&StL)

Subdivision Route / Mileage	East Grand Junction, Iowa-Mallard, Iowa; 69.9 miles
FRA Track Class	Class 3
Track Configuration	One main track
Maximum Authorized Speed Freight	• 40 mph freight (East Grand Junction-Moorland) • 30 mph freight (Moorland-Mallard)
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	Track Warrant Control (TWC)
Maximum Allowable Gross Weight	• 286,000 lbs. (East Grand Junction-Tara) • 268,000 lbs. (Tara-Mallard)
Clearances	Unknown
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	• 2.70 GTM (East Grand Junction-Moorland) • 1.77 GTM (Moorland-Tara) • 1.30 GTM (Tara-Rolfe) • 0.06 GTM (Rolfe-Mallard)
Average Number of Trains per Day	2-4
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	Farnhamville Industrial Lead: Gowrie, Iowa-Farnhamville, Iowa; 6.3 miles (former Chicago & North Western Railway); 286,000 lbs. maximum allowable gross weight; line density 0.25 GTM
FRA Excepted Track	None

SUBDIVISION: LAURENS SUBDIVISION	
Division	Iowa Area
Owner	UP
Operator	UP
Line Heritage	• Chicago & North Western Railway (C&NW) Rolfe, Iowa-Marathon, Iowa • Chicago, Milwaukee, St. Paul and Pacific Railroad (CMStP&P) Marathon, Iowa-Albert City, Iowa
Subdivision Route / Mileage	Rolfe, Iowa-Albert City, Iowa; 28.5 miles
FRA Track Class	Class 3
Track Configuration	One main track
Maximum Authorized Speed Freight	30 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	Track Warrant Control (TWC)
Maximum Allowable Gross Weight	268,000 lbs.
Clearances	Unknown
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	1.26 GTM
Average Number of Trains per Day	0-2
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: PERRY SUBDIVISION	
Division	Iowa Area
Owner	UP
Operator	UP
Line Heritage	Chicago, Rock Island & Pacific Railroad (CRI&P) East Des Moines, Iowa-Des Moines, Iowa; and Des Moines, Iowa-West Des Moines, Iowa
Subdivision Route / Mileage	East Des Moines, Iowa-Des Moines, Iowa; and Des Moines, Iowa-West Des Moines, Iowa; 8.3 miles
FRA Track Class	Class 1
Track Configuration	One main track
Maximum Authorized Speed Freight	10 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	Restricted Limits (RL) / Yard Limits (YL) East Des Moines, Iowa-West Des Moines, Iowa
Maximum Allowable Gross Weight	286,000 lbs. (East Des Moines-Des Moines-West Des Moines)
Clearances	• Double-stack compliant (approximately 20' 2" Above Top of Rail) — East Des Moines-West Des Moines • Unknown — West Des Moines-Waukee
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	• 2.50 GTM — UP (Des Moines-West Des Moines) • 4.41 GTM — IAIS (Des Moines-West Des Moines) • 0.02 GTM — UP (West Des Moines-Waukee)
Average Number of Trains per Day	0-2 UP
Commodities Transported	Farm products, food and kindred products, chemical and allied products, and general merchandise freight traffic
Industrial Leads	• Hollingsworth Industrial Lead: West Des Moines, Iowa; 1.4 miles; maximum allowable gross weight unknown • West Des Moines Industrial Lead: West Des Moines, Iowa; 2.2 miles (former Chicago, Rock Island & Pacific Railroad) ; 286,000 lbs. maximum allowable gross weight; leased to IAIS • Waukee Industrial Lead: West Des Moines, Iowa-Waukee, Iowa; 8.6 miles (former Minneapolis & St. Louis Railway); 268,000 lbs. maximum allowable gross weight
FRA Excepted Track	Waukee Industrial Lead: West Des Moines, Iowa-Waukee, Iowa; 8.6 miles

The Iowa subdivisions shown in Table A.11 below are a component of the UP Council Bluffs Area.

Table A.11: Descriptions of UP Subdivisions in Iowa — Council Bluffs Area

SUBDIVISION: BLAIR SUBDIVISION	
Division	Council Bluffs Area
Owner	UP
Operator	UP
Line Heritage	Chicago & North Western Railway (C&NW)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: East Missouri Valley, Iowa-Iowa / Nebraska state line near Blair, Nebraska; 14.2 miles
FRA Track Class	Class 4
Track Configuration	• Two main tracks (East Missouri Valley-Allen Creek) • One main track with passing sidings (Allen Creek-Iowa / Nebraska state line near Blair, Nebraska)

Maximum Authorized Speed Freight	60 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	• Centralized Traffic Control (CTC) and Automatic Train Control (ATC) East Missouri Valley, Iowa- Missouri Valley Junction, Iowa • Centralized Traffic Control (CTC) Missouri Valley Junction, Iowa-Iowa / Nebraska state line near Blair, Nebraska
Method of Operation	Centralized Traffic Control (CTC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Approximately 20' 2" Above Top of Rail (one bridge on the subdivision in Iowa will not clear 21' 6" Above Top of Rail)
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	• 92.9 GTM (Missouri Valley-California Junction) • 71.1 GTM (California Junction-Iowa / Nebraska state line near Blair, Nebraska)
Average Number of Trains per Day	35-45
Commodities Transported	Intermodal, automobiles, coal, farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: OMAHA SUBDIVISION	
Division	Council Bluffs Area
Owner	UP
Operator	UP
Line Heritage	Chicago & North Western Railway (C&NW)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Missouri Valley, Iowa-Iowa / Nebraska state line at Council Bluffs, Iowa; 23.1 miles
FRA Track Class	Class 4
Track Configuration	• Two main tracks (Missouri Valley-South Missouri Valley) • One main track (South Missouri Valley-North Council Bluffs) • Two main tracks (North Council Bluffs-Council Bluffs) • Three main tracks / two main tracks (Council Bluffs-Iowa / Nebraska state line at Council Bluffs)
Maximum Authorized Speed Freight	60 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	• Centralized Traffic Control (CTC) and Automatic Train Control (ATC) Missouri Valley, Iowa- North Council Bluffs, Iowa • Automatic Block Signals (ABS) North Council Bluffs, Iowa-Council Bluffs, Iowa • Centralized Traffic Control (CTC) Council Bluffs, Iowa-Iowa / Nebraska state line at Council Bluffs, Iowa
Method of Operation	• Centralized Traffic Control (CTC) Missouri Valley, Iowa- North Council Bluffs, Iowa • Yard Limits (YL) North Council Bluffs, Iowa-Council Bluffs, Iowa • Centralized Traffic Control (CTC) Council Bluffs, Iowa-Iowa / Nebraska state line at Council Bluffs, Iowa
Maximum Allowable Gross Weight	• 286,000 lbs. (Missouri Valley-Council Bluffs) • 315,000 lbs. (Council Bluffs-Iowa / Nebraska state line at Council Bluffs, Iowa)
Clearances	21' 6" Above Top of Rail

Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	99.7 GTM
Average Number of Trains per Day	35-45
Commodities Transported	Intermodal, automobiles, coal, farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	CBEC Railway: Council Bluffs, Iowa; approximately 6.0 miles owned by CBEC; operated by IAIS; BNSF and UP have operating rights over CBEC; 286,000 lbs. maximum allowable gross weight; line density 1.38 GTM
FRA Excepted Track	None

SUBDIVISION: SIOUX CITY SUBDIVISION	
Division	Council Bluffs Area
Owner	UP
Operator	UP
Line Heritage	Chicago & North Western Railway (C&NW)
Subdivision Route / Mileage	California Junction, Iowa-Sioux City, Iowa; 70.4 miles
FRA Track Class	Class 4
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	49 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	• Centralized Traffic Control (CTC) California Junction, Iowa-Modale, Iowa • Automatic Block Signals (ABS) Modale, Iowa-Sioux City, Iowa
Method of Operation	• Centralized Traffic Control (CTC) California Junction, Iowa-Modale, Iowa • Track Warrant Control (TWC) Modale, Iowa-Sioux City, Iowa • Yard Limits (YL) at Sioux City, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Approximately 20' 2" Above Top of Rail (two bridges on the subdivision in Iowa will not clear 21' 6" Above Top of Rail)
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	23.9 GTM
Average Number of Trains per Day	8-12
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, coal, intermodal, and general merchandise freight traffic
Industrial Leads	• Sergeant Bluff Industrial Lead: Sergeant Bluff, Iowa-Port Neal, Iowa; 7.7 miles; maximum allowable gross weight unknown • Dakota City Industrial Lead — Portion in Iowa only: Sioux City, Iowa-Iowa / Nebraska state line at Sioux City, Iowa; 1.2 miles of UP trackage between Sioux City, Iowa, and Floyd, Iowa (former Chicago & North Western Railway) and approximately 1.4 miles of UP trackage rights over BNSF Sioux City Subdivision (former Chicago, Burlington & Quincy Railroad) between Floyd, Iowa, and the Iowa / Nebraska state line at Sioux City, Iowa; 286,000 lbs. maximum allowable gross weight
FRA Excepted Track	None

The Iowa subdivisions shown in Table A.12 below are a component of the UP Twin Cities Area.

Table A.12: Descriptions of UP Subdivisions in Iowa — Twin Cities Area

SUBDIVISION: ALBERT LEA SUBDIVISION	
Division	Twin Cities Area
Owner	UP
Operator	UP
Line Heritage	• Joint Chicago, Rock Island & Pacific Railroad (CRI&P) and Chicago Great Western Railway (CGW) Mason City, Iowa-Manly, Iowa • Joint Chicago, Rock Island & Pacific Railroad (CRI&P) and Minneapolis & St. Louis Railway (M&StL) Manly, Iowa-Iowa / Minnesota state line near Northwood, Iowa
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Mason City, Iowa-Iowa / Minnesota state line near Northwood, Iowa; 24.4 miles
FRA Track Class	Class 4
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	50 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	Centralized Traffic Control (CTC)
Method of Operation	• Yard Limits (YL) at Mason City, Iowa • Centralized Traffic Control (CTC) Mason City, Iowa-Iowa / Minnesota state line near Northwood, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Approximately 20′ 2″ Above Top of Rail
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	25.7 GTM
Average Number of Trains per Day	10-16
Commodities Transported	Intermodal, automobiles, coal, farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: WORTHINGTON SUBDIVISION	
Division	Twin Cities Area
Owner	UP
Operator	UP
Line Heritage	Chicago, St. Paul, Minneapolis & Omaha Railway (CStPM&O)
Subdivision Route / Mileage	Le Mars, Iowa-Iowa / Minnesota state line near Bigelow, Minnesota; 55.7 miles
FRA Track Class	Class 4
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	49 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	Track Warrant Control (TWC) Le Mars, Iowa-Iowa / Minnesota state line near Bigelow, Minnesota
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Approximately 20′ 2″ Above Top of Rail

Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	12.2 GTM
Average Number of Trains per Day	6-10
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, coal, intermodal, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

SUBDIVISION: FAIRMONT SUBDIVISION	
Division	Twin Cities Area
Owner	UP
Operator	UP
Line Heritage	Chicago & North Western Railway (C&NW)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Mason City, Iowa-Iowa / Minnesota state line near Scarville, Iowa; 34.0 miles
FRA Track Class	Class 3
Track Configuration	One main track with passing sidings
Maximum Authorized Speed Freight	40 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	• Yard Limits (YL) Mason City, Iowa-River City, Iowa • Track Warrant Control (TWC) River City, Iowa-Iowa / Minnesota state line near Scarville, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Unknown
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	8.2 GTM
Average Number of Trains per Day	2-4
Commodities Transported	Farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	• Mason City Industrial Lead: Mason City, Iowa; 2.3 miles; maximum allowable gross weight unknown • Lake Mills Industrial Lead: Lake Mills, Iowa; 0.8 mile (former Minneapolis & St. Louis Railway); maximum allowable gross weight unknown
FRA Excepted Track	Lake Mills Industrial Lead: Lake Mills, Iowa; 0.8 mile

The Iowa subdivision shown in Table A.13 below is a component of the UP Kansas City Area.

Table A.13: Descriptions of UP Subdivisions in Iowa — Kansas City Area

SUBDIVISION: TRENTON SUBDIVISION	
Division	Kansas City Area
Owner	UP
Operator	UP
Line Heritage	Chicago, Rock Island & Pacific Railroad (CRI&P)
Subdivision Route / Mileage	Portion of Subdivision in Iowa: Des Moines, Iowa-Iowa / Missouri state line near Lineville, Iowa; 87.0 miles
FRA Track Class	Class 4
Track Configuration	One main track with passing sidings

Maximum Authorized Speed Freight	60 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	• Centralized Traffic Control (CTC) Des Moines, Iowa-Beech, Iowa • Automatic Block Signals (ABS) Beech, Iowa-Williamson, Iowa • Centralized Traffic Control (CTC) Beech, Iowa-Iowa / Missouri state line near Lineville, Iowa
Method of Operation	• Centralized Traffic Control (CTC) Des Moines, Iowa-Beech, Iowa • Track Warrant Control (TWC) Beech, Iowa-Williamson, Iowa • Centralized Traffic Control (CTC) Williamson, Iowa-Iowa / Missouri state line near Lineville, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Approximately 20' 2" Above Top of Rail (two bridges on the subdivision in Iowa will not clear 21' 6" Above Top of Rail)
Current Line Density (2014) in Annual Gross Tons per Mile (in Millions)	34.22 GTM
Average Number of Trains per Day	10-16
Commodities Transported	Intermodal, automobiles, coal, farm products, food and kindred products, chemical and allied products, ethanol, and general merchandise freight traffic
Industrial Leads	None
FRA Excepted Track	None

A.3 Class II Railroads in Iowa

The section describes Iowa's one Class II railroad — Iowa Interstate Railroad (IAIS). Included is a data sheet and operating subdivision table for IAIS, showing such details as ownership, miles owned and operated, physical characteristics of operating subdivisions, facilities, commodities and carloads handled, connections with other railroads, potential improvement needs, and more. In 2015, IAIS was asked to confirm all data appearing in the data sheet and operating subdivision table and to provide additional input, as appropriate. IAIS participated in the coordination. No physical inspections of IAIS were conducted during development of the Iowa State Rail Plan.

A.3.1 Iowa Interstate Railroad (IAIS)

Iowa Interstate Railroad (IAIS) is a Class II railroad based in Cedar Rapids, Iowa, and is owned by Railroad Development Corporation (RDC) of Pittsburgh, Pennsylvania. IAIS was established in 1984 to preserve rail service over a former principal route of the Chicago, Rock Island & Pacific Railroad line between Bureau, Illinois (west of Chicago) and Council Bluffs, Iowa. The initial network included trackage rights from Bureau to Joliet, Illinois, on CSX Transportation and from Joliet to Blue Island (near Chicago), Illinois, on Metra, for access to Chicago. The initial network also included branch lines extending from Altoona to Pella, Iowa (this segment was cut back from Pella in stages in 1998, 2000, and 2014 and now ends at South Mitchellville, Iowa); Hancock Junction to Hancock and Oakland, Iowa (this segment was largely abandoned between Hancock Junction and Oakland in 2014); Atlantic to Audubon, Iowa (this segment was largely abandoned in 1995); and Rock Island to Milan, Illinois.

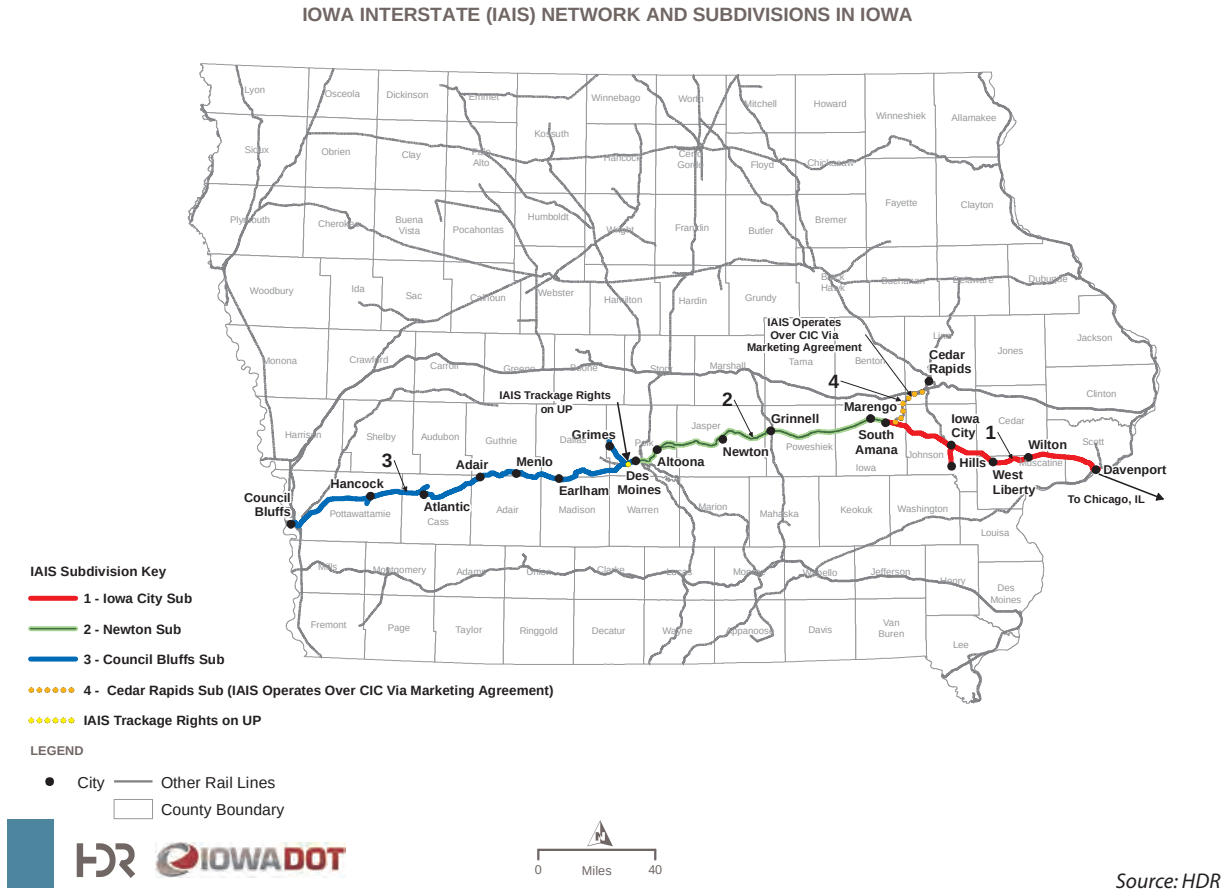
Subsequent network expansions included operation of NS-owned trackage between Des Moines and Grimes, Iowa; acquisition of the former CRI&P line between Henry (south of Bureau) and Peoria, Illinois (previously leased from Lincoln & Southern Railroad since 1987) and Class III railroad Great Western Railway of Iowa (CBGR) at Council Bluffs, Iowa, in 2006; operation by agreement over CIC trackage between between Yocum Connection (near South Amana) and Cedar Rapids, Iowa, and between Iowa City and Hills, Iowa; and lease of former CRI&P trackage from CSX Transportation between Henry, Bureau, and Utica, Illinois, in 2006[1].

1 *Iowa Interstate Railroad, Ltd. — Growing and Glowing at Age 25; Iowa Interstate Railroad, 2009*

IAIS also operates and maintains CBEC Railway in Council Bluffs, Iowa. Today, IAIS operates a regional network of approximately 550 miles, reaching from Chicago and Peoria, Illinois, to Davenport, Iowa City, Des Moines, and Council Bluffs, Iowa. IAIS operates over approximately 325 miles in Iowa. IAIS connects with all U.S. Class I railroads, either in Iowa or Illinois.

Figure A.7 below shows IAIS' present network and operating subdivisions in Iowa, which are described later in this section.

Figure A.7: IAIS Network and Subdivisions in Iowa



Source: HDR

Table A.14 below includes a datasheet for IAIS identifying additional details and physical and operating characteristics of the IAIS network in Iowa.

Table A.14: IAIS Datasheet

RAILROAD:	IOWA INTERSTATE RAILROAD
Alpha Code:	IAIS
Operator:	IAIS
Parent Company:	Railroad Development Corporation (RDC)
Phone:	(319) 298-5400
Company Website:	www.iaisrr.com
SERVICE AREA	
Counties in Iowa:	Scott, Muscatine, Cedar, Johnson, Iowa, Poweshiek, Jasper, Polk, Dallas, Madison, Adair, Guthrie, Cass, and Pottawattamie
Principal Stations in Iowa:	Davenport, Iowa City, South Amana, Newton, Des Moines, Atlantic, Council Bluffs

RAIL TRAFFIC							
Principal Commodities:	Grain and grain products, intermodal, aggregates, metals, and machinery						
Annual Carloads in Iowa (2014):	117,481 (IAIS system); 82,754 (in Iowa)						
IOWA ROUTE MILES							
Subdivision or Segment and Limits	**Length**	**Operated**	**Out of Service**	**Owned**	**Leased**	**Trackage Rights**	**Average Number of Trains per day (can be presented as a range)**
Iowa/Illinois state line at Davenport, Iowa-Davenport, Iowa	0.4	0.4	0	0	0	0.4 (on U.S. Army Government Bridge)	See Subdivision Tables Below
Davenport, Iowa-East Des Moines, Iowa	170.6	170.6	0	170.6	0	0	
East Des Moines, Iowa-Short Line (Des Moines), Iowa	2.7	2.7	0	0	0	2.7 (on UP)	
Short Line (Des Moines), Iowa- Des Moines, Iowa	2.7	2.7	0	2.7	0	0	
Des Moines, Iowa-West Des Moines, Iowa	6.4	6.4	0	0	6.4 (from UP)	0	
West Des Moines, Iowa-Council Bluffs, Iowa	125.0	125.0	0	125.0	0	0	
Yocum Connection, Iowa-Cedar Rapids, Iowa	17.8	17.8	0	0	0	17.8 (on CIC; note that IAIS operates over this trackage via a marketing agreement with CIC)	
Total	325.6	325.6	0	298.3	6.4	20.9	
TRACK CHARACTERISTICS (AS NECESSARY BY LINE SEGMENT)							
FRA Track Class:	• Class 3 (Iowa / Illinois state line at Davenport, Iowa-Council Bluffs, Iowa) • Class 2 (Yocum Connection, Iowa-Cedar Rapids, Iowa) over CIC trackage						
Operating Speed:	• 40 mph (FRA Track Class 3) • 25 mph (FRA Track Class 2)						
Signal System:	None						
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions):	• 10.90 GTM (Iowa / Illinois state line at Davenport, Iowa-Iowa City, Iowa) • 9.56 GTM (Iowa City, Iowa-South Amana, Iowa) • 6.10 GTM (South Amana, Iowa-Newton, Iowa) • 2.69 GTM (Newton, Iowa-Des Moines, Iowa) • 4.41 GTM (Des Moines, Iowa-Menlo, Iowa) • 3.15 GTM (Menlo, Iowa-Atlantic, Iowa) • 2.10 GTM (Atlantic, Iowa-Council Bluffs, Iowa) • 8.98 GTM (South Amana, Iowa-Cedar Rapids, Iowa)						
Weight Limits:	• 286,000 lbs (Iowa / Illinois state line at Davenport, Iowa-Council Bluffs, Iowa; Yocum Connection, Iowa-Cedar Rapids, Iowa) • Other line segments vary (see subdivision tables below)						
Vertical Clearance and Restrictions:	See subdivision tables below						

FRA Excepted Track:	See subdivision tables below
INTERCHANGE POINTS	
Location:	**Railroad:**
Davenport	CP
Iowa City	CIC
Cedar Rapids	CIC
Des Moines	BNSF, NS, UP
Council Bluffs	BNSF, CN, KCS, UP
FACILITIES	
Type:	**Location:**
Classification Yards	Iowa City, South Amana, Newton, Council Bluffs
Transload Facility	Quad Cities, West Liberty, Newton, Council Bluffs
Intermodal Facility	Council Bluffs
Mechanical Facility	South Amana, Council Bluffs
PRESENT CAPACITY CONSTRAINTS AND OPERATIONAL BOTTLENECKS	
Location:	**Description:**
FUNDED CAPITAL PROJECTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	**Estimated Costs, if known:**
FUTURE PLANNED IMPROVEMENTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	Estimated costs, if known:
OTHER IMPROVEMENT AND INFRASTRUCTURE NEEDS (NOT YET FUNDED OR PLANNED), INCLUDING REHABILITATION OR CONSTRUCTION OF SPUR TRACKS FOR INCREASED OR RENEWED USE BY RAIL SHIPPERS	
Identification and Description:	**Estimated costs, if known:**
OTHER COMMENTS	
Identification:	**Description:**

Source: IAIS and Iowa DOT

Table A.15 below identifies and describes the physical and operating characteristics of IAIS' operating subdivisions in Iowa.

Table A.15: IAIS Operating Subdivisions in Iowa

SUBDIVISION: IOWA CITY SUBDIVISION	
Division	IAIS
Owner	IAIS
Operator	IAIS
Line Heritage	Chicago, Rock Island & Pacific Railroad (CRI&P)
Subdivision Route / Mileage	Davenport, Iowa-South Amana, Iowa; 77.4 miles
FRA Track Class	Class 3
Number of Main Tracks	One main track with passing sidings
Maximum Authorized Speed Freight	40 mph freight
Maximum Authorized Speed Passenger	N/A

Wayside Signals	None
Method of Operation	Track Warrant Control (TWC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Double stack capable (20' 2" Above Top of Rail)
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions)	• 10.90 GTM (Iowa / Illinois state line at Davenport, Iowa, Iowa-Iowa City, Iowa) • 9.56 GTM (Iowa City, Iowa-South Amana, Iowa)
Average Number of Trains per Day	5-6
Commodities Transported	Grain and grain products, intermodal, aggregates, metals, and machinery
Industrial Spurs	Hills Industrial Spur: Iowa City, Iowa-Hills, Iowa; 8.4 miles; owned by CIC and operated by IAIS under lease with CIC (former Cedar Rapids & Iowa City Railway at Iowa City, Iowa, and former Chicago, Rock Island & Pacific Railroad between Iowa City, Iowa, and Hills, Iowa); 263,000 lbs. maximum allowable gross weight. Note that CIC is anticipated to resume operations of this trackage between Iowa City and Hills with the expiration of the IAIS lease in October 2016.
FRA Excepted Track	None

SUBDIVISION: NEWTON SUBDIVISION	
Division	IAIS
Owner	IAIS
Operator	IAIS
Line Heritage	Chicago, Rock Island & Pacific Railroad (CRI&P)
Subdivision Route / Mileage	South Amana, Iowa-East Des Moines, Iowa; 93.2 miles
FRA Track Class	Class 3
Number of Main Tracks	One main track with passing sidings
Maximum Authorized Speed Freight	40 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	Track Warrant Control (TWC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Double stack capable (20' 2" Above Top of Rail)
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions)	• 6.10 GTM (South Amana, Iowa-Newton, Iowa) • 2.69 GTM (Newton, Iowa- Des Moines, Iowa)
Average Number of Trains per Day	2-4
Commodities Transported	Grain and grain products, intermodal, aggregates, metals, and machinery
Industrial Spurs	Prairie City Spur: Altoona, Iowa-South Mitchellville, Iowa; approximately 7.3 miles (former Chicago, Rock Island & Pacific Railroad); 263,000 lbs. maximum allowable gross weight
FRA Excepted Track	None

SUBDIVISION: COUNCIL BLUFFS SUBDIVISION	
Division	IAIS
Owner	IAIS
Operator	IAIS

Line Heritage	• Chicago, Rock Island & Pacific Railroad (CRI&P) Des Moines, Iowa-Peter (near McClelland), Iowa • Joint Chicago Great Western Railway (CGW) / Chicago, Rock Island & Pacific Railroad (CRI&P) Peter (near McClelland), Iowa-Rigg (near Council Bluffs), Iowa • Chicago, Rock Island & Pacific Railroad (CRI&P) Rigg (near Council Bluffs), Iowa-Council Bluffs, Iowa
Subdivision Route / Mileage	West Des Moines, Iowa-Council Bluffs, Iowa; 125.0 miles
FRA Track Class	Class 3
Number of Main Tracks	One main track with passing sidings
Maximum Authorized Speed Freight	40 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	Track Warrant Control (TWC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Double stack capable (20' 2" Above Top of Rail)
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions)	• 4.41 GTM (Des Moines, Iowa-Menlo, Iowa) • 3.15 GTM (Menlo, Iowa-Atlantic, Iowa) • 2.10 GTM (Atlantic, Iowa-Council Bluffs, Iowa)
Average Number of Trains per Day	2-4
Commodities Transported	Grain and grain products, intermodal, aggregates, metals, and machinery
Industrial Spurs	• Grimes Industrial Spur and related trackage: Des Moines, Iowa-Grimes, Iowa; approximately 12.0 miles (former Chicago, Milwaukee, St. Paul & Pacific Railroad) owned by Norfolk Southern Railway (NS) and operated by IAIS; 286,000 lbs. maximum allowable gross weight; line density 0.02 GTM • Atlantic Spur: Atlantic, Iowa; approximately 3.0 miles (former Chicago, Rock Island & Pacific Railroad); 286,000 lbs. maximum allowable gross weight • Hancock Spur: Hancock Junction, Iowa-Hancock, Iowa; length unknown (former Chicago, Rock Island & Pacific Railroad); 286,000 lbs. maximum allowable gross weight • CBEC Railway: Council Bluffs, Iowa; approximately 6.0 miles owned by CBEC; operated by IAIS; BNSF and UP have operating rights over CBEC; 286,000 lbs. maximum allowable gross weight; line density 1.38 GTM
FRA Excepted Track	• Grimes Industrial Spur and related trackage (Des Moines, Iowa-Grimes, Iowa); approximately 12.0 miles • Hancock Spur (Hancock Junction, Iowa-Hancock, Iowa); length unknown

SUBDIVISION: CEDAR RAPIDS SUBDIVISION	
Division	IAIS Cedar Rapids Subdivision (known also as CIC Division 4)
Owner	Cedar Rapids & Iowa City Railway (CIC)
Operator	IAIS/CIC (IAIS operates over this segment via a marketing agreement with CIC; IAIS controls train operations over this trackage)
Line Heritage	Chicago, Milwaukee, St. Paul & Pacific Railroad (CMStP&P)
Subdivision Route / Mileage	Yocum Connection, Iowa-Smith-Dows Yard (Cedar Rapids), Iowa; 17.8 miles
FRA Track Class	Class 2
Number of Main Tracks	One main track
Maximum Authorized Speed Freight	25 mph freight
Maximum Authorized Speed Passenger	N/A

Wayside Signals	None
Method of Operation	Track Warrant Control (TWC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Double stack capable (21' 3" Above Top of Rail)
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions)	• 8.98 GTM — IAIS (Yocum Connection, Iowa-Cedar Rapids, Iowa) • 0.04 GTM — CIC (Yocum Connection, Iowa-Cedar Rapids, Iowa)
Average Number of Trains per Day	4
Commodities Transported	Grain and grain products, intermodal, aggregates, metals, and machinery
Industrial Spurs	None
FRA Excepted Track	None

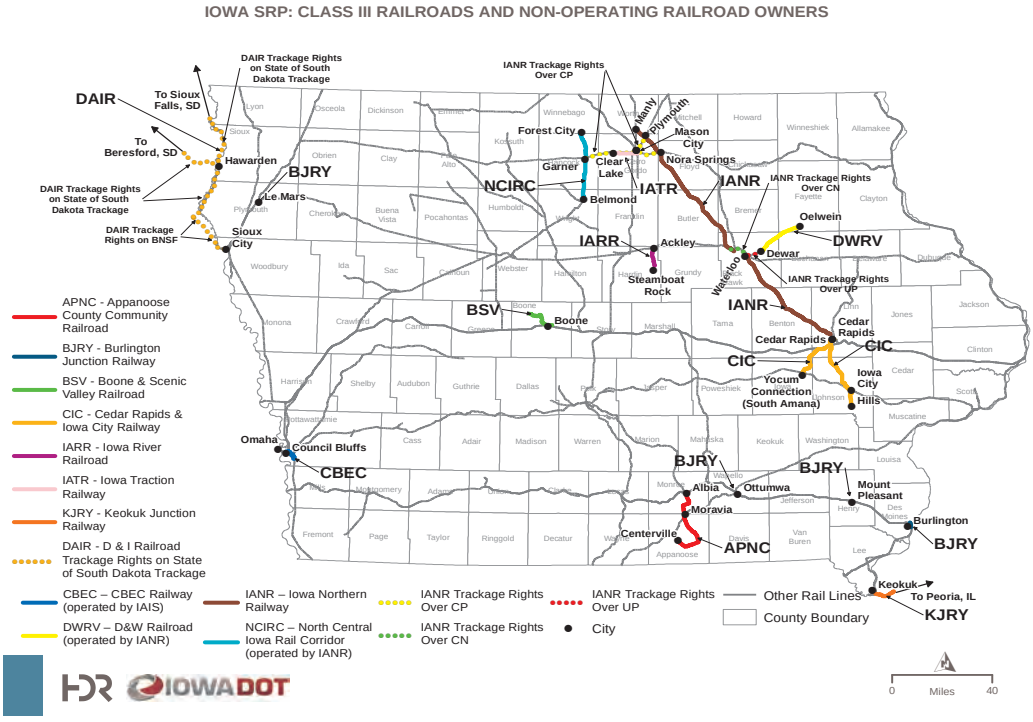
Source: IAIS, CIC, and Iowa DOT

A.4 Class III Railroads in Iowa

The section identifies and describes Iowa's 11 Class III (or short line) railroads. Nine of these Class III railroads currently provide railroad service, while two others contract out with another Class II or Class III railroad to provide rail service. Included is a data sheet for the Class III railroads providing railroad service, showing such details as ownership, miles owned and operated, physical characteristics of rail lines, commodities and carloads handled, connections with other railroads, potential improvement needs, and more. In 2015, the Class III railroads currently providing railroad service were asked to confirm the data appearing in the data sheets and to provide additional input, as appropriate. Eight of the nine Class III railroads providing rail service in Iowa participated. No physical inspections of Iowa's Class III railroads were conducted during development of the Iowa State Rail Plan.

Figure A.8 below identifies the networks of the state's Class III railroads described in this section, and also identifies non-operating railroad owners that will be described in Appendix A.5.

Figure A.8: Iowa's Class III Railroads and Non-Operating Railroad Owners



Source: HDR and Iowa DOT

Each of the railroads identified above are described in this section.

A.4.1 Appanoose County Community Railroad (APNC)

The Appanoose County Community Railroad (APNC) is a Class III railroad headquartered in Centerville, Iowa. The APNC was established by the town of Centerville, Iowa, in 1983 to preserve rail service in Appanoose County. Today, APNC owns and operates segments of former Chicago, Burlington & Quincy Railroad; Chicago, Rock Island & Pacific Railroad; and Wabash Railroad trackage that form a continuous, J-shaped route from Centerville to Moravia and Albia, Iowa. APNC operates 35 miles of railroad in Iowa.

Table A.16 below includes a datasheet for APNC identifying additional details and operating and physical characteristics of the APNC network in Iowa.

Table A.16: APNC Datasheet

RAILROAD:	APPANOOSE COUNTY COMMUNITY RAILROAD						
Alpha Code:	APNC						
Operator:	APNC						
Parent Company:							
Contact:	Heather Clark						
Phone:	(641) 437-7029						
Email:	apncrr@iowatelecom.net						
Company Website:	N/A						
SERVICE AREA							
Counties in Iowa:	Appanoose and Monroe						
Principal Stations in Iowa:	Centerville, Albia						
RAIL TRAFFIC							
Principal Commodities:	Transportation machinery, chemical and allied products Products, and scrap						
Annual Carloads in Iowa (2014):	574 (APNC system is entirely within Iowa)						
IOWA ROUTE MILES							
Subdivision or Segment and Limits	**Length**	**Operated**	**Out of Service**	**Owned**	**Leased**	**Trackage Rights**	**Average Number of Trains per day**
Centerville - Albia	35	35	0	35	0	0	0-1
Total	35	35	0	35	0	0	
TRACK CHARACTERISTICS (AS NECESSARY BY LINE SEGMENT)							
FRA Track Class:	Class 2						
Operating Speed:	15 mph						
Signal System:	None						
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions):	0.05 GTM						
Weight Limits:	268,000 lbs.						
Vertical Clearance and Restrictions:	Unknown						
FRA Excepted Track:	Unknown						
INTERCHANGE POINTS							
Location:				**Railroad:**			

Moravia	CP
Albia	BNSF, NS
FACILITIES	
Type:	**Location:**
Classification Yards	Albia
Transload Facility	None
Intermodal Facility	None
Mechanical Facility	None
BRIDGES	
Number of Bridges on APNC in Iowa:	**Number of Bridges in Need of Repair:**
Number of Bridges in Need of Upgrade to Handle 286K Loads:	**Other Bridge Comments, if applicable:**
Location:	
PRESENT CAPACITY CONSTRAINTS AND OPERATIONAL BOTTLENECKS	
Location:	**Description:**
FUNDED CAPITAL PROJECTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	**Estimated Costs, if known:**
APNC Project (completed 2015) — included rehabilitation of existing mainline track and one bridge, installation of one switch, and construction of 1,365 feet of track.	$906,139 (Funding provided by Federal SAFETEA-LU Earmark Grant)
FUTURE PLANNED IMPROVEMENTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	**Estimated costs, if known:**
OTHER IMPROVEMENT AND INFRASTRUCTURE NEEDS (NOT YET FUNDED OR PLANNED), INCLUDING REHABILITATION OR CONSTRUCTION OF SPUR TRACKS FOR INCREASED OR RENEWED USE BY RAIL SHIPPERS	
Identification and Description:	**Estimated costs, if known:**
OTHER COMMENTS	
Identification:	**Description:**

Source: APNC and Iowa DOT

A.4.2 Boone & Scenic Valley Railroad (BSV)

The Boone and Scenic Valley Railroad (BSV) is a Class III railroad based in Boone, Iowa. B&SV passenger rail operations began in 1983 when it acquired 12 miles of former Fort Dodge, Des Moines & Southern Railroad (FDDM&S) trackage between Boone and Wolf, Iowa, from the Chicago & North Western Railway (C&NW). In 2001, B&SV acquired an additional 2 miles of former FDDM&S and C&NW trackage in Boone, Iowa, from UP, and began offering freight service only on that segment to serve an industrial park. Today, the Boone-Wolf segment is for passenger service of the Boone & Scenic Valley Railroad and Museum only.

Table A.17 below includes a datasheet for BSV identifying additional details and operating and physical characteristics of the BSV freight network in Iowa, excluding the portion from Boone to Wolf, Iowa, that is operated only as tourist passenger railroad.

Table A.17: BSV Datasheet

RAILROAD:	BOONE & SCENIC VALLEY RAILROAD
Alpha Code:	BSV

Operator:	BSV
Parent Company:	
Contact:	
Phone:	
Email:	info@bsvrr.com
Company Website:	http://www.bsvrr.com/index.html
SERVICE AREA	
Counties in Iowa:	Boone
Principal Stations in Iowa:	Boone
RAIL TRAFFIC	
Principal Commodities:	Food and kindred products
Annual Carloads in Iowa (2014):	84 (BSV system is entirely within Iowa)

IOWA ROUTE MILES

Subdivision or Segment and Limits	Length	Operated	Out of Service	Owned	Leased	Trackage Rights	Average Number of Trains per day
Boone, Iowa	2	2	0	2	0	0	0-1
Total	2	2	0	2	0	0	

TRACK CHARACTERISTICS (AS NECESSARY BY LINE SEGMENT)	
FRA Track Class:	Class 1
Operating Speed:	10 mph
Signal System:	None
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions):	0.01 GTM
Weight Limits:	268,000 lbs.
Vertical Clearance and Restrictions:	Unknown
FRA Excepted Track:	Unknown

INTERCHANGE POINTS	
Location:	**Railroad:**
Boone	UP

FACILITIES	
Type:	**Location:**
Classification Yards	Boone
Transload Facility	None
Intermodal Facility	None
Mechanical Facility	Boone

BRIDGES	
Number of Bridges on BSV in Iowa:	**Number of Bridges in Need of Repair:**
Number of Bridges in Need of Upgrade to Handle 286K Loads:	**Other Bridge Comments, if applicable:**

PRESENT CAPACITY CONSTRAINTS AND OPERATIONAL BOTTLENECKS	
Location:	**Description:**

FUNDED CAPITAL PROJECTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	Estimated Costs, if known:
FUTURE PLANNED IMPROVEMENTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	**Estimated costs, if known:**
OTHER IMPROVEMENT AND INFRASTRUCTURE NEEDS (NOT YET FUNDED OR PLANNED), INCLUDING REHABILITATION OR CONSTRUCTION OF SPUR TRACKS FOR INCREASED OR RENEWED USE BY RAIL SHIPPERS	
Identification and Description:	**Estimated costs, if known:**
OTHER COMMENTS	
Identification:	**Description:**

Source: BSV and Iowa DOT

A.4.3 Burlington Junction Railway (BJRY)

The Burlington Junction Railway (BJRY) is a Class III railroad headquartered in Burlington, Iowa. The BJRY was established in 1985 to provide rail service over former Chicago, Rock Island & Pacific Railroad trackage in Burlington, Iowa, and commodity transloading services. BJRY subsequently expanded its rail switching and commodity transloading services to additional locations in Mount Pleasant, Ottumwa, and Le Mars, Iowa, as well as at other locations in Illinois and Missouri. BJRY operates approximately 6 miles of railroad in Iowa.

Table A.18 below includes a datasheet for BJRY identifying additional details and operating and physical characteristics of the BJRY network in Iowa.

Table A.18: BJRY Datasheet

RAILROAD:	BURLINGTON JUNCTION RAILWAY						
Alpha Code:	BJRY						
Operator:	BJRY						
Parent Company:							
Contact:	Andrew Hoth						
Phone:	(319) 753-6157						
Email:	hothlaw@mchsi.com						
Company Website:	www.bjryrail.com						
SERVICE AREA							
Counties in Iowa:	Des Moines, Henry, and Wapello						
Principal Stations in Iowa:	Burlington, Mount Pleasant, and Ottumwa						
RAIL TRAFFIC							
Principal Commodities:	Food and Kindred Products, Chemical and Allied Products, Farm Products, Lumber and Paper.						
Annual Carloads in Iowa (2014):	3,485 (in Iowa)						
IOWA ROUTE MILES							
Subdivision or Segment and Limits	**Length**	**Operated**	**Out of Service**	**Owned**	**Leased**	**Trackage Rights**	**Average Number of Trains per day**
Burlington	3	3	0	3	0	0	0-1

Mount Pleasant	1	1	0	1	0	0	0-1
Ottumwa	1	1	0	1	0	0	0-1
Le Mars	1	1	0	1	0	0	0-1
Total	6	6	0	6	0	0	

TRACK CHARACTERISTICS (AS NECESSARY BY LINE SEGMENT)	
FRA Track Class:	Class 1
Operating Speed:	10 mph
Signal System:	None
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions):	Under 1.0 GTM
Weight Limits:	286,000 lbs.
Vertical Clearance and Restrictions:	Unknown
FRA Excepted Track:	Unknown

INTERCHANGE POINTS	
Location:	**Railroad:**
Burlington	BNSF
Mount Pleasant	BNSF
Ottumwa	BNSF
Le Mars	CN

FACILITIES	
Type:	**Location:**
Classification Yards	Boone
Transload Facility	None
Intermodal Facility	None
Mechanical Facility	Boone

BRIDGES	
Number of Bridges on BJRY in Iowa:	**Number of Bridges in Need of Repair:**
Number of Bridges in Need of Upgrade to Handle 286K Loads:	**Other Bridge Comments, if applicable:**

PRESENT CAPACITY CONSTRAINTS AND OPERATIONAL BOTTLENECKS	
Location:	**Description:**

FUNDED CAPITAL PROJECTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	**Estimated Costs, if known:**

FUTURE PLANNED IMPROVEMENTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	**Estimated costs, if known:**

OTHER IMPROVEMENT AND INFRASTRUCTURE NEEDS (NOT YET FUNDED OR PLANNED), INCLUDING REHABILITATION OR CONSTRUCTION OF SPUR TRACKS FOR INCREASED OR RENEWED USE BY RAIL SHIPPERS	
Identification and Description:	**Estimated costs, if known:**

OTHER COMMENTS	
Identification:	**Description:**

Source: BJRY and Iowa DOT

A.4.4 CBEC Railway (CBEC)

The CBEC Railway (CBEC) was established in 1992 as a wholly owned subsidiary of MidAmerican Energy in Council Bluffs, Iowa. The CBEC network was built in 1997 and consists of 6 miles of trackage in the Council Bluffs area and is used primarily to provide coal to a utility plant at the Council Bluffs Energy Center. IAIS operates and maintains the CBEC. BNSF and UP have operating rights over CBEC. Today, CBEC is owned by Corn Belt Power Cooperative and the Central Iowa Power Cooperative[2]. Details about the operating and physical characteristics of the CBEC network in Iowa can be found in the IAIS section presented earlier in Appendix A.3.

A.4.5 Cedar Rapids & Iowa City Railway (CIC)

The Cedar Rapids & Iowa City Railway (CIC) — more commonly referred to as the CRANDIC — is a Class III railroad owned by Alliant Energy and is based in Cedar Rapids, Iowa. The CIC was established as an electric railroad and began providing service between Cedar Rapids and Iowa City, Iowa, in 1904. The railroad subsequently dieselized its operations in the 1950s and later expanded its freight railroad network in the area considerably, mostly via the acquisitions of former Chicago, Rock Island & Pacific Railroad trackage between Iowa City and Hills, Iowa, and former Chicago, Milwaukee, St. Paul & Pacific Railroad trackage between Cedar Rapids and near Yocum Connection (South Amana), Iowa, during 1980-1982. CIC owns 57 miles of railroad in Iowa.

Table A.19 below includes a datasheet for CIC identifying additional details and operating and physical characteristics of the CIC network in Iowa.

Table A.19: CIC Datasheet

RAILROAD:	CEDAR RAPIDS & IOWA CITY RAILWAY						
Alpha Code:	CIC						
Operator:	CIC						
Parent Company:	Alliant Energy						
Contact:	Kevin Burke						
Phone:	(319) 786-3698						
Email:	kevinburke@alliantenergy.com						
Company Website:	www.crandic.com						
SERVICE AREA							
Counties in Iowa:	Linn, Johnson, Benton, and Iowa						
Principal Stations in Iowa:	Cedar Rapids, Iowa City, North Liberty						
RAIL TRAFFIC							
Principal Commodities:	Corn, coal, denatured ethanol, dried distillers grain, corn starch, corn syrup, corn gluten feed, corn gluten meal, soybean meal, soybean oil, and pulpboard						
Annual Carloads in Iowa (2014):	99,128 (CIC system is entirely within Iowa)						
IOWA ROUTE MILES							
Subdivision or Segment and Limits	**Length**	**Operated**	**Out of Service**	**Owned**	**Leased**	**Trackage Rights**	**Average Number of Trains per day**

2 *http://www.cbpower.coop/aspx/News.aspx?NewsID=1945*

Cedar Rapids, Iowa-Hills, Iowa (CIC Division 2)	33	25	0	33 (Note: The 8-mile Iowa City-Hills segment is leased to IAIS as its Hills Industrial Lead. CIC is anticipated to resume operations of the trackage between Iowa City and Hills with the expiration of the IAIS lease in October 2016.)	0	0	0-1 CIC
Cedar Rapids, Iowa-Yocum Connection, Iowa (CIC Division 4)	22	22	0	22 (Note: 18 miles of segment is dispatched by the IAIS as the IAIS Cedar Rapids Subdivision)	0	0	0-1 CIC 4 IAIS
Other Main Track Segment in Cedar Rapids, Iowa	2	2	0	2	0	0	10-12 CIC
Total	57	49	0	57	0	0	

TRACK CHARACTERISTICS (AS NECESSARY BY LINE SEGMENT)	
FRA Track Class:	Class 1 / Class 2 (varies by segment)
Operating Speed:	• 10 mph (FRA Track Class 1) • 25 mph (FRA Track Class 2)
Signal System:	None
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions):	• 0.01 GTM CIC (Cedar Rapids, Iowa-Iowa City, Iowa) • 0.04 GTM CIC / 8.98 GTM IAIS (Cedar Rapids, Iowa-Yocum Connection, Iowa)
Weight Limits:	286,000 lbs. (systemwide), except for 263,000 lbs. (Iowa City, Iowa-Hills, Iowa; trackage on this segment operated by IAIS under a lease agreement)
Vertical Clearance and Restrictions:	N/A
FRA Excepted Track:	N/A

INTERCHANGE POINTS	
Location:	**Railroad:**
Cedar Rapids	CN, UP, IAIS, IANR
Iowa City	IAIS
Yocum Connection (South Amana)	IAIS

FACILITIES	
Type:	**Location:**

Classification Yards	• CRANDIC Yard (Shops Yard) — Cedar Rapids • Smith-Dows Yard — Cedar Rapids • Other Industrial Yards — Cedar Rapids
Transload Facility	Cedar Rapids
Intermodal Facility	None
Mechanical Facility	Cedar Rapids
BRIDGES	
Number of Bridges on CIC in Iowa: 40	**Number of Bridges in Need of Repair: 4**
Number of Bridges in Need of Upgrade to Handle 286K Loads: 0	**Other Bridge Comments, if applicable: N/A**
PRESENT CAPACITY CONSTRAINTS AND OPERATIONAL BOTTLENECKS	
Location:	**Description:**
26th Street to Edgewood Road — Cedar Rapids	Double track main to ease congestion
Interchange Track 953 — Cedar Rapids	Additional interchange track with IAIS
OR Bypass Interchange Track- Cedar Rapids	Unit train receiving track for CN, IANR
FUNDED CAPITAL PROJECTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	**Estimated Costs, if known:**
N/A	
FUTURE PLANNED IMPROVEMENTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	**Estimated costs, if known:**
Cedar Rapids Team Track Expansion / Transload Facility — CRANDIC desires to relocate and expand its transload and team track facilities to offer weather-protected and bulk transload options near Edgewood Road and U.S. Highway 30 in southwest Cedar Rapids.	$4.2 Million
OTHER IMPROVEMENT AND INFRASTRUCTURE NEEDS (NOT YET FUNDED OR PLANNED), INCLUDING REHABILITATION OR CONSTRUCTION OF SPUR TRACKS FOR INCREASED OR RENEWED USE BY RAIL SHIPPERS	
Identification and Description:	**Estimated costs, if known:**
DuPont Rail Spur	$1.7 Million
OTHER COMMENTS	
Identification:	**Description:**

Source: CIC and Iowa DOT

A.4.6 D&I Railroad (DAIR)

The D&I Railroad (DAIR) is a Class III railroad based in Sioux Falls, South Dakota, and is owned by aggregate producer L.G. Everist. DAIR was established in 1981, and its principal route is from Sioux City, Iowa, to Hawarden, Iowa, and Sioux Falls and Dell Rapids, South Dakota. The segments of DAIR's network in Iowa consist almost entirely of operating or trackage rights over former lines of the Chicago, Milwaukee, St. Paul & Pacific Railroad (CMStP&P), which retrenched from much of Iowa and South Dakota in 1980, and was acquired by other entities as a means of preserving rail service to the region.

DAIR has trackage rights over a line operated by the BNSF Railway between Sioux City, Iowa, and Elk Point, South Dakota, and operating rights over the state of South Dakota owned trackage between Elk Point and Canton, South Dakota, via Hawarden, Iowa. DAIR also operates over a branch line consisting of former Chicago & North Western Railway (C&NW) trackage that is now owned by the state of South Dakota between Hawarden, Iowa, and Beresford, South Dakota. The state of South Dakota-owned trackage is known as the Sioux Valley Line cluster and it is leased to the Sioux Valley Regional Railroad Authority (SVRRA) and DAIR is SVRRA's designated operator. DAIR designates the segment between Elk Point and Canton, South Dakota, via Hawarden, Iowa, as its Hawarden Subdivision and the segment between Hawarden, Iowa, and Beresford,

South Dakota, as its Beresford Subdivision. DAIR operates over approximately 42 route miles in Iowa.

Table A.20 below includes a datasheet for DAIR identifying additional details and operating and physical characteristics of the DAIR network in Iowa.

Table A.20: DAIR Datasheet

RAILROAD:	D & I RAILROAD						
Alpha Code:	DAIR						
Operator:	DAIR						
Parent Company:	L.G. Everist						
Contact:	Jack Parliament						
Phone:	(605) 330-6588						
Email:	jdparliament@lgeverist.com						
Company Website:	www.dirailroad.com						
SERVICE AREA							
Counties in Iowa:	Woodbury, Plymouth, Sioux, and Lyon						
Principal Stations in Iowa:	Sioux City, Hawarden						
RAIL TRAFFIC							
Principal Commodities:	Nonmetallic Minerals; Stone, Clay, and Glass Products; Farm Products; and Hazardous Materials						
Annual Carloads in Iowa (2014):	34,291 (DAIR system); 14,452 (in Iowa)						
IOWA ROUTE MILES							
Subdivision or Segment and Limits	**Length**	**Operated**	**Out of Service**	**Owned**	**Leased**	**Trackage Rights**	**Average Number of Trains per day**
Sioux City, Iowa-Iowa / South Dakota state line near North Sioux City, South Dakota	7	7	0	0	0	7 (over BNSF Aberdeen Subdivision)	2-4 (DAIR only)
DAIR Hawarden Subdivision — State of South Dakota Sioux Valley Line (Segments in Iowa between the Iowa / South Dakota state line near Westfield, Iowa, and the Iowa / South Dakota state line near Beloit, Iowa)	34	34	0	0	0	34 (over State of South Dakota owned trackage)	2-4 (DAIR only)
DAIR Beresford Subdivision — State of South Dakota Sioux Valley Line (Segment in Iowa between Hawarden, Iowa-Iowa / South Dakota state line at Hawarden, Iowa)	1	1	0	0	0	1 (over State of South Dakota owned trackage)	0-1 (DAIR only)
Total	42	42	0	0	0	42	
TRACK CHARACTERISTICS (AS NECESSARY BY LINE SEGMENT)							
FRA Track Class:	Class 2 (on the DAIR Hawarden and Beresford subdivisions)						

Operating Speed:	Restricted Speed — RS (20 mph) on the DAIR Hawarden and Beresford subdivisions
Signal System:	None
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions):	• 2.12 GTM DAIR (BNSF Aberdeen Subdivision: Sioux City, Iowa-Iowa / South Dakota state line near North Sioux City, South Dakota) • 2.12 GTM DAIR (DAIR Hawarden Subdivision: Iowa / South Dakota state line near Westfield, Iowa-Hawarden, Iowa) • 1.57 GTM DAIR (DAIR Hawarden Subdivision: Hawarden, Iowa-Iowa / South Dakota state line near Beloit, Iowa) • 0.01 GTM DAIR (DAIR Beresford Subdivision: Hawarden, Iowa-Iowa / South Dakota state line near Hawarden, Iowa)
Weight Limits:	• 286,000 lbs. (DAIR Hawarden Subdivision in Iowa) • 286,000 lbs. (DAIR Beresford Subdivision in Iowa)
Vertical Clearance and Restrictions:	Unknown
FRA Excepted Track:	Unknown

INTERCHANGE POINTS	
Location:	**Railroad:**
Sioux City	BNSF, CN, UP

FACILITIES	
Type:	**Location:**
Classification Yards	Sioux City
Transload Facility	Sioux City, Hawarden
Intermodal Facility	None
Mechanical Facility	Dell Rapids (South Dakota)

BRIDGES	
Number of Bridges on DAIR in Iowa: Unknown	**Number of Bridges in Need of Repair: Unknown**
Number of Bridges in Need of Upgrade to Handle 286K Loads: N/A	**Other Bridge Comments, if applicable: N/A**

PRESENT CAPACITY CONSTRAINTS AND OPERATIONAL BOTTLENECKS	
Location:	**Description:**
Sioux City Terminal Area; Sioux City, Iowa	Operations bottleneck exists where the four railroads in Sioux City (BNSF, CN, DAIR, and UP) intersect at a major at-grade crossing of rail lines where trains operate at slow speeds in a terminal environment. Carload interchange between the carriers can be a challenge, as there are presently no designated interchange locations and many of the carriers must operate into each other's yards to interchange cars.

FUNDED CAPITAL PROJECTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	**Estimated Costs, if known:**
Sioux Valley Line Repair Project (2015-2016): Will replace nine bridges mostly of timber construction on the state of South Dakota owned DAIR Hawarden Subdivision (as of November 2015, five of the nine bridge replacments were complete).	$7.3 million (funded by $5.1 million in grants and loans from the state of South Dakota Railroad Board, a $1.8 million federal grant, $300,00 from DAIR, and a $100,000 grant from the South Dakota Department of Transportation)

FUTURE PLANNED IMPROVEMENTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	**Estimated costs, if known:**

OTHER IMPROVEMENT AND INFRASTRUCTURE NEEDS (NOT YET FUNDED OR PLANNED), INCLUDING REHABILITATION OR CONSTRUCTION OF SPUR TRACKS FOR INCREASED OR RENEWED USE BY RAIL SHIPPERS

Identification and Description:	Estimated costs, if known:
Improvements to operations and carload interchange in the Sioux City Terminal Area; Sioux City, Iowa	N/A
OTHER COMMENTS	
Identification:	**Description:**

Source: DAIR and Iowa DOT

A.4.7 D&W Railroad (DWRV)

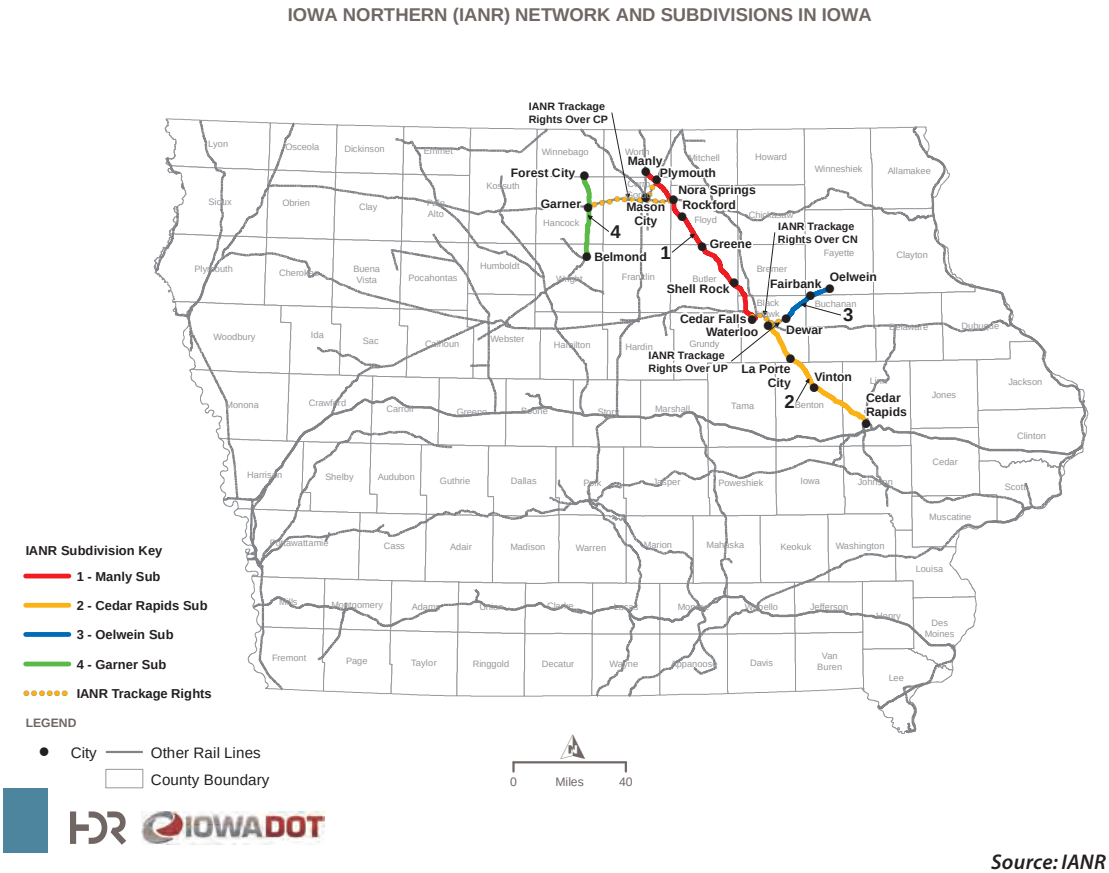
The D&W Railroad (DWRV) was established by TRANSCO Railway Products in 2002 to acquire from UP 19 miles of former Chicago Great Western Railway trackage between Dewar and Oelwein, Iowa, in order to preserve rail service in three Iowa counties. DWRV is based in Chicago, Illinois. DWRV later added 3 miles to its network at Oelwein. TRANSCO remains the parent company of DWRV. IANR operates the 22-mile railroad through an agreement with DWRV and the line between Dewar and Oelwein is designated as the IANR Oelwein Subdivision. Details about the operating and physical characteristics of the DWRV network in Iowa can be found in the IANR section presented below.

A.4.8 Iowa Northern Railway (IANR)

Iowa Northern Railway (IANR), based in Cedar Rapids and Manly, Iowa, is the state's largest Class III railroad and it operates a regional network consisting of approximately 167 miles of railroad it owns, leases, and operates under contract, all in Iowa. IANR was established in 1984 to provide operations over former Chicago, Rock Island & Pacific Railroad trackage and to preserve rail service in seven Iowa counties. That included a principal route of the former CRI&P from Manly, Iowa, to Waterloo and Cedar Rapids, Iowa, and a branch line from Vinton to Dysart, Iowa (this segment was mostly abandoned in 1994). The present IANR management team assumed control of the railroad in 1994. Today, in addition to the principal line segment between Manly and Cedar Rapids (consisting of the Manly and Cedar Rapids subdivisions), IANR has trackage rights over CP and UP to access isolated lines between Belmond and Forest City, Iowa (owned by the North Central Iowa Rail Corridor and operated by IANR as its Garner Subdivision), and between Dewar (Waterloo) and Oelwein, Iowa (owned by DWRV and operated by IANR as its Oelwein Subdivision), respectively.

Figure A.9 below shows IANR's present network and operating subdivisions, which are described in detail later in this section.

Figure A.9: IANR Network and Subdivisions in Iowa



Source: IANR and HDR

Table A.21 below includes a datasheet for IANR identifying additional details and physical and operating characteristics of the IANR network in Iowa.

Table A.21: IANR Datasheet

RAILROAD:	IOWA NORTHERN RAILWAY
Alpha Code:	IANR
Operator:	IANR
Parent Company:	IANR
Contact:	Daniel R. Sabin
Phone:	(319) 297-6000
Email:	no17eng654@aol.com
Company Website:	www.iowanorthern.com
SERVICE AREA	
Counties in Iowa:	Linn, Benton, Black Hawk, Bremer, Buchanan, Fayette, Butler, Floyd, Cerro Gordo, Worth, Wright, Hancock, and Winnebago
Principal Stations in Iowa:	Manly, Waterloo, Cedar Rapids
RAIL TRAFFIC	
Principal Commodities:	Farm products, hazardous commodities, chemical and allied products, food and kindred products, and machinery
Annual Carloads in Iowa (2014):	19,168 carloads originated; 2,318 carloads terminated; and 14,552 carloads of overhead traffic = 36,038 total carloads (IANR system is entirely within Iowa)

IOWA ROUTE MILES							
Subdivision or Segment and Limits	**Length**	**Operated**	**Out of Service**	**Owned**	**Leased**	**Trackage Rights**	**Average Number of Trains per day**
Manly Junction, Iowa-Cedar Falls Junction, Iowa	67	67	0	67	0	0	2 - 4
Cedar Falls Junction, Iowa-Waterloo, Iowa	9	9	0	0	0	09 (On CN Waterloo Subdivision and CN North Waterloo Industrial Lead)	2 - 4
Waterloo, Iowa-Dewar, Iowa	7	7	0	0	0	7 (On UP Waterloo Industrial Lead)	2
Waterloo, Iowa-Cedar Rapids, Iowa	50	50	0	50	0	0	2
Cedar Rapids, Iowa	4	4	0	0	0	4 (On UP Cedar Rapids Industrial Lead — UP North Yard Lead)	2
Dewar, Iowa-Oelwein, Iowa	22	22	0	0	22 (From D&W Railroad [DWRV])	0	2
Plymouth, Iowa-Mason City, Iowa	9	9	0	0	0	9 (On CP Owatonna Subdivision)	0 - 2
Nora Springs, Iowa-Garner, Iowa	31	31	0	0	0	31 (On CP Mason City and Sheldon subdivisions)	0 - 2
Belmond, Iowa-Forest City, Iowa	28	28	0	0	28 (From North Central Iowa Rail Corridor)	0	0 - 2
Total	227	227	0	117	50	60	

TRACK CHARACTERISTICS (AS NECESSARY BY LINE SEGMENT)	
FRA Track Class:	• Class 2 (Manly, Iowa-Cedar Falls Junction, Iowa) • Class 2 (Waterloo, Iowa-Cedar Rapids, Iowa) • Class 1 (Dewar, Iowa-Oelwein, Iowa) • Class 1 (Belmond, Iowa-Forest City, Iowa)

Operating Speed:	• 25 mph (FRA Track Class 2) • 10 mph (FRA Track Class 1)
Signal System:	None
Line Density (2014) in Annual Gross Tons per Mile (in Millions):	• 0.98 GTM (Manly, Iowa-Nora Springs, Iowa) • 2.14 GTM (Nora Springs, Iowa-Cedar Falls Junction, Iowa) • 2.94 GTM (Waterloo, Iowa-Cedar Rapids, Iowa) • 0.58 GTM (Dewar, Iowa-Oelwein, Iowa) • 0.02 GTM (Belmond, Iowa-Forest City, Iowa

Line Density (2014): (From Iowa Railroad Annual Report Schedule 600)

LINE NO.	FROM STATION	M.P.	TO STATION	M.P.	MILES	WEIGHT CARRIED
1	MANLY	224.9	NORA SPRINGS	211.7	13.7	13,510,562
2	BELMOND	48.2	FOREST CITY	75.1	26.9	319,348
3	NORA SPRINGS	211.2	WATERLOO	150.25	60.95	114,496,512
4	DEWAR	332	OELWEIN	351.2	19.2	12,023,102
5	WATERLOO	150.25	CEDAR RAPIDS	100.1	50.15	159,358,986
			SYSTEM TOTALS		**170.9**	**~ 300,158,509**

Weight Limits:	• 286,000 lbs. (Manly, Iowa-Plymouth Junction, Iowa) • 263,000 lbs. (Plymouth Junction, Iowa— Nora Springs Iowa); 286,000 lbs. with special approval from IANR Engineering Department • 286,000 lbs. (Nora Springs Iowa-Cedar Falls Junction, Iowa) • 286,000 lbs. (Waterloo, Iowa-Cedar Rapids, Iowa) • 268,000 lbs. (Dewar, Iowa-Oelwein, Iowa) • 263,000 lbs. (Belmond, Iowa-Forest City, Iowa)
Vertical Clearance and Restrictions:	See operating subdivision tables below
FRA Excepted Track:	See operating subdivision tables below

INTERCHANGE POINTS

Location:	**Railroad:**
Cedar Rapids	CIC, CN, UP
Waterloo	CN, UP
Nora Springs	CP
Plymouth	CP
Manly	UP
Garner	CP (Connection Only — No Interchange Agreement)
Belmond	UP (Connection Only — No Interchange Agreement)

FACILITIES

Type:	**Location:**
Classification Yards	Manly (Manly Yard), Butler (Butler Yard), Waterloo (Bryant Yard),
Transload Facility	Manly Terminal (Manly), Butler (Butler Yard), Bryant Yard (Waterloo)
Intermodal Facility	None
Mechanical Facility	Manly and Waterloo

BRIDGES

Number of Bridges on IANR in Iowa: (IANR = 77) (DWRV = 11)	**Number of Bridges in Need of Repair:** (IANR = 12) (DWRV = 4)

Number of Bridges in Need of Upgrade to Handle 286K Loads: (IANR = 5 - Garner Sub) (DWRV = 0)	**Other Bridge Comments, if applicable:** The 16 bridges noted above reflects current year bridge management plan.
PRESENT CAPACITY CONSTRAINTS AND OPERATIONAL BOTTLENECKS	
Location:	**Description:**
Bryant Yard — Waterloo	Convergence of traffic from three subdivisions results in insufficient classification space.
Nora Springs — CP Interchange Traffic	Increased volumes of IANR/CP interchange traffic results in insufficient track capacity.
FUNDED CAPITAL PROJECTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Ident**ification and Description:**	**Estimated Costs, if known:**
Bridge Deck Replacement Program	$395,500
Butler — North Lead	$286,000
FUTURE PLANNED IMPROVEMENTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	**Estimated costs, if known:**
System Main Track Tie Program	$1.5 Million
La Porte City Main and Industry Track Upgrades	$750,000
OTHER IMPROVEMENT AND INFRASTRUCTURE NEEDS (NOT YET FUNDED OR PLANNED), INCLUDING REHABILITATION OR CONSTRUCTION OF SPUR TRACKS FOR INCREASED OR RENEWED USE BY RAIL SHIPPERS	
Identification and Description:	**Estimated costs, if known:**
N/A	
OTHER COMMENTS	
Identification:	**Description:**
N/A	

Source: IANR and Iowa DOT

Table A.22 below identifies and describes the physical and operating characteristics of IANR's operating subdivisions in Iowa.

Table A.22: IANR Operating Subdivisions in Iowa

SUBDIVISION: MANLY SUBDIVISION	
Division	IANR
Owner	IANR
Operator	IANR
Line Heritage	Chicago, Rock Island & Pacific Railroad (CRI&P)
Subdivision Route / Mileage	Manly Junction, Iowa-Cedar Falls Junction, Iowa; 67.3 miles
FRA Track Class	Class 2
Number of Main Tracks	One main track with passing sidings
Maximum Authorized Speed Freight	25 mph freight
Maximum Authorized Speed Passenger	30 mph passenger
Wayside Signals	None
Method of Operation	• Yard Limits (YL) Manly, Iowa-Reindl, Iowa • Track Warrant Control (TWC) Reindl, Iowa-Cedar Falls Junction, Iowa
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Double-stack capable; Clears Plate H 20'-9" (Manly, Iowa-Cedar Falls Junction, Iowa)
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions)	• 0.98 GTM (Manly-Nora Springs) • 2.14 GTM (Manly-Cedar Falls Junction)

Average Number of Trains per Day	2-4
Commodities Transported	Farm products, hazardous commodities, chemical and allied products, and food and kindred products.
Industrial Spurs	• Bristow Spur: Clarksville, Iowa; approximately 1.7 miles (former Chicago Great Western Railway); 286,000 lbs. maximum allowable gross weight • Cedar Falls Spur: Cedar Falls Junction, Iowa-Cedar Falls, Iowa; approximately 1.8 miles (former Chicago, Rock Island & Pacific Railroad); 286,000 lbs. maximum allowable gross weight
FRA Excepted Track	None

SUBDIVISION: CEDAR RAPIDS SUBDIVISION	
Division	IANR
Owner	IANR
Operator	IANR
Line Heritage	Chicago, Rock Island & Pacific Railroad (CRI&P)
Subdivision Route / Mileage	Waterloo, Iowa-Cedar Rapids, Iowa; 50.2 miles
FRA Track Class	Class 2
Number of Main Tracks	One main track with passing sidings
Maximum Authorized Speed Freight	25 mph freight
Maximum Authorized Speed Passenger	30 mph passenger
Wayside Signals	None
Method of Operation	Track Warrant Control (TWC)
Maximum Allowable Gross Weight	286,000 lbs.
Clearances	Double-stack capable; Clears Plate H 20'-9" (Waterloo, Iowa-Cedar Rapids, Iowa)
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions)	2.94 GTM (Waterloo-Cedar Rapids)
Average Number of Trains per Day	2
Commodities Transported	Farm products, hazardous commodities, chemical and allied products, and food and kindred products.
Industrial Spurs	• Dysart Spur: Vinton, Iowa; approximately 1.2 miles (former Chicago, Rock Island & Pacific Railroad); 286,000 lbs. maximum allowable gross weight • FPL Spur: Palo, Iowa; approximately 2.7 miles; 286,000 lbs. maximum allowable gross weight
FRA Excepted Track	None

SUBDIVISION: OELWEIN SUBDIVISION	
Division	IANR
Owner	D&W Railroad (DWRV)
Operator	IANR
Line Heritage	Chicago Great Western Railway (CGW)
Subdivision Route / Mileage	Dewar, Iowa-Oelwein, Iowa; 22.0 miles
FRA Track Class	Class 1
Number of Main Tracks	One main track with passing sidings
Maximum Authorized Speed Freight	10 mph freight
Maximum Authorized Speed Passenger	N/A

Wayside Signals	None
Method of Operation	• Track Warrant Control (TWC) Dewar, Iowa-Oelwein, Iowa • Yard Limits (YL) at Oelwein, Iowa
Maximum Allowable Gross Weight	268,000 lbs.
Clearances	Clears Plate H 20' 9" Above Top of Rail (Dewar, Iowa-Oelwein, Iowa)
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions)	0.58 GTM (Dewar-Oelwein)
Average Number of Trains per Day	2
Commodities Transported	Farm products, hazardous commodities, chemical and allied products, and food and kindred products.
Industrial Spurs	None
FRA Excepted Track	None

SUBDIVISION: GARNER SUBDIVISION	
Division	IANR
Owner	North Central Iowa Rail Corridor (NCIRC)
Operator	IANR
Line Heritage	Chicago, Rock Island & Pacific Railroad (CRI&P)
Subdivision Route / Mileage	Belmond, Iowa-Forest City, Iowa; 27.9 miles
FRA Track Class	Class 1
Number of Main Tracks	One main track with passing sidings
Maximum Authorized Speed Freight	10 mph freight
Maximum Authorized Speed Passenger	N/A
Wayside Signals	None
Method of Operation	• Track Warrant Control (TWC) Belmond, Iowa-Garner, Iowa • Yard Limits (YL) Garner, Iowa • Track Warrant Control (TWC) Garner, Iowa-Forest City, Iowa
Maximum Allowable Gross Weight	263,000 lbs.
Clearances	21' 0" Above Top of Rail (Belmond, Iowa-Forest City, Iowa)
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions)	0.02 GTM (Belmond-Forest City)
Average Number of Trains per Day	0-2
Commodities Transported	Farm products, hazardous commodities, chemical and allied products, and food and kindred products.
Industrial Spurs	Forest City Spur: Forest City, Iowa; approximately 1.5 miles (former Minneapolis & St. Louis Railway); 263,000 lbs. maximum allowable gross weight
FRA Excepted Track	None

Source: IANR and Iowa DOT

A.4.9 Iowa River Railroad (IARR)

The Iowa River Railroad (IARR) is a Class III railroad based in Steamboat Rock, Iowa. IARR was established in 2006 to operate former Minneapolis & St. Louis Railway trackage acquired from UP between Marshalltown and Steamboat Rock, Iowa, and from the North Central Railway Association (NCRA) between Steamboat Rock and Ackley, Iowa. IARR abandoned the Marshalltown-Steamboat Rock segment in 2012. Today, IARR operates over the 9-mile segment between Steamboat Rock and Ackley and is used primarily to serve an ethanol plant near Steamboat Rock.

Table A.23 below includes a datasheet for IARR identifying additional details and operating and physical characteristics of the IARR network in Iowa.

Table A.23: IARR Datasheet

RAILROAD:	IOWA RIVER RAILROAD
Alpha Code:	IARR
Operator:	IARR
Parent Company:	N/A
Contact:	Renee Schachterle
Phone:	(641) 868-2676
Email:	rschachterle@pinelakecorn.com
Company Website:	N/A
SERVICE AREA	
Counties in Iowa:	Hardin
Principal Stations in Iowa:	Ackley, Steamboat Rock
RAIL TRAFFIC	
Principal Commodities:	Ethanol and farm products
Annual Carloads in Iowa (2014):	1,227 (IARR system is entirely within Iowa)

IOWA ROUTE MILES							
Subdivision or Segment and Limits	**Length**	**Operated**	**Out of Service**	**Owned**	**Leased**	**Trackage Rights**	**Average Number of Trains per day**
Ackley-Steamboat Rock	9	9	0	9	0	0	0-1
Total	9	9	0	9	0	0	

TRACK CHARACTERISTICS (AS NECESSARY BY LINE SEGMENT)	
FRA Track Class:	Class 1
Operating Speed:	10 mph
Signal System:	None
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions):	0.11 GTM
Weight Limits:	265,000 lbs.
Vertical Clearance and Restrictions:	Unknown
FRA Excepted Track:	None

INTERCHANGE POINTS	
Location:	**Railroad:**
Ackley	CN

FACILITIES	
Type:	**Location:**
Classification Yards	None
Transload Facility	None
Intermodal Facility	None
Mechanical Facility	None

BRIDGES

Number of Bridges on IARR in Iowa:	**Number of Bridges in Need of Repair:**
Number of Bridges in Need of Upgrade to Handle 286K Loads:	**Other Bridge Comments, if applicable:**
PRESENT CAPACITY CONSTRAINTS AND OPERATIONAL BOTTLENECKS	
Location:	**Description:**
FUNDED CAPITAL PROJECTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Ident**ification and Description:**	**Estimated Costs, if known:**
FUTURE PLANNED IMPROVEMENTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	**Estimated costs, if known:**
OTHER IMPROVEMENT AND INFRASTRUCTURE NEEDS (NOT YET FUNDED OR PLANNED), INCLUDING REHABILITATION OR CONSTRUCTION OF SPUR TRACKS FOR INCREASED OR RENEWED USE BY RAIL SHIPPERS	
Identification and Description:	**Estimated costs, if known:**
OTHER COMMENTS	
Identification:	**Description:**

Source: IARR and Iowa DOT

A.4.10 Iowa Traction Railway (IATR)

The Iowa Traction Railway (IATR) is a Class III railroad based in Mason City, Iowa, and one of seven railroads owned and operated by short line railroad conglomerate Progressive Rail of Lakeville, Minnesota. IATR traces its history back to the founding of the Mason City & Clear Lake Railway (MC&CL) in 1896, was acquired by Progressive Rail in 2012, and is the only remaining electrified common carrier freight railroad in Iowa. IATR operates over approximately 10.4 miles of mostly former MC&CL trackage between Mason City and Clear Lake, Iowa.

Table A.24 below includes a datasheet for IATR identifying additional details and operating and physical characteristics of the IATR network in Iowa.

Table A.24: IATR Datasheet

RAILROAD:	IOWA TRACTION RAILWAY
Alpha Code:	IATR
Operator:	IATR
Parent Company:	Progressive Rail
Contact:	Michael Johns
Phone:	(612) 791-3255
Email:	mjohns@progressiverail.com
Company Website:	www.progressiverail.com
SERVICE AREA	
Counties in Iowa:	Cerro Gordo
Principal Stations in Iowa:	Mason City and Clear Lake
RAIL TRAFFIC	
Principal Commodities:	Food and kindred products, farm products, scrap materials, biofuels, and utility poles

Annual Carloads in Iowa (2014):	Carloads in 2013: 4,424 (IATR system is entirely within Iowa) Note: Carload data for 2014 unavailable.

IOWA ROUTE MILES

Subdivision or Segment and Limits	Length	Operated	Out of Service	Owned	Leased	Trackage Rights	Average Number of Trains per day
Mason City-Clear Lake	10	10	0	10	0	0	0-1
Total	10	10	0	10	0	0	

TRACK CHARACTERISTICS (AS NECESSARY BY LINE SEGMENT)

FRA Track Class:	Class 1
Operating Speed:	10 mph
Signal System:	None
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions):	0.25 GTM
Weight Limits:	286,000 lbs.
Vertical Clearance and Restrictions:	19' 6" Above Top of Rail
FRA Excepted Track:	Unknown

INTERCHANGE POINTS

Location:	Railroad:
Mason City	CP, UP

FACILITIES

Type:	Location:
Classification Yards	None
Transload Facility	Mason City, Emery
Intermodal Facility	None
Mechanical Facility	Emery

BRIDGES

Number of Bridges on IATR in Iowa:	**Number of Bridges in Need of Repair:**
Number of Bridges in Need of Upgrade to Handle 286K Loads:	**Other Bridge Comments, if applicable:**

PRESENT CAPACITY CONSTRAINTS AND OPERATIONAL BOTTLENECKS

Location:	Description:

FUNDED CAPITAL PROJECTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)

Identification and Description:	Estimated Costs, if known:

FUTURE PLANNED IMPROVEMENTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)

Identification and Description:	Estimated costs, if known:

OTHER IMPROVEMENT AND INFRASTRUCTURE NEEDS (NOT YET FUNDED OR PLANNED), INCLUDING REHABILITATION OR CONSTRUCTION OF SPUR TRACKS FOR INCREASED OR RENEWED USE BY RAIL SHIPPERS

Identification and Description:	Estimated costs, if known:

OTHER COMMENTS

Identification:	Description:

Source: IATR and Iowa DOT

A.4.11 Keokuk Junction Railway (KJRY)

The Keokuk Junction Railway (KJRY) is a Class III railroad based in Peoria, Illinois, and one of several railroads owned and operated by short line conglomerate Pioneer Railcorp. of Peoria, Illinois. KJRY was established in 1981 to operate former Chicago, Rock Island & Pacific Railroad trackage at Keokuk, Iowa, and later expanded with the 1986 acquisition from the Atchison, Topeka & Santa Fe Railway of the former Toledo, Peoria & Western Railroad between Keokuk, Iowa, and La Harpe, Illinois (east of Keokuk, Iowa). Subsequent expansions included trackage acquisition from La Harpe to Peoria and Lomax, Illinois, and trackage rights over the BNSF Railway Chillicothe Subdivision between Lomax, Illinois, and Fort Madison, Iowa. KJRY operates 1 mile in Iowa (a segment of the KJRY Iowa Subdivision at Keokuk) and has 3 miles of trackage rights in Iowa.

Table A.25 below includes a datasheet for KJRY identifying additional details and operating and physical characteristics of the KJRY network in Iowa.

Table A.25: KJRY Datasheet

RAILROAD:	KEOKUK JUNCTION RAILWAY						
Alpha Code:	KJRY						
Operator:	KJRY						
Parent Company:	Pioneer Railcorp						
Contact:	Nathan Johns						
Phone:	(309) 697-1400						
Email:	njohns@pioneer-railcorp.com						
Company Website:	www.pioneer-railcorp.com						
SERVICE AREA							
Counties in Iowa:	Lee						
Principal Stations in Iowa:	Keokuk						
RAIL TRAFFIC							
Principal Commodities:	Food and Kindred Products and Farm Products						
Annual Carloads in Iowa (2014):	6,428 (KJRY system in Iowa and Illinois); 3,112 (in Iowa only)						
IOWA ROUTE MILES							
Subdivision or Segment and Limits	**Length**	**Operated**	**Out of Service**	**Owned**	**Leased**	**Trackage Rights**	**Average Number of Trains per day**
KJRY Iowa Subdivision — Keokuk, Iowa — Iowa/Illinois state line at Keokuk, Iowa	1	1	0	1	0	0	0-1
Iowa / Illinois state line at Fort Madison, Iowa — Fort Madison, Iowa	3	3	0	0	0	3 (over BNSF Chillicothe Subdivision)	0
Total	9	9	0	9	0	0	
TRACK CHARACTERISTICS (AS NECESSARY BY LINE SEGMENT)							
FRA Track Class:	Class 1						
Operating Speed:	10 mph						

Signal System:	None
Current Traffic Density (2014) in Annual Gross Tons per Mile (in Millions):	Under 1.0 GTM
Weight Limits:	263,000 lbs.
Vertical Clearance and Restrictions:	Unknown
FRA Excepted Track:	None

INTERCHANGE POINTS	
Location:	**Railroad:**
Keokuk	BNSF
Fort Madison	UP

FACILITIES	
Type:	**Location:**
Classification Yards	Keokuk
Transload Facility	Keokuk
Intermodal Facility	None
Mechanical Facility	La Harpe (Illinois)

BRIDGES	
Number of Bridges on KJRY in Iowa: 1	**Number of Bridges in Need of Repair:**
Number of Bridges in Need of Upgrade to Handle 286K Loads:	**Other Bridge Comments, if applicable:**

PRESENT CAPACITY CONSTRAINTS AND OPERATIONAL BOTTLENECKS	
Location:	**Description:**
Keokuk	Limited yard space for storage of primary shippers' private railcars

FUNDED CAPITAL PROJECTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	**Estimated Costs, if known:**
KJRY Keokuk Yard Enhancements Phase I — Includes rehabilitation of 4 miles of yard tracks and replacement of one switch.	$350,000

FUTURE PLANNED IMPROVEMENTS (INFRASTRUCTURE AND OTHER IMPROVEMENTS)	
Identification and Description:	**Estimated costs, if known:**
KJRY Keokuk Yard Enhancements Phase II — Includes replacement of four yard switches and a rehabilitation of corresponding yard tracks.	$380,000

OTHER IMPROVEMENT AND INFRASTRUCTURE NEEDS (NOT YET FUNDED OR PLANNED), INCLUDING REHABILITATION OR CONSTRUCTION OF SPUR TRACKS FOR INCREASED OR RENEWED USE BY RAIL SHIPPERS	
Identification and Description:	**Estimated costs, if known:**
Keokuk Transload Facility Enhancements	

OTHER COMMENTS	
Identification:	**Description:**

Source: KJRY and Iowa DOT

A.5 Non-Operating Railroad Owners in Iowa

The following two entities own trackage in Iowa that is part of the state rail network, but are considered non-

operators. Each non-operating railroad owner has established an agreement with an operator to provide rail service. The location of these segments within the Iowa rail network was identified previously in Figure A.8 in Appendix A.4 above. The general physical characteristics for the networks of each non-operating railroad owner are included in the discussion for the designated Class III railroad operator of each segment included earlier in Appendix A.4.

A.5.1 North Central Iowa Rail Corridor (NCIRC)

The North Central Iowa Rail Corridor, LLC (NCIRC), based in Forest City, Iowa, was established as a locally owned entity in 2009 to preserve rail service in three Iowa counties. NCIRC acquired approximately 28 miles of former Chicago, Rock Island & Pacific Railroad trackage between Belmond and Forest City, Iowa, from then-owner UP in 2011. The corridor is today privately owned by a consortium of rail shippers, private citizens, and the IANR. Rail service on NCIRC is provided under contract by IANR and the line between Belmond and Forest City is designated as the IANR Garner Subdivision.

A.5.2 State of South Dakota (SD)

The State of South Dakota (SD) is a non-carrier in Iowa. The Chicago, Milwaukee, St. Paul & Pacific Railroad (CMStP&P) retrenched from much of South Dakota and Iowa in 1980. The state of South Dakota acquired the essential components of the CMStP&P network in South Dakota in stages during 1980-1982 to preserve rail service and sustain local economies. Additional essential rail lines owned by other carriers — notably the Chicago & North Western Railway (C&NW) — were also acquired by the state of South Dakota. This growing network included rail lines with connectivity to Iowa and the Iowa rail network. The state of South Dakota subsequently sold the core network of former CMStP&P lines to BNSF in 2005, but retained ownership of approximately 406 miles of active rail lines and approximately 124 miles of railbanked lines in South Dakota, Iowa, and North Dakota[3].

Segments of state of South Dakota owned trackage that feature some mileage in Iowa include the former CMStP&P line between Elk Point and Canton, South Dakota, via Hawarden, Iowa, and the former C&NW line between Hawarden, Iowa, and Beresford, South Dakota. This cluster is known as the Sioux Valley Line, which presently includes approximately 69 route miles, of which approximately 35 miles are located in Iowa[4]. The Sioux Valley Line is currently owned by the state of South Dakota, leased to the Sioux Valley Regional Railroad Authority (SVRRA), and operated by DAIR.

A.6 Industrial Railroads in Iowa

Industrial railroads exist in Iowa that typically provide intraplant and interplant rail switching service to industrial and manufacturing customers and to coordinate and facilitate carload interchange with Class I, II, or III railroads. These small privately owned switching railroads operate over short segments of private industrial track on private property, and exist at many grain elevators, ethanol plants, and other manufacturing and industrial facilities in Iowa. These operations can be owned and operated by the company they serve or can be operated under a contract agreement with an outside party. Due to their classification, the mileage of privately owned industrial track is not included in route-mile calculations of the Iowa rail network. Specific industrial railroad applications and private track ownership in Iowa are not identified in the Iowa State Rail Plan.

A.7 Major Railroad Yards and Facilities in Iowa

The section identifies the location of known major Class I, II, and III railroad yards and facilities in Iowa, including the following:

3 *Official South Dakota Rail Map; South Dakota Department of Transportation, June 2015*
4 *Ibid*

- **Yard/Terminal** — Locations with yards where railcars are switched, classified, and stored and where trains are built and staged. Iowa's principal rail yards are located throughout the state.
- **Freight Car Repair Facilities** — Locations where railcars used for freight transportation may be repaired in Iowa.
- **Locomotive Repair and Servicing Facilities** — Locations where railroad locomotives may be repaired and/or serviced (which may include fueling) in Iowa.

Class I Railroads

Major freight rail yards and facilities of Class I railroads in Iowa, to the extent known through coordination with the state's railroads, are shown in Table A.26 below.

Table A.26: Iowa Class I Railroads Major Freight Rail Yards and Facilities in Iowa

CITY	YARD/TERMINAL	FREIGHT CAR REPAIR FACILITIES	LOCOMOTIVE REPAIR AND/OR SERVICING FACILITIES
Boone	UP (Boone Yard)		UP
Burlington	BNSF		
Cedar Rapids	• CN (A Yard and B Yard) • UP (Beverly Yard and North Yard)	UP	
Clinton	UP (Clinton Yard)	UP	UP
Council Bluffs	• BNSF • CN • UP (Council Bluffs Yard)	UP	UP
Creston	BNSF (Creston Yard)		
Davenport	CP (Nahant Yard)	CP	CP
Des Moines	• BNSF • NS (Glake Yard) • UP (Short Line Yard, Hull Yard, and Highland Yard)	UP	UP
Dubuque	CN, CP		
Eagle Grove	UP	UP	UP
Fort Dodge	CN, UP		
Fort Madison	BNSF		
Marquette	CP		
Marshalltown	UP		
Mason City	CP, UP	CP, UP	CP, UP
Missouri Valley	UP		
Muscatine	CP		
Omaha, Nebraska (opposite Council Bluffs, Iowa)		BNSF	BNSF
Ottumwa	BNSF, CP		
Sioux City	BNSF, CN, UP	BNSF	BNSF
Tara	CN		
Waterloo	CN (Waterloo Yard)	CN	CN

Source: BNSF, CP, NS, UP, Iowa DOT, and Iowa DOT "Iowa Rail Toolkit," October 2014

Class II and Class III Railroads

Major freight rail yards and facilities of Class II and Class III railroads in Iowa, to the extent known through coordination with the state's railroads, are shown in Table A.27 below.

Table A.27: Iowa Class II and III Railroads Major Freight Rail Yards and Facilities in Iowa

CITY	YARD/TERMINAL	FREIGHT CAR REPAIR FACILITIES	LOCOMOTIVE REPAIR AND/OR SERVICING FACILITIES
Boone	BSV		BSV
Burlington	BJRY	BJRY	BJRY
Butler (Shell Rock)	IANR (Butler Yard)		
Cedar Rapids	CIC (Shops Yard, Smith-Dows / 900 Yard, and other industrial yards)	CIC	CIC
Council Bluffs	IAIS (Council Bluffs Yard)	IAIS	IAIS
Emery (Mason City / Clear Lake)	IATR		IATR
Iowa City	IAIS (Iowa City Yard)		
Keokuk	KJRY		
Manly	IANR (Manly Yard)	IANR	IANR
Newton	IAIS (Newton Yard)		
Sioux City	DAIR		
South Amana	IAIS (South Amana Yard)	IAIS	IAIS
Waterloo	IANR (Bryant Yard)	IANR	IANR

Source: BJRY, CIC, DAIR, IAIS, IANR, IARR, IATR, KJRY, Iowa DOT, and Iowa DOT "Iowa Rail Toolkit," October 2014

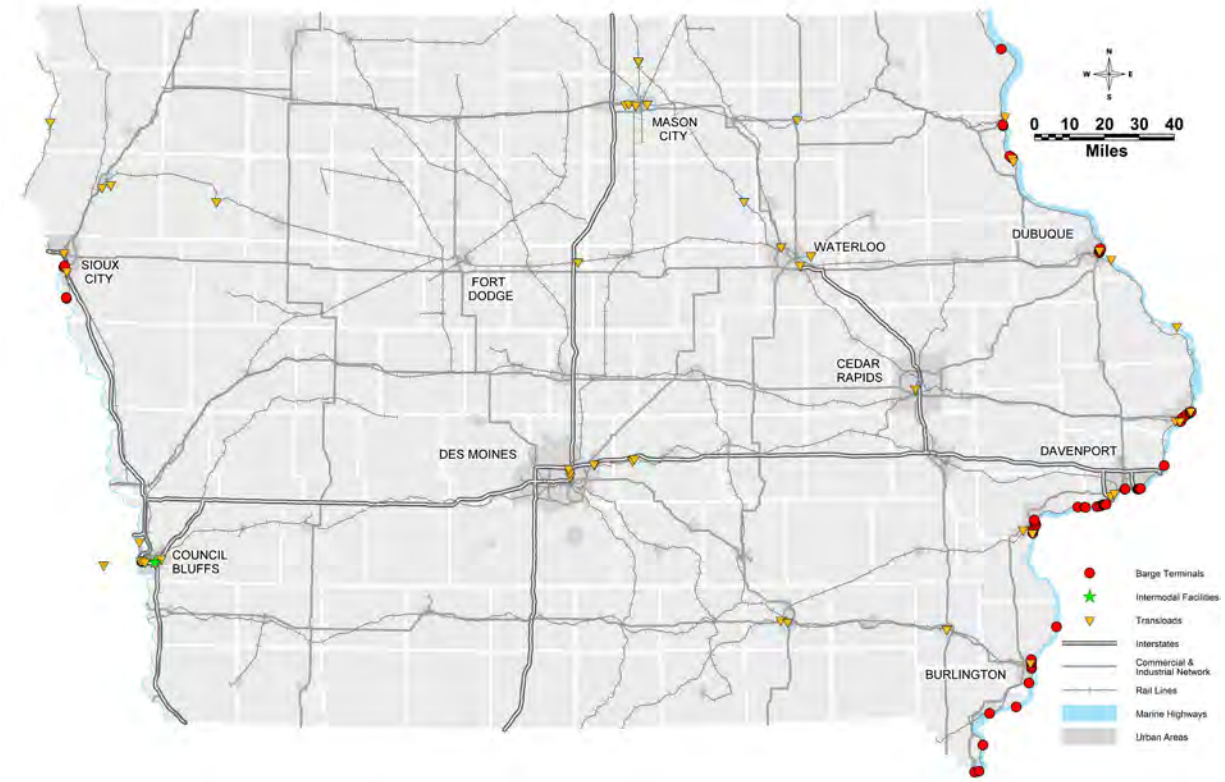
A.8 Multimodal Connections to the Iowa Rail Network

Multimodal connections to the Iowa rail network are the subject of this section and include the following facilities:

- **Rail Intermodal Facility** — Location where the transfer of containers and trailers between road (truck) and rail modes occurs. There is presently one rail intermodal facility in Iowa.
- **Rail Transload Facility** — Other "intermodal" facility location where freight is transferred between two modes of transportation — generally between road (truck) and rail modes. There are several transload facilities on the Iowa rail network. Commonly transloaded commodities include finished and unfinished goods, food and beverage products, lumber, metals, paper, building materials, and other packaged bulk commodities.
- **River Barge Terminal Facility** — Other "intermodal" facility location where freight is transferred between two modes of transportation — rail and barge. Commonly transloaded commodities are bulk commodities, including grains, fertilizer, coal, and sand.

Figure A.10 below shows the distribution of these multimodal connections across the Iowa rail network, which are identified and described by type and location later in this section.

Figure A.10: Map of Multimodal Facilities with Connections to the Iowa Rail Network



Source: Iowa DOT

Rail Intermodal Facilities

Iowa currently has one intermodal freight rail facility — the Council Bluffs Railport — which is located on and operated by Class II railroad Iowa Interstate (IAIS) in Council Bluffs and provides direct access to Class I UP's national network and the IAIS' regional network. This UP/IAIS facility provides an interface between truck and rail transportation modes and handles domestic and international intermodal freight. Iowa's shippers have access to international markets via seaports on the U.S. West Coast. The terminal is capable of handling Container on Flat Car (COFC) and Trailer on Flat Car (TOFC) freight shipments by rail.

According to UP data, the Council Bluffs Railport currently handles domestic and international Container on Flat Car (COFC) shipments. The intermodal service lanes or network corridors over which services are provided and on which shippers at Council Bluffs have access are described below.

Domestic COFC shipments to/from[5]:

- ICTF at Long Beach, California
- Lathrop, California
- Oakland, California
- Seattle, Washington

International COFC shipments to/from international ports on the U.S. West Coast at[6]:

- ICTF at Long Beach, California
- Oakland, California
- Seattle, Washington

5 *Union Pacific Railroad Intermodal Domestic Container Service Matrix; May 25, 2015*
6 *Union Pacific Railroad Intermodal International Service Matrix (Marine Containers Only); June 9, 2015*

IAIS also offers intermodal service between the Council Bluffs Railport and an IAIS intermodal facility in Blue Island (Chicago), Illinois[7].

The location of the Council Bluffs Railport and proximity to local roadways and Interstate Highways 29 and 80 is shown in Figure A.11 below.

Figure A.11: Council Bluffs Railport

Source: Google Earth; October 14, 2014 image

The Council Bluffs Auto Facility, a distribution center where finished automobiles are transferred from railcars to trucks, is located west of the Council Bluffs Railport on the UP at Council Bluffs.

Other UP intermodal facilities located in proximity to Iowa shippers include Chicago (multiple facilities) and Rochelle, Illinois (west of Chicago), and Kansas City, Missouri.

BNSF Railway also currently offers intermodal services to and from the Council Bluffs, Iowa, area via its Omaha Intermodal Facility in Omaha, Nebraska[8]. The facility provides access to BNSF intermodal services east to Chicago, south to Texas, and west to ports on the U.S. West Coast.

Other BNSF intermodal facilities and logistics parks located in close proximity to Iowa shippers include Chicago and Joliet, Illinois; Kansas City, Kansas; and St. Paul, Minnesota.

7 *http://iaisrr.com/ship-with-iais/intermodal/*
8 *http://www.bnsf.com/customers/where-can-i-ship/facility-hours-directions/omaha.html*

Rail Transload Facilities

In its broadest definition, transloading is the process of transferring freight between two modes of transportation; the section refers to instances in which freight is transferred between rail and truck in the state. Transloads located across Iowa — and in close proximity, in the neighboring states of Illinois and Nebraska — provide a variety of services, facilities, and equipment to transfer freight of varying commodity and shipment types. For example, some bulk commodities require augers or blowers to load rail cars, while other commodities use bottom dump and pit facilities to move product from rail to truck or from truck to rail. Some transloads may only consist of a team track, while others may have more extensive facilities and storage capabilities. Some commodities may require warehouse or cross-dock facilities for packaged products. There are many service combinations available at a rail transload location and many logistics service providers are able to customize service for local users in the state based upon specialized freight characteristics. For example, some transloading facilities specialize in refrigerated or frozen goods, which require a cold storage transload and / or warehouse. Additional details about the types and functions of various transloads are described in the Iowa State Freight Plan and the Iowa Rail Toolkit developed by Iowa DOT.

Transload facilities with connections to the Iowa rail network, to the extent known through outreach conducted by Iowa DOT for the companion Iowa State Freight Plan, are identified and described in Table A.28 below.

River Barge Terminal Facilities

Owing to its inland position, Iowa does not have any seaports; however, the state is located on two major inland waterways navigable for trade or commercial transportation purposes. These waterways include the Mississippi River and the Missouri River, which provide nearly 500 miles of navigable waterways serving Iowa and a connection to the Gulf of Mexico[9]. The Mississippi River, which is commercially navigable between Minneapolis, Minnesota, and the Gulf of Mexico near New Orleans, Louisiana, defines Iowa's eastern boundary between New Albin and Keokuk, Iowa. Major Iowa cities on the Mississippi River include Marquette, Dubuque, Clinton, Bettendorf, Davenport, Muscatine, Burlington, Fort Madison, and Keokuk. The Missouri River, which is commercially navigable between Sioux City, Iowa, and its confluence with the Mississippi River at St. Louis, Missouri, defines Iowa's western boundary between Sioux City and Hamburg, Iowa. Major Iowa cities on the Missouri River include Sioux City, Sergeant Bluff, and Council Bluffs. Iowa's freight railroads serve all major Iowa cities identified on the Mississippi and Missouri rivers.

Iowa has 60 river ports or barge terminals — 55 on the Mississippi River and five on the Missouri River[10]. Several of these facilities have multimodal connections to the Iowa rail network, although these connections may or may not be currently active. Some river barge terminals have public access, while others are private terminals. River barge terminals in Iowa with connections to the Iowa rail network, to the extent known through outreach conducted by Iowa DOT during development of the Iowa State Freight Plan, are identified and described in Table A.28 below.

Inventory of Multimodal Facilities with Connections to the Iowa Rail Network

Table A.28 below identifies specific multimodal facilities with connections to the Iowa rail network, to the extent known through outreach undertaken to assemble a state transload inventory by Iowa DOT during development of the Iowa State Freight Plan.

Additional details about the access, services, capabilities, and capacity for each multimodal facility can be found in the Iowa State Freight Plan.

9 *Iowa DOT River Barge Terminal Directory, Revised April 2011*
10 *Ibid*

Table A.28: Inventory of Multimodal Facilities with Connections to the Iowa Rail Network

NAME	CITY	PUBLIC FACILITY	INTERMODAL	TRANSLOAD	CROSS-DOCK	TEAM TRACK	WAREHOUSE	TRUCK TO RAIL	TRUCK TO BARGE	RAIL TO BARGE	KNOWN RAILROAD CONNECTIONS
ADM Terminal Services — Camanche Terminal	Camanche, Iowa	●		●	●		●	●	●	●	BNSF, CP, UP
ADM Terminal Services — Clinton Terminal	Clinton, Iowa	●		●			●	●	●	●	BNSF, CP, UP
BAT Logistics	Council Bluffs, Iowa			●				●			
Big Soo Terminal	Sioux City, Iowa			●				●	●	●	UP
Burlington Junction Railway	Mount Pleasant, Iowa	●		●				●			BJRY, BNSF
Bryant Yard	Waterloo, Iowa	●		●	●		●	●			IANR
Buesing Bulk Transport Inc.	Mason City, Iowa	●									IATR, UP, CP
Burlington Junction Railway	Burlington, Iowa	●		●	●	●	●	●		●	BJRY, BNSF
Burlington Junction Railway	Ottumwa, Iowa	●		●	●	●		●			BJRY, BNSF
Burlington Junction Railway Transload	Le Mars, Iowa	●		●	●	●		●			BJRY, CN
Butler Logistics Park	Shell Rock, Iowa										IANR
CAM II Warehouse	Muscatine, Iowa	●					●	●			CP
Cartersville Elevator Inc.	Mason City, Iowa	●		●				●			CP
Catch-Up Logistics	Davenport, Iowa										CP
Clausen Companies Warehousing	Clinton, Iowa	●		●	●		●	●			UP
Cloverleaf Cold Storage	Cherokee, Iowa	●					●	●			CN
Consolidated Grain and Barge	Clayton, Iowa			●				●		●	CP
Council Bluffs Railport	Council Bluffs, Iowa	●	●					●			IAIS, UP
Cox Contracting Company Inc.	Council Bluffs, Iowa			●				●			
CRANDIC Railroad — Wilson Avenue Team Track	Cedar Rapids, Iowa	●		●	●	●		●			CIC
Des Moines Cold Storage	Des Moines, Iowa										
Gavilon	Dubuque, Iowa			●			●	●	●	●	
Gavilon	Prairie du Chien, Wisconsin (opposite Marquette, Iowa)	●		●				●	●	●	
GCC Dakotah Cement/L.G. Everist	Hawarden, Iowa	●		●				●			DAIR

Geo Transload, LLC	Omaha, Nebraska (opposite Council Bluffs, Iowa)	●		●			●	●			UP
IEI Barge Services	East Dubuque, Illinois (opposite Dubuque, Iowa)	●		●		●	●	●	●	●	CN
Iowa Cold Storage	Altoona, Iowa	●			●			●			IAIS
Iowa Dry Warehouse	Mason City, Iowa	●		●	●	●	●	●			IATR, UP, CP
Iowa Interstate Railroad	Newton, Iowa	●				●		●			IAIS
Iowa Interstate Railroad Intermodal Facility	Council Bluffs, Iowa		●					●			IAIS
Iowa Traction Railroad/ Progressive Rail	Mason City, Iowa			●	●	●		●			IATR
Kinder Morgan/Black Hawk Terminal	Waterloo, Iowa	●		●			●	●			UP
Kinder Morgan/Muscatine	Muscatine, Iowa	●		●			●	●			CP
Kinder Morgan/Omaha Terminal	Omaha, Nebraska	●		●			●	●	●		UP
L.G. Everist	Sioux City, Iowa	●		●				●			DAIR
Le Mars Public Storage, Inc.	Le Mars, Iowa				●		●	●			CN
Luckey Logistics	Des Moines, Iowa			●				●			UP
Luckey Logistics	Newton, Iowa			●				●			IAIS
Manly Terminal	Manly, Iowa			●				●			IANR
Manly Yard	Manly, Iowa	●		●			●	●			IANR
Merchants Distribution Service	Altoona, Iowa	●		●	●		●	●			IAIS
Merchants Distribution Service	Des Moines, Iowa	●		●	●		●	●			UP
Murrays Warehousing	Davenport, Iowa	●		●	●		●				CP
New Hampton Transfer and Storage	New Hampton, Iowa	●		●	●		●	●			CP
Omaha Transloading	Omaha, Nebraska (opposite Council Bluffs, Iowa)	●		●			●	●			BNSF
Pattison Sand Company	Near Garnavillo, Iowa										CP
Quest Liner/Foodliner	Ottumwa, Iowa			●				●			CP
Riverport Railroad, LLC	Savanna, Illinois (opposite Sabula, Iowa)	●		●			●	●			BNSF
Standard Distribution Rail Facility	Cedar Falls, Iowa	●		●	●		●	●			CN
Union Pacific Distribution Services	Council Bluffs, Iowa				●	●					UP
Union Pacific Distribution Services	Camanche, Iowa										UP

Williams Bulk Transfer	Williams, Iowa	●		●	●	●	●	●			CN

Source: Iowa DOT

IOWA DOT

Iowa State Rail Plan Final

Appendix B

Iowa Crude Oil and Biofuels Rail Transportation Study Executive Summary

IOWA DOT

Crude Oil and Biofuels Rail Transportation Study

Final Study: Executive Summary

IOWA DOT

IOWA HOMELAND SECURITY AND EMERGENCY MANAGEMENT

April 2016

Executive Summary

Purpose

The Iowa Crude Oil and Biofuels Rail Transportation Study (the Study) was created through an initiative of the Iowa Department of Transportation's (Iowa DOT) Office of Rail Transportation in cooperation with the Iowa Homeland Security and Emergency Management Department (Iowa HSEMD). These agencies sought to define the characteristics, risks, prevention, and emergency response system status and capabilities for crude oil and biofuels rail transportation in the state, and to measure Iowa's preparedness, prevention, response, and recovery capabilities in the event that a crude oil or biofuel rail transportation incident were to occur.

Key items that the Study sought to accomplish were as follows:

- Inform the state about the likely current and near-term future frequency, routes, volumes, and transportation characteristics of crude oil and biofuels by rail within and through Iowa
- Assess the potential risks to public health and safety, and the potential environmental impacts, created by rail transportation of crude oil and biofuels by rail
- Document current private- and public-sector programs and plans related to rail incident prevention and management, including access to emergency equipment and services
- Identify actions to address potential gaps in prevention, preparedness, response, and recovery methods and make public health and safety and environmental protection recommendations for appropriate federal, state, and local agencies, or the private sector
- Establish internal assignments and timelines to quantify successful implementation of findings and recommendations provided in the Study
- Formulate recommendations to close potential gaps in the following areas that would cause a shortfall in Iowa's capabilities for prevention, preparedness, response, and recovery: rail transportation infrastructure, rail transportation practices, rail transportation regulations and regulatory oversight, emergency response resources, organization, training, and response capabilities, communication systems and methods, and other concerns identified through the Study

Crude Oil and Biofuels in Iowa

This Study examined both crude oil and biofuels rail transportation. Both commodities are at present transported by railroads in large volumes in and through Iowa.

Crude Oil

No crude oil shipments originate and terminate in Iowa at present, nor are likely to in the future; however, substantial quantities of crude oil shipments originating in other states pass through

Iowa en route to their destination. Current principal sources of crude oil passing through Iowa include the Williston Basin (Bakken) Field of North Dakota, synthetic and blended oil extracted from oil sands in Alberta and Saskatchewan, Canada. This crude oil is typically sold for markets in the southern and eastern U.S. Other origins of crude oil moving through Iowa include the Niobrara Field of northeast Colorado and the Uinta Basin of northeast Utah. The crude oil consists of various specific gravities and volatility ranging from heavy bitumen to light crude oil.

Biofuels

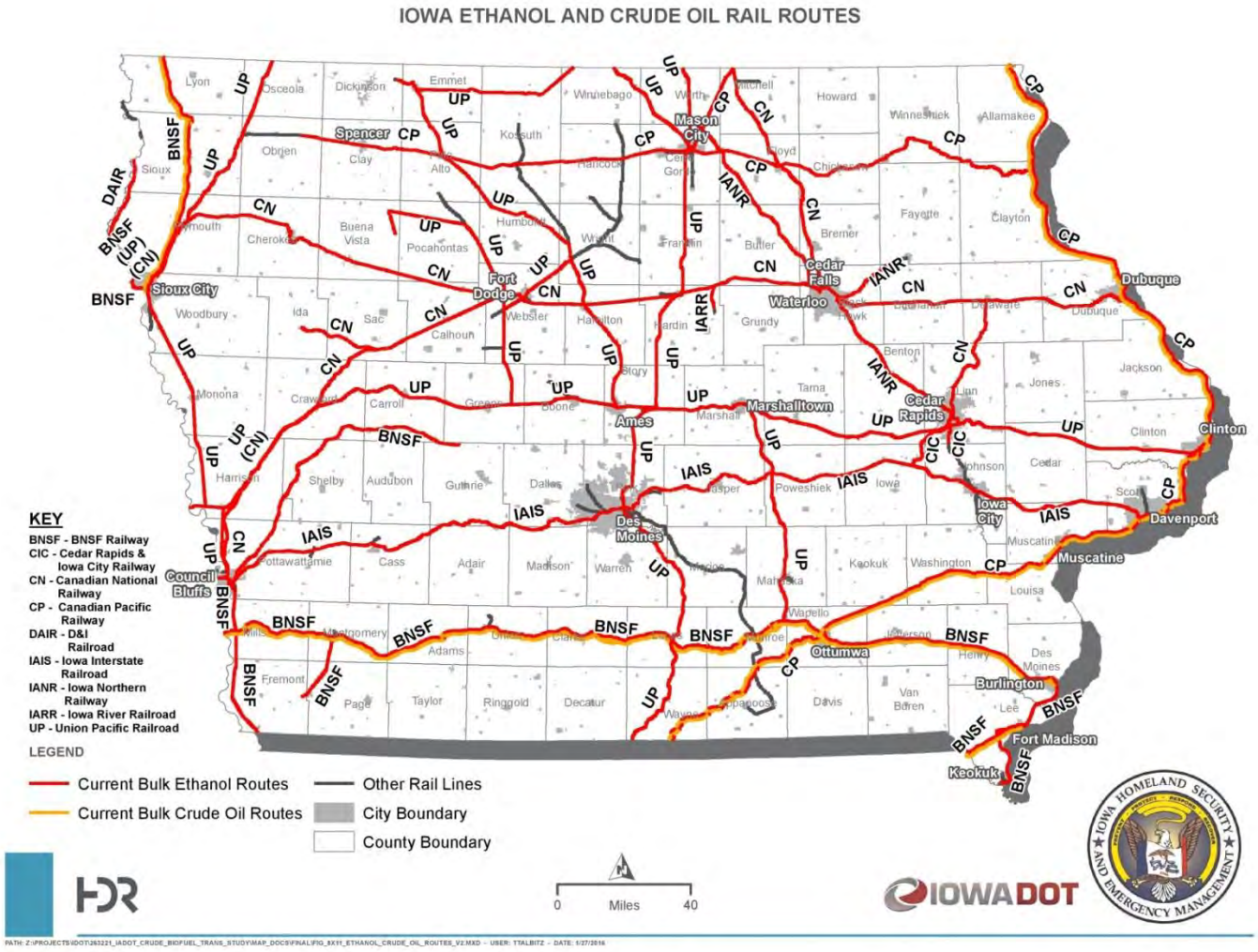
Biofuels transported by rail in and through Iowa consist principally of ethanol and biodiesel. Biodiesel is produced in small quantities relative to ethanol, and is almost exclusively consumed locally to its points of origin, and not moved in large quantities by rail. Ethanol is produced in relatively large quantities. Because ethanol is consumed universally throughout the U.S. but is principally produced only in states with high corn production levels, such as Iowa, and because ethanol is not commercially feasible to be moved by pipeline, ethanol is moved by rail between production and consumption points. The state of Iowa is one of the chief producers of ethanol in the United States. The Iowa Renewable Fuels Association estimated that Iowa produced approximately 26 percent of the nation's ethanol (3.92 billion gallons) in 2015; much of this ethanol moved by rail out of Iowa.[1]

Since only small volumes of biodiesel moves by rail in Iowa, biodiesel transportation practices, risks, and vulnerabilities were not examined in detail in this Study.

Figure ES-A, below, depicts current primary railroad routes of crude oil and ethanol transportation by rail in Iowa.

[1] Renewable Fuels Association, *Where Ethanol is Made*, http://www.ethanolrfa.org/consumers/where-is-ethanol-made/

Figure ES-A. Current Iowa Railroad Routes for Bulk Crude Oil and Ethanol Transportation



Source: HDR, Inc. as of 01/27/2016

Methodology

The Study used desktop research, interviews and surveys, a Stakeholder Steering Committee, and workshops to gather and assess information, develop findings, form recommendations, and design an action plan. Desktop research used public sources to assess current practices, regulations, risks, and vulnerabilities. Interviews and surveys were used to focus on the capabilities, practices, and programs of railroads, ethanol shippers, first responders, and federal, state, and local agencies. The Stakeholder Steering Committee included all Iowa railroads currently engaged in large-scale transportation of crude oil and ethanol by rail, selected Iowa producer/shippers of ethanol, selected Iowa emergency responders, and Iowa DOT and Iowa HSEMD. Workshops were used to present findings, discuss gaps and develop strategies to close gaps, to refine recommendations, and to develop implementable action plans. The Study consultant, HDR, Inc., used mapping to relate rail routes used for crude oil and ethanol to various public and environmental risks and vulnerabilities. The mapping informed a Risk and Vulnerability Analysis (RVA) that quantified risks on a county-by-county basis. Stakeholders participating in interviews and workshops included all Iowa railroads currently engaged in large-scale transportation of crude oil and ethanol by rail, selected Iowa producer/shippers of ethanol, many of Iowa's emergency responders, and the principal federal and state agencies involved in the regulation of crude oil and ethanol transportation safety.

Interviews and surveys were designed to discover information related to railroad and ethanol producer/shipper stakeholders' organization, operating characteristics, transportation routes and volumes, prevention programs, response resources, and recovery plans, with respect to the transportation of crude oil and ethanol by rail. Regulating agencies were interviewed to gain insight into the efficacy of current and possible future regulations and regulatory compliance programs, and to obtain their ideas about how Iowa could improve its Study and reduce its risks and vulnerabilities to crude oil and ethanol rail transportation risks.

The Stakeholder Steering Committee (SSC) was created to guide and inform the Study, and provide opportunities for collaboration and improvement related to findings and recommendations. Two SSC meetings were conducted to review. The first discussed the Study's methodology and initial findings from interviews and research, and the second discussed proposed recommendations and actions.

Risk and Vulnerability Assessment

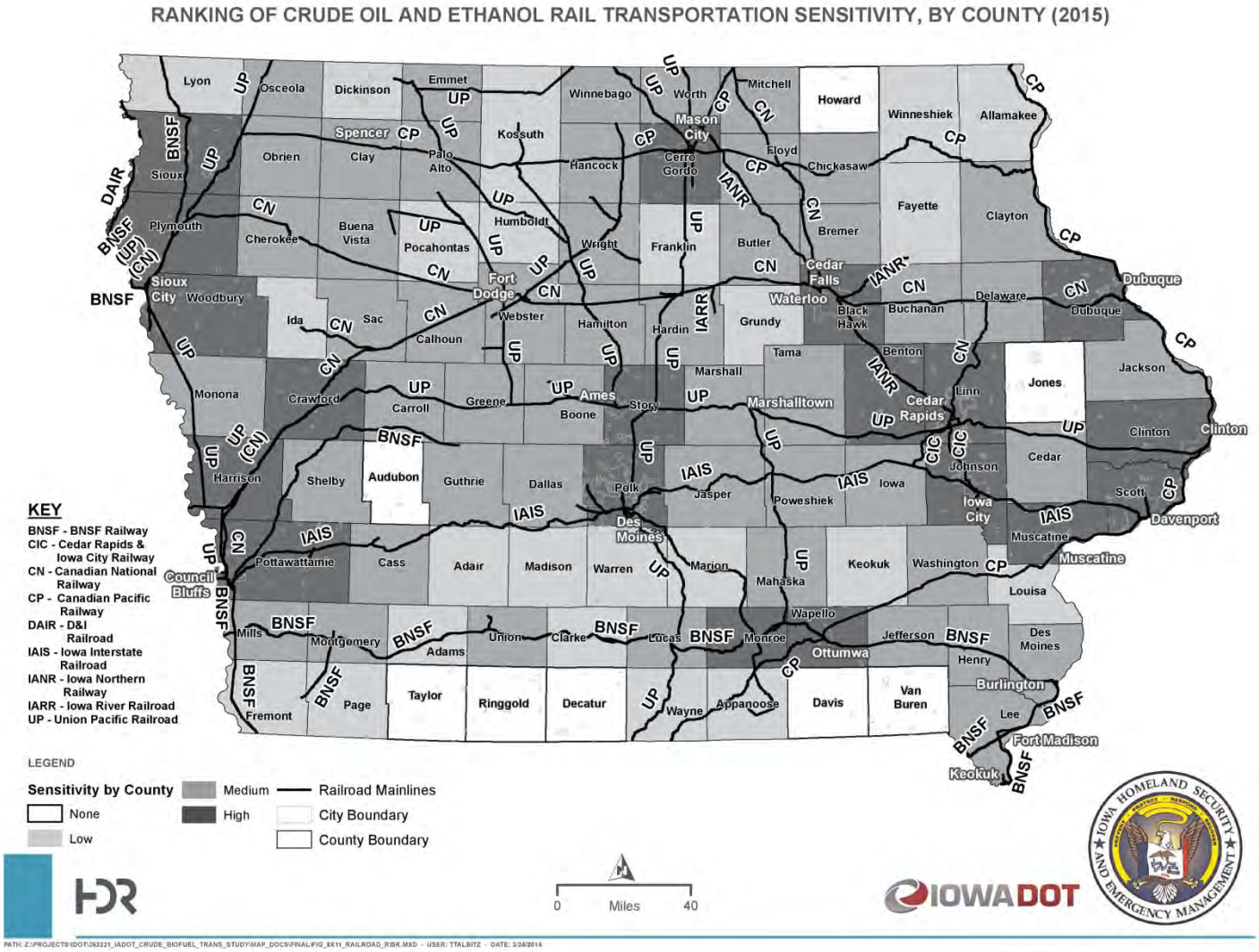
The Risk and Vulnerability Assessment (RVA) considered bulk crude oil and ethanol transportation routes and volumes, recorded previous incidents including main track derailments, spills, and fires, likelihood of future incidents, key public safety and environmental risk factors, and potential impacts from those incidents. These quantities were used to derive an aggregate value for risk.

The RVA was constructed as a building block process on a county-by-county basis, using various factors, such as length of railroad segments carrying crude oil or ethanol within a county, volume of rail traffic, and populations, critical facilities, and environmentally important segments within an identified hazard area. The individual factors were analyzed to determine and overall risk for a given county. The data and information provided for this RVA were the best available data at the time of collection and should be regarded as a snapshot in time, as data changes over time. In addition, all risk assessment results are based on methodology designed

specifically for the State of Iowa using Iowa-specific data, statistics, and conditions. Therefore, the results of the RVA are used to prioritize and develop prevention, protection, mitigation, response, and recovery strategies and resources for Iowa.

Figure ES-B, below, depicts the ranking by Iowa county of bulk crude oil and ethanol rail transportation sensitivity. It is crucial to note that this map does not indicate the likelihood of a rail transportation incident, but aids in reinforcing the intended actions of the RVA.

Figure ES-B. Ranking of Crude Oil and Ethanol Rail Transportation Sensitivity, by County (2015)



Source: HDR, Inc. as of 3/24/2016

Findings, Recommendations, and Improvement Actions

Findings, recommendations, and improvement actions are presented in the following tables: ES-A through ES-D. Recommendations were developed by the Study Team using feedback from stakeholders and Iowa DOT and Iowa HSEMD. Improvement actions were guided by several principles:

1. Cooperation and voluntary action by stakeholders would be the preferred methods, instead of new regulation requiring legislative action at the state or federal level.
2. Proposed improvements would be implementable within the near term, and would be practical and meaningful.
3. Proposed improvements would work within existing commercial, economic, regulatory, and technological parameters.
4. Proposed improvements would be amenable to tracking to enable measurement of improvement and the efficacy of actions.
5. Where feasible, improvements would extend to other hazardous commodities transported by rail in or through Iowa.

Table ES-A. Improvement Implementation Strategy - Prevention

Findings/Challenges	Recommendations	Improvement Actions
Prevention		
1. At-grade crossing collisions, which can lead to derailments and incidents, are a single type of risk that requires coordination among state and local government entities to reduce and eliminate. At-grade grade-crossing signal improvements, separations, or closures can be costly and/or difficult to accomplish.	**1.A:** The state should consider ranking at-grade crossings based on their risk relative to their exposure to crude oil, ethanol, and other high-risk hazardous commodities such as toxic inhalation gases, and the crossing's proximity to the public, and develop an investment program in conjunction with railroads and local and county governments that targets public funds onto higher-risk crossings.	**1.A-1:** Reassess the current at-grade crossing benefit-cost process related to hazardous commodities risk. **1.A-2:** Include hazardous materials as a variable in the crossing consolidation formula. **1.A-3:** Build awareness through education and enforcement via the law enforcement and judiciary communities.
	1.B: The state should consider increasing its funding level for at-grade crossing improvement projects, focusing on high safety benefit-cost ratio improvements such as closure, signage, and signaling.	**1.B-1:** Advocate for state and federal funding for railroad-highway grade crossings.
2. The state has limited knowledge of shipper mechanical and safety inspection practices and execution for ethanol tank cars loaded at ethanol producers in Iowa.	**2.A:** The Iowa DOT should consider hiring an FRA-certified motive power and equipment (MP&E) inspector to visit each Iowa ethanol facility on an annual basis to observe inspection practices and report on training, qualifications, and hand-off of tank cars from the ethanol refinery to the handling railroad. The state should consider coordinating with the FRA to obtain its ethanol refinery inspection reports.	**2.A-1:** Work with the Regional FRA to determine whether a state MP&E inspector is necessary and beneficial. **2.A-2:** If determined necessary, advocate for a new position. **2.A-3:** Discuss with ethanol producers and railroads on how a program could be implemented. **2.A-4:** Increase communication with regional FRA MP&E and hazmat inspectors.
	2.B: The state should evaluate and refine an ethanol refinery tank car mechanical inspection program based on its findings from its first year of inspections and coordination.	**2.B-1:** Collect related information from the FRA and refineries for program evaluation. Include Iowa railroads

Findings/Challenges	Recommendations	Improvement Actions
		during implementation process.
3. Railroad infrastructure investment programs help reduce risk of derailments. Potential impacts of derailments, from the state's perspective, are different in each area based on the built and physical environment adjacent to the rail line, and the capabilities of the local response system. Railroad infrastructure investment programs would help the state to reduce risk of derailments. Public investments could include track, bridges, signaling and grade crossings improvements, or installation of asset-protection devices such as Wheel Impact Load Detectors, Hot-Box Detectors, or Dragging-Equipment Detectors.	**3.A:** The state should consider an annual discussion with Iowa's railroads regarding their infrastructure investment and improvement needs. This discussion would enable private /public partnerships for Iowa to target public investments in derailment prevention to the areas that the state perceives to have higher physical and natural environment risks and lower response capabilities.	**3.A-1:** Set up a regular channel to discuss infrastructure investment and improvement needs.
	3.B: The state should consider developing a "public investment inventory" to share with the railroads that identifies improvements supported with public funds including past and anticipated decision criteria.	**3.B-1:** Annually track infrastructure improvements that have been made through public investment.
	3.C: The state should consider increasing state funding and seeking federal grants to focus on high safety benefit-cost ratio improvements such as removal of rail joints in bridges, bridge approaches, and crossings; and installation of asset-protection devices.	**3.C-1:** Advocate for additional funding and seek grant opportunities.

Table ES-B. Improvement Implementation Strategy - Preparedness

Findings/Challenges	Recommendations	Improvement Actions
Preparedness		
1. Local emergency preparedness activities, including that for rail incidents involving crude oil or ethanol, is the responsibility of local emergency managers/coordinators. Many local emergency coordinators are not full-time employees and/or have multiple responsibilities/assignments often not related to emergency management.	**1.A:** County officials should consider prioritizing the identification and maintenance of revenue to fund a full-time emergency manager in each county, or consider resource sharing among neighboring counties to create a full-time emergency manager position that serves a larger community or region. This increase in emergency management capacity would better serve the local planning, preparedness, and response needs of the local communities.	**1.A-1:** Conduct outreach to the Iowa Emergency Managers Association, League of Cities, and Iowa State Association of Counties to fully inform them of the importance of the roles the Emergency Manager undertakes, and form a study group to identify areas where regional emergency management coverage would be of benefit.
2. Many counties and municipalities plan along "all-hazards lines" in Iowa and generally do not specifically separate out the risks and vulnerabilities related to crude oil and ethanol transportation by rail or related mitigation measures that can reduce risk.	**2.A:** In counties where crude oil and ethanol are transported by rail, local emergency management could profile and analyze rail incident risk and vulnerability to identify and prioritize mitigation measures through their local and regional Incident Management Standard Operating Guidelines/Procedures.	**2.A-1:** Continue to support activities through current and future funding streams. **2.A-2:** Encourage coordination at a systems level for this particular hazard.
3. Many local jurisdictions do not have adequate mapping or information gathering capabilities to identify critical infrastructure or vulnerable populations within a 0.5-mile buffer area of railroad main tracks carrying crude oil or ethanol, or within 0.5 miles of major yards.	**3.A:** Counties and municipalities, with support from the state, should consider identifying, mapping, and assessing the vulnerability of the critical infrastructure and vulnerable populations located within 0.5 mile of all railroad main tracks and major yards to determine areas of highest risk, and then prioritize preparedness, response, or mitigation actions for those areas to reduce the risk and improve response.	**3.A-1:** Develop a better understanding of GIS capabilities at the state and local level. Update the status of GIS capabilities by exploring ways to enhance and support locals. **3.A-2:** Iowa HSEMD could advocate for an additional GIS position to help support these activities. **3.A-3:** Iowa DOT/HSEMD can provide critical infrastructure and vulnerable population data created for this study **3.A-4:** Iowa DOT and HSEMD should determine and maintain an appropriate update cycle for this shareable GIS

Findings/Challenges	Recommendations	Improvement Actions
		data. **3.A-5:** Quadrenially update risk vulnerability assessment by county.
4. Not all local jurisdictions have written evacuation and shelter plans related to a rail incident involving crude oil or ethanol and other hazardous materials transported by rail.	**4.A:** Iowa HSEMD could assist local emergency managers with the development of local evacuation and sheltering plans tailored for rail incidents where public health and safety is at risk.	**4.A-1:** Iowa HSEMD can provide tailored technical assistance and guidance when evacuation and sheltering plans are updated. **4.A-2:** Create public outreach for instructional media related to evacuation and sheltering activities for people in the hazard areas or buffer zones.
	5.A: LEPCs should consider actively seeking attendance by railroads and shippers, and providing them with a statewide schedule of LEPC meetings and agendas.	**5.A-1:** Disseminate LEPC meeting information and dates, with advanced notice, to all interested stakeholders. **5.A-2:** Encourage Iowa DOT District involvement in LEPCs. **5.A-3:** Advocate rail issues in general emergency management venues.
5. Emergency Managers noted that railroads do not typically attend Local Emergency Planning Committee (LEPC) meetings. Some ethanol plants attend, but not all.	**5.B:** Iowa DNR and Iowa HSEMD may consider polling local emergency managers and first responder groups to determine which counties need assistance enhancing LEPC membership, participation, and best practices.	**5.B-1:** Iowa HSEMD can provide an online survey tool to gauge the needs of LEPC management. **5.B-2:** Provide a LEPC best-practices workshop. **5.B-3:** Advocate rail issues in general emergency management venues.
	5.C: Iowa DOT, Iowa DNR, and Iowa HSEMD may consider developing a crude oil and ethanol transportation incident response planning committee to develop guidance and work with LEPCs and emergency management coordinators to develop local incident specific response plans and capabilities.	**5.C-1:** Develop a crude oil and ethanol transportation incident response planning working group from the IERC

Findings/Challenges	Recommendations	Improvement Actions
6. Federal, state, and industry training and readiness information is often difficult to locate and access.	6.A: Iowa HSEMD, state agencies, and association partners should consider development of a comprehensive, one-stop web portal to provide access and guidance to training opportunities, grants, and other preparedness and response resources.	**6.A-1:** Iowa HSEMD will create a consolidated training calendar on their website. **6.A-2:** Iowa HSEMD can internally try to coordinate grant resources and rail training in a more consolidated form.
7. Federally required crude oil traffic notifications from the railroads to the state have too great a range of traffic volume for effective situational awareness and response planning purposes in some areas. The 25 percent range of change in volume is too broad for some local planners to be comfortable about knowing how much crude oil is being transported through their community.	**7.A:** The state should consider requesting of the FRA that it adjust railroad advance crude oil transportation reporting requirements to notify Iowa HSEMD on behalf of the State Emergency Response Commission (SERC) in advance of scheduled shipments, from a 25 percent change in volume to a smaller range of traffic volume (e.g. no more than a 10 train per week range variance or when a 10 percent or greater change in traffic volume is scheduled to occur).	**7.A-1:** Continue to work with the railroads to find satisfactory reporting regimens that work with both the local responders and the railroads.
8. Federally required Bakken oil train traffic notifications are provided by the railroads to the Iowa HSEMD, on behalf of the SERC, then passed on to the LEPC, local emergency management coordinator, Iowa DOT, and other response entities with a need to know as allowed by state and federal law. Some counties do not have LEPCs that meet regularly to receive and act on new information.	**8.A:** Iowa HSEMD, on behalf of the SERC, should continue to work with local LEPC coordinators and emergency management coordinators to ensure the oil train traffic notifications are shared with emergency response partners who would normally be a member of an active LEPC including the fire chief, police chief, and other response operational groups.	**8.A-1:** Iowa HSEMD will continue to notify Iowa LEPCs and emergency managers on the affected routes. **8.A-2:** Iowa HSEMD will continue to notify relevant state partners. **8.A-3:** Iowa HSEMD will assure all emergency managers understand what to expect from the reporting process.
9. Under the standing USDOT Emergency Order, Class I railroads are required to share information on changes to Bakken oil train traffic volume with the SERC. They are not required to share the same	**9.A:** The state should consider working with the USDOT to address the information-sharing gap between Bakken oil, and other oil, ethanol, and other commodities when carried in quantity and identified as high-hazard flammable trains by the FRA and PHMSA, and present similar risks to local communities.	**9.A-1:** Local, state, and railroads should continue to work together to find common ground on these issues.

Findings/Challenges	Recommendations	Improvement Actions
information for ethanol trains or other trains that also operate as High-Hazard Flammable Trains (HHFT), and present a similar hazard to railroad communities across Iowa.	**9.B:** Local emergency managers and first responders should consider requesting hazardous commodity flow information from the railroads so that they have a better understanding of all potential hazardous materials that are transported along the tracks through their jurisdiction.	**9.B-1:** Local, state, and railroads should continue to work together to find common ground on these issues.
10. Local and rail industry information sharing related to exemplary practices for preparedness, response capability, and mutual aid, as well as public sector outreach and rail-specific training opportunities are not equal for all communities across the state.	**10.A:** The state should consider developing a web portal that allows for better information sharing, lessons learned, exemplary practices, and railroad incident training opportunities to be accessible to all local first responders and emergency managers in the state	**10.A-1:** Iowa HSEMD can open discussion with the rail industry to determine ways to improve information sharing.
11. Iowa's railroads do not have similar methods for measuring the effectiveness or accomplishments of their preparedness programs.	**11.A:** To maximize public-private coordination efforts, Iowa should recommend that the state, railroads, TRANSCAER, and other railroad-related organizations report annually on the results of their preparedness programs, using simple metrics such as number of local emergency managers and first responder organizations contacted and offered training and exercises; number of coordination meetings attended; and number of first responders trained and number of exercises held. Iowa could facilitate preparedness through tracking and providing the contact information of all local emergency managers and first responder organizations for each of the Iowa railroads, with respect to each railroad's territory.	**11.A-1:** The state is willing to work with the railroads on tracking and reporting of all preparedness, response, and training efforts as part of the public outreach and education program. **11.A-2:** Iowa HSEMD can provide emergency manager and first responder contact information to the railroads. **11.A-3:** Iowa DOT can provide the railroad contact information to Iowa HSEMD for dissemination to appropriate local authorities. **11.A-4:** Iowa HSEMD and Iowa DOT will work with the railroads to encourage exercises when testing planning assumptions.

Table ES-C. Improvement Implementation Strategy - Response

Findings/Challenges	Recommendations	Improvement Actions
Response		
1. Many local emergency operations plans, annexes, incident response plans, and standard operating procedures/guidelines take an all-hazards approach and do not specifically address rail incidents involving crude oil or ethanol or other flammable liquids.	**1.A:** State departments including Iowa DOT, Iowa HSEMD, and Iowa DNR should consider working with local emergency managers to develop local crude oil, ethanol, and other flammable liquids transportation incident response standard operating procedures or guidelines.	**1.A-1:** Iowa HSEMD will work with local emergency managers and LEPCS to provide technical assistance on their plans.
2. Many local first responders are not trained or equipped to appropriately respond to a large rail incident involving crude oil or ethanol on their own. (It is not the goal, however, to have every responder capable of an active response where scene security and notification is the appropriate response).	**2.A:** The Iowa Fire Service Training Bureau, the Iowa Firefighter's Association, Hazmat Task Force, and the crude oil transportation industry and ethanol transportation industry (including shippers and carriers) should work together to identify, fund, and offer specialized hazardous materials response training to all local, state, and tribal first responders. These partners should consider identifying and providing a mobile, local program of training and exercises that meets the appropriate response level criteria for the level of response anticipated by the local first responders. This response level capability should run from active firefighting response (when adequately trained staff are available) to appropriate geographical and situation stabilization activities in tandem with coordination with specialty response teams sent for support. Some responders may only need training on how to evacuate, shelter, and protect lives, while others may need training to support the regional hazardous materials responders (including foam application and hazardous materials decontamination).	**2.A-1:** Encourage the formation of an IERC crude oil transportation incident response planning working group to coordinate these issues.
	2.B: The state, along with the Hazmat Task Force, Iowa Firefighters Association, and railroads operating in Iowa, may consider assembling a focus group to identify ways to improve training, preparedness, and response capabilities for volunteer emergency responders.	**2.B-1:** Encourage the formation of an IERC crude oil transportation incident response planning working group to coordinate these issues.
3. Local firefighting foam resources in rural areas are not sufficient to fight large-scale rail incidents involving crude oil, ethanol, or other flammable liquids.	**3.A:** Iowa HSEMD, the Hazmat Task Force, and the Fire Service Training Bureau of the Department of Public Safety should consider conducting a study to determine how much firefighting foam should be accessible on a regional basis that can be deployed to a rail incident involving crude oil, ethanol, or other flammable liquids.	**3.A-1:** Iowa HSEMD can take the lead in coordinating the group on this issue. **3.A-2:** Coordinate with the railroads on this issue.

Findings/Challenges	Recommendations	Improvement Actions
	3.B: Iowa HSEMD, the Hazmat Task Force, and the Fire Service Training Bureau of the Department of Public Safety should consider establishing a statewide standard for firefighting foam resources for municipal fire department operations at a crude oil, ethanol, or other flammable liquids spill and assist local fire departments and partner resources with designing a path that brings all responders to the same standard.	**3.B-1:** Iowa HSEMD can take the lead in coordinating the group on this issue. **3.B-2:** Coordinate with the railroads on this issue.
	3.C: Iowa HSEMD, the Hazmat Task Force, and the Fire Service Training Bureau of the Department of Public Safety should consider purchasing and strategically placing firefighting foam and application tools around the state for rapid deployment.	**3.C-1:** Iowa HSEMD can take the lead in coordinating the group on this issue. **3.C-2:** Coordinate with the railroads on this issue.
4. Counties across the state rely on Hazmat teams to provide hazardous materials response capabilities, usually at a subscription fee, and with varied degrees of capability and availability to respond due to distance from the hazmat team's home base.	**4.A:** Iowa HSEMD may consider developing and maintaining a capabilities list of all the regional hazmat teams as a database to maintain situational awareness of their varied response capabilities including: equipment caches, location, team training and certification levels, availability, and procedures for activation, deployment, and mobilization.	**4.A-1:** Iowa HSEMD can take the lead in coordinating the group on this issue. **4.A-2:** Coordinate with the railroads on this issue.
5. No individual state department maintains a centralized, comprehensive database of private crude oil, ethanol, or other flammable liquids incident response equipment, qualified spill response contractors, and related resources.	**5.A:** Iowa HSEMD may consider developing and maintaining a response capabilities list of all the railroads as a database to maintain situational awareness of their varied response capabilities including: equipment caches, location, team training and certification levels, and procedures for activation, deployment, and mobilization.	**5.A-1:** Iowa HSEMD and Iowa DNR will work with the railroads, AAR, and ASLRRA to devise an easy and well-maintained process.
	5.B: Iowa HSEMD should consider working with Iowa DNR to update Iowa DNR's list of private contractors operating in Iowa, and to ensure the list of capabilities, their location, certifications, training, and equipment can then be made available to local emergency managers, first responders, and incident responsible parties.	**5.B-1:** Iowa HSEMD and Iowa DNR will work with the railroads, AAR, and ASLRRA to devise an easy and well-maintained process.
6. Local first responders need real-time electronic access to cargo manifest data for rail shipments.	**6.A:** Railroads, state and local authorities should work together to promote and facilitate, statewide, the use of "AskRail" mobile application and work with first responders to obtain the required training and clearances to access the application.	**6.A-1:** Poll stakeholders to determine obstacles to the use of "AskRail," if any. **6.A-2:** Ask the AAR for plain language summaries of appropriate and inappropriate use of the "AskRail"

Findings/Challenges	Recommendations	Improvement Actions
		application. **6.A-3:** Promote the clarification of the legal concerns related to the access and use of the "AskRail" application.
	6.B: Iowa DOT and Iowa HSEMD should work with the short line railroad association and the AAR to include Class II and Class III railroads in the "AskRail" mobile application.	**6.B-1:** Iowa HSEMD and Iowa DOT should contact AAR and ASLRRA.
7. GIS databases that identify railroad ownership and operators are not completely accurate, particularly in urban areas where trackage is complex. First responders may be delayed in contacting the correct railroad in the event of an incident.	**7.A:** The state should consider updating its railroad GIS databases with accurate information on the railroad responsible for dispatching each line segment, including contact information for that railroad. The state should consider annually furnishing this database to Iowa railroads and request verification of the information.	**7.A-1:** Promote the railroad crossing identifiers (Emergency Notification System signs) that provide the railroad contact information. **7.A-2:** Promote the availability to Iowa DOT's current GIS data. **7.A-3:** Explore the feasibility of adding and improving GIS staffing, capabilities, and data.
8. Railroad notification in the event of an incident is unique to each railroad.	**8.A:** The state should consider meeting with Iowa railroads and discussing methods to simplify and standardize how railroads are contacted and coordinated with during an incident and share that information with local emergency managers.	**8.A-1:** Facilitate an open discussion with railroads on this issue. **8.A-2:** Iowa DOT will continue education and outreach to local responders and dispatch centers on the meaning and use of Emergency Notification System.

Table ES-D. Improvement Implementation Strategy - Recovery

Findings/Challenges	Recommendations	Improvement Actions
Recovery		
1. The railroads methods for recovering from incidents are unique to each railroad. Railroads may have different financial and organizational capability to respond to in incident. The state has low visibility into railroad capabilities.	1.A: The state should consider requesting Iowa railroads to report annually on their recovery program.	**1.A-1:** Work with the railroads to refine the challenge and recommendation, then determine a path forward.

IOWA DOT

Iowa State Rail Plan Final

Appendix C

Economic Impacts

IOWA DOT

Contents

Executive Summary

Rail economic impacts to Iowa are derived from the IMPLAN® economic model with input data and assumptions from freight movement data (via the STB WAYBILL) and passenger rail operations and visitor characteristics. Impacts of rail activities in Iowa emanate from firms providing freight and passenger transport services, industries using such services to trade goods (shippers/receivers), and tourism-related visitors to Iowa via rail. Of these activities, freight-users generate the most significant impacts.

Impacts are calculated and presented by activity (service provision and rail users), type (direct, indirect, induced, and total), and measure (employment, income, value added, output, and tax revenue) for year 2013 to provide a comprehensive perspective on how rail in Iowa impacts the economy:

- ***Employment*** — Economic impacts of rail extend beyond the 3,520 directly employed in the provision of rail transport (both passenger and freight). When the freight and visitor user impact activities and multiplier impacts are included, rail-related employment in Iowa totals 219,380 jobs, which represent 10.8% of the 2.0 million jobs statewide.
- ***Income*** — $13.8 billion earned by these total employees represent 13.6% of Iowa's total labor income.
- ***Value-Added*** — And, the combined value-added impact, $24.2 billion, associated with the rail services and users represent 14.7% of the state's Gross State Product (GSP).

Table C.1: Rail Economic Impacts in Iowa

MEASURE AND TYPE	TRANSPORT SERVICES			TRANSPORT USERS			TOTAL		
	PASS.	FREIGHT	SERVICES	PASS.	FREIGHT	USERS	PASS.	FREIGHT	TOTAL
EMPLOYMENT*									
Direct	20	3,500	3,520	230	66,450	66,680	250	69,960	70,200
Total	40	8,830	8,860	300	210,220	210,510	330	219,040	219,380
INCOME**									
Direct	$1.1	$365.9	$367.0	$4.8	$6,411.3	$6,416.1	$5.9	$6,777.2	$6,783.1
Total	$1.7	$600.6	$602.4	$7.6	$13,214.2	$13,221.8	$9.4	$13,814.8	$13,824.2
VALUE ADDED**									
Direct	$1.9	$1,075.5	$1,077.4	$7.1	$11,196.9	$11,204.0	$9.0	$12,272.4	$12,281.4
Total	$3.0	$1,448.0	$1,451.0	$12.0	$22,705.5	$22,717.6	$15.0	$24,153.6	$24,168.6
OUTPUT**									
Direct	$3.6	$1,725.8	$1,729.4	$13.4	$43,029.3	$43,042.6	$17.0	$44,755.0	$44,772.0
Total	$5.6	$2,428.0	$2,433.6	$22.3	$66,970.4	$66,992.7	$27.9	$69,398.4	$69,426.3
TAX REVENUE**									
Direct	$0.05	$18.3	$18.4	$1.2	$475.0	$476.2	$1.3	$493.3	$494.6
Total	$0.14	$49.5	$49.6	$1.6	$1,325.5	$1,327.1	$1.8	$1,375.0	$1,376.7

Source: CDM Smith, Amtrak, WAYBILL, and IMPLAN

* Employment rounded to nearest ten job-years; totals may not sum due to rounding
** in millions of 2013 dollars

C.1 Introduction

Economic impacts of rail activities in Iowa emanate from firms providing freight and passenger rail services, industries using such services to trade goods (shippers/receivers), and tourism-related visitors to Iowa via rail. Of these activities, freight-users generate the most significant impacts.

The Surface Transportation Board (STB) WAYBILL SAMPLE freight database is used to analyze Iowa rail goods movements. WAYBILL-derived, inbound, outbound, and intrastate commodity volumes and values[1] are applied, together with the IMPLAN® economic model, to determine how commodity movements generate direct economic impacts in Iowa relating to shippers/receivers.

Additionally, visitors to Iowa via rail (spending on accommodations, food and beverages, recreational activities, etc.) and the provision of freight and passenger rail services also yield direct economic impacts.

Indirect impacts associated with suppliers, and induced impacts associated with the re-spending of income, are also quantified. Combined, the direct, indirect, and induced comprise total economic impacts, with each measured in terms of employment, income, value-added (i.e., Gross State Product), output, and taxes. The following sections outline the methodology employed, relevant commodity/input data, and modeling results.

C.2 Methodology, Data Sources, and Analysis Assumptions

The analysis categorically addresses the range of economic impacts directly and tangentially related to rail transportation. The following subsection outlines this methodology, data sources, economic model, and the applied assumptions for freight and passenger movements.

C2.1 Methodology and Terminology

Economic impacts of rail are categorized into two broad activities: transport service providers and transport users. For each activity, three types are quantified: direct, indirect, and induced. And for each type, five measures are derived: jobs (employment), income, value-added, output, and taxes. Activities, types, and measures are defined below.

Activities — Iowa rail-related economic impacts are categorized into service provider and user impacts. Rail transport services would be curtailed in the absence of rail activity (elimination of goods or passenger movements). And, transport user impacts pertain to industries using freight rail to transport goods or the industries supporting visitors to Iowa travelling by rail.

- ***Transport Service Providers*** — Impacts associated with the provision of rail transport (e.g., the rail industry) include a wide range of primarily modal transport activity, but also may include other support administrative operations. Service provider impacts are based on existing transportation industry information in the IMPLAN® model (e.g., "rail transportation" and "scenic and sightseeing transportation"). It reflects freight (e.g., BNSF), passenger (i.e., Amtrak), and scenic railroad operations.
- ***Transport Users*** — Impacts associated with shippers/receivers of freight and the industries that supply goods and services to out-of-state visitors traveling via rail.
  - ***Freight Users*** — Impacts associated with shippers/receivers using freight rail for goods movement (e.g., intermediate and final goods, etc.), excepting the rail industry itself. Rail users have several options available to transport freight and could possibly substitute other modal transport (truck and/or water) if rail services became unavailable. However, the choice to use railroads to ship/receive freight indicates cost and/or logistical advantages, and as such, removal of such advantages would negatively affect rail users.

1 *Freight rail volumes are readily available from the STB WAYBILL database; however, values for the movements are not supplied; as such, values per ton for commodities from the TRANSEARCH® database pertaining to proximate geographies were applied to the STB WAYBILL database for Iowa.*

- ***Visitors*** — Similarly, economic impacts arise in industry sectors that service visitors to Iowa who arrive by passenger rail (i.e., Amtrak) or come for scenic tours. Rail visitors have several transport options and could possibly substitute other modal transport (highway and/or air) if rail services became unavailable. However, the choice to travel via Amtrak indicates cost, convenience and/or amenity advantages, and as such, removal of such advantages would negatively affect rail users and the industries serving them.

Types — Transport services and users each consist of three types (and a combined total):

- ***Direct*** — Impacts from the provision of rail transport (i.e., "transport services"), as well from the firms/industries that use such rail transport services to ship and receive goods or service out-of-state visitors (i.e., "transport users").
- ***Indirect*** — Impacts associated with the suppliers that provide intermediate goods and services to the directly impacted industries.
- ***Induced*** — Impacts associated with the re-spending of earned income from both the direct and indirect industries in the study area[2].
- ***Total*** — Aggregated direct, indirect, and induced types.

Measures — Each type is measured in terms of five economic metrics[3]:

- ***Jobs/Employment*** — Measured in terms of full-time-equivalent (FTE) job-years.
- ***Income*** — Wage/salary earnings paid to the associated jobs.
- ***Value-Added*** — Net additional economic activity (i.e., total output less gross intermediate inputs), synonymous with GRP (gross regional product); includes employee and proprietor income, other income types, taxes, etc., required to produce final goods and services.
- ***Output*** — Total sales value associated with all levels of economic activity (comprised of gross intermediate inputs and value added, combined).
- ***Taxes*** — Various taxes on production and imports (sales, property, excise, etc.), fines, fees, licenses, permits, etc., resulting from business economic activity; and, include all federal, state, and local tax revenues.

C.2.2 Data Sources and Models

For the two impact activities, various data and modeling data are utilized. Reflective of assorted production sectors, freight rail user impacts are typically much greater than those related to transport services, and especially dwarf the visitor-related impacts. Generating comprehensive freight user-related estimates requires converting commodity movement data into direct industry output estimates. This is done by bridging the STB WAYBILL commodity movement data and the IMPLAN® economic model. Passenger-related impacts are derived from IMPLAN®, Amtrak and other visitor-related data.

WAYBILL SAMPLE — Based on traditional Standard Transportation Commodity Classifications (STCC) developed for railroads, and by the Surface Transportation Board (STB), the WAYBILL provides detailed movement data by commodity at the county level. It uses a 2% stratified sample of carload waybills for all domestic rail traffic submitted by carriers that terminate 4,500 or more revenue carloads annually. STCC data were obtained from the WAYBILL at the four-digit level to ascertain the economic impact associated with firms that export locally produced goods, and/or import materials used in the production process (intermediate goods) or sold as finished products (final consumption). Although the WAYBILL database provides freight rail volumes, values for the movements are not supplied; as such, values per ton for commodities from the TRANSEARCH® database pertaining to other geographies were applied to WAYBILL database for Iowa, effectively serving as a proxy estimate for the directional commodity movement values.

IMPLAN® — The IMPLAN® v3 model, produced by the IMPLAN® Group, LLC, is an economic modeling, input-output based, social account matrix software. It is used to estimate the economic impacts to a defined geography (i.e., Iowa) ensuing from expenditures in an industry or commodity[4]. A social account matrix

2 Note that the indirect and induced impact types are often referred to, jointly, as multiplier impacts.
3 Note that all monetary measures are presented in constant 2013 dollar terms (i.e., income, value-added, output, and taxes).
4 Note that all results presented pertain only to one-year static impacts for year 2013 flows (in year 2013 values), and do not provide any dynamic or feedback changes.

reflects the economic interrelationships between the various industries (and commodities), households, and governments in an economy and measures the economic interdependency of each industry on others through impact multipliers. Multipliers are developed within IMPLAN® from regional purchase coefficients, production functions, and socioeconomic data for each of the economic impact variables and are geographically-specific. IMPLAN® data and industry-accounts closely follow the conventions used in the "Input-Output Study of the U.S. Economy" by the U.S. Bureau of Economic Analysis. IMPLAN® is one of the most commonly accepted models used for economic impact analysis and estimation throughout the country.

Additionally, IMPLAN® provides commodity-to-industry production and absorption matrices that enable the quantification, for example, of how inbound commodities are used (absorbed) across Iowa industries in the respective production processes to create final goods and services, or by institutions for final consumption. Further, algorithms developed for this analysis translate commodity (Standard Transportation Commodity Classification, or STCC) data into IMPLAN® industry categories. Such data and translation processes are used to estimate the impacts associated with directional commodity movements.

Combined — The WAYBILL commodity detail (supplemented with proxy values for the directional commodity tonnage movements) is bridged with the IMPLAN® economic model to assess the economic interrelationships underpinning the Iowa economy, and to derive the economic impacts of freight. WAYBILL data provides the requisite commodity detail for translation into detailed economic interrelationships between commodities, industries, and institutions in the economy, made transparent via the IMPLAN® model.

IMPLAN® does not identify commodity tonnage movements (only the underlying commodity to industry structure), and the WAYBILL does not provide the economic interrelationships necessary to determine how the commodity movements interact within the economy. As such, the two sources are combined to derive the freight-related economic impacts to Iowa. Lastly, both the commodity detail and the IMPLAN® model reflect year 2013 activity.

Visitor Data — Expenditures were estimated for out-of-state visitors arriving by Amtrak, based on various sources. Amtrak "Fact Sheets"[5] were used to estimate passenger movements. Travel expenditure data and overall visitor characteristics were estimated via similarly-conducted previous studies, "Amtrak's Economic Contribution"[6], and the Iowa Economic Development Authority (Tourism Office)[7]. Tourist rail services-related data and assumptions (e.g. the Boone and Scenic Valley Railroad in Boone) were estimated from online data in the respective webpages of the tourist rail lines and Consultant interviews of tourist rail operators.

C.2.3 Freight Tonnage and Value

Freight tonnage volumes used in the economic analysis are based on the data and findings presented in Chapter 2. Economically-relevant directional movements include outbound (originating within Iowa, terminating beyond), inbound (originating beyond Iowa, terminating within), and intra (originating and terminating within Iowa). However, through traffic is not directly applicable to freight users based in Iowa, and are thus excluded; albeit, such movements affect on the magnitude of freight transport service providers in Iowa.

For economic analysis, two considerations to the data presented in Chapter 2 were made:

- ***Commodity Detail*** —To translate between WAYBILL commodity categories with those of IMPLAN®, commodity flow data are analyzed from a detailed four-digit STCC code level, whereas the freight flow analysis is aggregated at the two-digit STCC level[8].

5 https://www.amtrak.com/pdf/factsheets/IOWA13.pdf
6 https://www.amtrak.com/ccurl/256/745/Amtrak-Economic-Contribution-Brochure-051915.pdf
7 http://www.traveliowa.com/UserDocs/2015_WC_Survey_Report_2_26_16_FINAL.pdf
8 STCC4 and STCC2 are commodity aggregation designations, with STCC4 reflecting more detailed commodity sub-categorization, whereas STCC2 reflect higher level category subtotals; the freight flow analysis presents STCC2 results for the sake of simplifying and presenting multidimensional results; however, the economic analysis necessitates the greater commodity detail because of the detailed commodity-to-industry economic model structure.

- ***Intrastate Movements*** — Are combined with outbound movements, since both reflect industry production within Iowa.

While the detailed commodity freight flows (i.e., four-digit STCC) are evaluated in the economic impact calculations, the consolidated tons and value movements (i.e., two-digit STCC) are summarized in Table C.2.

Table C.2: Economically-Relevant Freight Movements

STCC2	COMMODITY	TONS		VALUE (IN MILLIONS)		AVERAGE
		AMOUNT	PERCENT	AMOUNT	PERCENT	VALUE/TON
OUTBOUND/INTRA						
28	Chemicals or Allied Prods.	10,280,937	24.3%	$15,019	43.6%	$1,461
20	Food or Kindred Prods.	19,415,563	45.9%	$13,163	38.2%	$678
46	Misc. Mixed Shipments	398,800	0.9%	$2,110	6.1%	$5,290
33	Primary Metal Prods.	981,544	2.3%	$1,431	4.2%	$1,458
35	Machinery	107,236	0.3%	$845	2.4%	$7,875
01	Farm Prods.	4,411,181	10.4%	$754	2.2%	$171
37	Transportation Equipment	258,998	0.6%	$292	0.8%	$1,126
40	Waste or Scrap Materials	804,620	1.9%	$236	0.7%	$294
32	Clay, Concrete, Glass, or Stone	772,904	1.8%	$155	0.4%	$200
29	Petroleum or Coal Prods.	135,368	0.3%	$152	0.4%	$1,121
	Remaining Commodities	4,724,433	11.2%	$315	0.9%	$67
	Total	**42,291,584**	**100.0%**	**$34,471**	**100.0%**	**$815**
INBOUND						
28	Chemicals or Allied Prods.	4,229,255	12.0%	$5,292	40.7%	$1,251
46	Misc. Mixed Shipments	367,000	1.0%	$1,942	14.9%	$5,290
20	Food or Kindred Prods.	2,510,984	7.1%	$1,496	11.5%	$596
33	Primary Metal Prods.	500,324	1.4%	$1,133	8.7%	$2,265
11	Coal	22,363,841	63.3%	$802	6.2%	$36
37	Transportation Equipment	173,128	0.5%	$735	5.7%	$4,247
29	Petroleum or Coal Prods.	387,588	1.1%	$456	3.5%	$1,176
01	Farm Prods.	2,277,752	6.4%	$365	2.8%	$160
26	Pulp, Paper or Allied Prods.	268,040	0.8%	$280	2.2%	$1,046
40	Waste or Scrap Materials	754,940	2.1%	$230	1.8%	$304
	Remaining Commodities	1,509,948	4.3%	$269	2.1%	$178
	Total	**35,342,800**	**100.0%**	**$13,001**	**100.0%**	**$368**

Source: STB WAYBILL 2013 and CDM Smith

Outbound/Intrastate — Combining outbound and intrastate rail movements, 42.3 million tons of freight, valued at $34.5 billion, originates in Iowa. *Chemicals or Allied Products* and *Food and Kindred Products* comprise the majority of originating freight tonnage (70.2%, combined) and value (81.8%). Impacts associated with outbound/intrastate movements are derived by mapping the freight values with the respective industrial production in Iowa from the IMPLAN® model. While *Miscellaneous Mixed Shipments* category is a relatively small tonnage share (0.9%), the relatively high value per ton (mostly containers with a heterogeneous composition of goods) results in the third largest-valued movement originating in Iowa (6.1%). Such undefined commodities are mapped into the economic model by allocating the associated value across the various existing physical goods production within the existing economy.

Inbound — In 2013, 35.4 million economically-relevant tons were moved into Iowa, valued at $13.0 billion. *Coal*, by far the largest commodity by volume at 63.3%, only amounts to 6.2% of the inbound value. In contrast, *Chemicals and Allied Products* comprise 12.0% of the inbound volumes, but 40.7% of the value. In combination with *Miscellaneous Mixed Shipments* (i.e., containerized goods), those two categories comprise more than half of all inbound freight value (55.6%). Inbound commodities are translated into economic impacts by mapping the value of the inbound goods via the absorption of such respective goods into the industry production in Iowa. Non-defined miscellaneous commodities are reallocated to the various existing Iowa industries that absorb physical products into the production process[9].

C. 2.4 Passenger Rail Assumptions

Various data sources used include: Amtrak, tourist rail operator interviews, rail industry journals, annual reports, IMPLAN®, the Iowa Economic Development Authority Tourism Office, the internet, and consultant experience. Data sought included number of passengers (equally split between boardings and alightings), employment, revenues, operating expenses, visitor characteristics (percent of passengers, average expenditures), etc. Such information was used to estimate direct transport-service and transport-user impacts input into the IMPLAN® model.

Passenger Transport — IMPLAN® industry data provides various economic measures associated with the direct provision of rail transport in Iowa (e.g., employment, output, etc.). Unfortunately, such data are not subcategorized by passenger versus freight transport. As such, to estimate the passenger share of direct transport service impacts required evaluation of the Amtrak "Fact Sheets" for Iowa[10] in year 2013, which provide total employment and labor income for Amtrak passenger rail transport service. While such Amtrak data exclude any freight transport activity, it is comparable to the overall industry sector IMPLAN® totals. Consequently, the difference between the IMPLAN® rail transport industry sector totals (i.e., 3,511 jobs) and the estimated direct passenger transport activity impacts (i.e., about 7 Amtrak rail jobs) provides an estimate for direct freight rail provision activity impacts (i.e., 3,504 jobs). In addition to Amtrak service provision employment, employment for the tourist railroads were included, amounting to an additional 13 FTE direct jobs in the scenic transportation and museum industries.

Passenger Visitor Expenditures — Out-of-state visitor expenditures reflect Amtrak and tourist rail passengers arriving in Iowa (obtained from the Amtrak Fact Sheets and tourist rail interviews). Such information, in conjunction with visitor profiles and Consultant experience, is used to estimate the share of rail visitors (i.e., out-of-state) and average visitor spending.

In the case of Amtrak, total annual passenger movements for the six Iowa stations totaled 59,825 in 2013. Since each passenger typically embarks (boards) and disembarks (alights), it is necessary to divide total passenger movements by two to estimate the actual number of Amtrak passengers (29,913). It was estimated that half of the boarding passengers are out-of-state visitors. Assuming an average visit duration of 3.5 days and an estimated visitor expenditure per day of $114, a total Amtrak visitor expenditure to Iowa is estimated at $6.0 million.

In addition to the Amtrak visitors, similar assumptions for the tourism rail lines and museum were based on information directly from the respective operations, other visitor studies, and consultant estimates to yield an out-of-state visitor spending estimate of $8.7 million. Combined, Amtrak and tourism rail visitor spending is estimated at $14.7 million in 2013, as summarized in Table C.3.

9 *Allocated in proportion to the existing economic composition of imported physical products to the region.*
10 *http://www.amtrak.com/pdf/factsheets/IOWA13.pdf*

Table C.3: Passenger Rail Visitor Expenditures

ACTIVITY	INTERCITY	TOURIST						
RR NAME	AMTRAK	BOONE & SCENIC VALLEY	MIDWEST CENTRAL	MIDWEST ELECTRIC	THRESHERS REUNION	UP RR MUSEUM	SUBTOTAL	TOTAL
LOCATION	STATEWIDE	BOONE	MT. PLEASANT	MT. PLEASANT	MT. PLEASANT	COUNCIL BLUFFS		
ANNUAL PASSENGERS								
Boardings	29,913	52,000	14,000	25,000	N/A	N/A	91,000	120,913
Alightings	29,913	52,000	14,000	25,000	N/A	N/A	91,000	120,913
Total Movements	59,825	104,000	28,000	50,000	N/A	N/A	182,000	241,825
VISITORS (OUT-OF-STATE)								
Percent	50%	60%	50%	50%	50%	73%	57%	104,845
Number	14,955	31,200	7,000	12,500	18,750	20,440	89,890	
Expenditures/Day	$114	$114	$88	$88	$88	$88	$97	
Days/Visit	3.5	1.0	1.0	1.0	1.0	1.0	1.0	
Visitor Expenditures	$5,976,885	$3,562,666	$612,500	$1,093,750	$1,640,625	$1,788,500	$8,698,041	$14,674,926

Sources: Amtrak, Iowa Economic Development Authority, Tourism Office, CDM Smith

C.3 Rail Economic Impacts

Rail impacts total 219,380 jobs across Iowa, reflecting the various impact activities (services provision and users) and types (direct plus multipliers). A vast majority of these total employment impacts arise from rail users who move goods via the freight system, with the fractional balance attributable to transport services and visitor impacts.

The ensuing discussion details the composition of the employment impact estimates, as well as the other impact measures (e.g., output, value-added, income, and taxes). Impact types (e.g., direct, indirect, and induced) and measures are first presented for rail transport-services, and then for freight and visitor users.

C.3.1 Transport Service Impacts

Provisioning rail transportation to Iowa yields a direct employment impact of 3,520 jobs, comprised of 20 passenger-related transport jobs and 3,500 freight transport jobs. As reflective of the multiplier impacts, the indirect and induced effects associated with rail operations yield an additional 5,340 jobs (2,450 and 2,890 indirect and induced, respectively) throughout the State. Combined, an estimated 8,860 people owe their jobs, directly or tangentially to the physical movement of freight or passengers by rail. This excludes freight user impacts associated with the shippers/consignees that ship/receive goods (as quantified in the following subsection).

As gleaned from the summary services impacts, presented in Table 4 by activity, measure (output, jobs, etc.) and type (direct, indirect, etc.), the passenger-related transportation service impacts constitute less than 1% of all Iowa rail transport impacts. Summary findings shown in the table indicate that the freight movement is a larger relative contributor to economic activity than the passenger component, which is relatively trivial.

Table C.4: Transport Service Impacts

MEASURE AND TYPE	PASSENGER	FREIGHT	SERVICES TOTAL
EMPLOYMENT*			
Direct	20	3,500	3,520
Indirect	10	2,440	2,450
Induced	10	2,880	2,890

Total	40	8,830	8,860
INCOME**			
Direct	$1.1	$365.9	$367.0
Indirect	$0.4	$129.7	$130.1
Induced	$0.3	$105.0	$105.3
Total	$1.7	$600.6	$602.4
VALUE ADDED**			
Direct	$1.9	$1,075.5	$1,077.4
Indirect	$0.5	$180.9	$181.4
Induced	$0.6	$191.7	$192.2
Total	$3.0	$1,448.0	$1,451.0
OUTPUT**			
Direct	$3.6	$1,725.8	$1,729.4
Indirect	$1.0	$365.6	$366.6
Induced	$1.0	$336.7	$337.6
Total	$5.6	$2,428.0	$2,433.6
TAX REVENUE**			
Direct	$0.05	$18.3	$18.4
Indirect	$0.03	$13.1	$13.2
Induced	$0.05	$18.0	$18.1
Total	$0.14	$49.5	$49.6

Source: CDM Smith, Amtrak, and IMPLAN

* emp. rounded to nearest 10 job-years; totals may not sum due to rounding
** in millions of 2013 dollars

- ***Direct*** — Combining the passenger and freight providers yields a direct impact of 3,520 jobs, earning $367 million in labor income, producing $1.08 billion in value-added activity, which equates to $1.73 billion in economic output, with tax revenues (on direct output) of $18.4 million.
- ***Total*** — Including the Iowa multiplier effects, transport service-related activity impacts total 8,860 jobs, earning $602 million in labor income, producing $1.45 billion in economic value-added, which equates to a total economic output of $2.43 billion, and yields a tax impact of $49.6 million to the State and Federal governments.

C.3.2 Transport User Impacts

Provided below (per Table C.5) are the impacts to Iowa from rail users, including passenger and freight activities.

- Passenger-related activities reflect expenditures within the region by out-of-state visitors, based on Amtrak and tourist rail related passenger movements and assumptions regarding visitors (versus residents), average length of stay, average visitor expenditure per day, and an allocation to various expenditure categories (e.g., retail purchases, ground transportation, entertainment and recreation, lodging, and food purchases).
- Freight-related activities reflect the extent to which inbound goods via rail are absorbed into the existing production processes as intermediates into the final production of saleable goods and services, and how outbound/intrastate goods via rail are produced by the various existing industries in the region.

A compositional breakdown of the directional-related freight user impacts is also provided in Table C.5. Combining passenger and freight users yields the following combined impacts:

- ***Direct*** — Passenger and freight users, combined, yields a direct impact of 66,680 jobs, earning $6.4 billion in labor income, producing $11.2 billion in value-added activity, which equates to $43.2 billion in economic output; with tax revenues (on direct output) equating to $0.5 billion.
- ***Total*** — Including the multipliers, transport user-related activity impacts total 210,510 jobs, earning $13.2 billion in labor income, producing $22.7 billion in economic value-added, which equates to a total economic output of $67.0 billion, and yields a tax impact of $1.3 billion to the State and Federal governments.

Table C.5: Transport User Impacts

MEASURE AND TYPE	PASSENGER	FREIGHT			USERS TOTAL
		OUT/INTRA	INBOUND	SUBTOTAL	
EMPLOYMENT*					
Direct	230	24,490	41,960	66,450	66,680
Indirect	30	56,310	24,080	80,390	80,420
Induced	40	39,850	23,530	63,370	63,410
Total	300	120,870	89,350	210,220	210,510
INCOME**					
Direct	$4.8	$3,626.5	$2,784.8	$6,411.3	$6,416.1
Indirect	$1.5	$3,249.9	$1,249.9	$4,499.8	$4,501.2
Induced	$1.3	$1,447.8	$855.4	$2,303.1	$2,304.5
Total	$7.6	$8,313.0	$4,901.3	$13,214.2	$13,221.8
VALUE ADDED**					
Direct	$7.1	$6,426.7	$4,770.2	$11,196.9	$11,204.0
Indirect	$2.5	$5,267.0	$2,039.8	$7,306.8	$7,309.3
Induced	$2.4	$2,641.1	$1,560.7	$4,201.8	$4,204.3
Total	$12.0	$14,332.8	$8,372.7	$22,705.5	$22,717.6
OUTPUT**					
Direct	$13.4	$28,872.7	$14,156.6	$43,029.3	$43,042.6
Indirect	$4.6	$12,199.5	$4,359.3	$16,558.8	$16,563.4
Induced	$4.3	$4,640.4	$2,741.9	$7,382.4	$7,386.6
Total	$22.3	$45,696.4	$21,274.0	$66,970.4	$66,992.7
TAX REVENUE**					
Direct	$1.2	$163.3	$311.7	$475.0	$476.2
Indirect	$0.2	$302.9	$151.8	$454.8	$454.9
Induced	$0.2	$248.8	$147.0	$395.7	$396.0
Total	$1.6	$727.2	$598.4	$1,325.5	$1,327.1

Source: CDM Smith, Amtrak, WAYBILL, and IMPLAN

* employment rounded to nearest 10 job-years; totals may not sum due to rounding
** in millions of 2013 dollars

C.3.2.1 Visitor Impacts

As per Table C.5, the passenger-related rail user impacts are dwarfed by the freight user impacts, which is intuitive, considering the volumes on each respective rail purpose. The impact differential is a function of the relative volumes and the value carried. In addition, the passenger-related user impacts reflect spending in service industries. Conversely, the freight-related user impacts are dispersed throughout various industries in the economy, including those almost entirely rail dependent. As such, the narrowly-focused passenger user-related impacts are overshadowed by the more broadly-encompassing freight-related impacts.

- ***Direct*** — Passengers and the tourism-related spending yield a direct impact of 230 jobs, earning $4.8 million in labor income, producing $7.1 million in value-added activity, which equates to $13.4 million in economic output, with tax revenues (on direct output) of $1.2 million.
- ***Total*** — Including the multipliers, passenger-related user activity impacts a total of 300 jobs, earning $7.6 million in labor income, producing $12.0 million in economic value-added, which equates to a total economic output of $22.3 million, and yields a tax impact of $1.6 million to the State and Federal governments.

C.3.2.2 Freight User Impacts

In addition to the transport-service impacts detailed above, many consignees and shippers heavily rely on rail service to receive and/or ship freight; in doing so, they generate significant impacts. While these firms/industries are not entirely dependent on rail for shipping freight (as alternative modes are available, such as trucking), it is hard to envision continued operations without such access. In fact, rail access is often instrumental in major manufacturing business location decisions.

If railroads did not accommodate demand, consignees and shippers could use other modes (i.e., truck, water, air, etc.) to transport freight. However, the use of other modes would likely entail higher transport costs (due to longer transport distances, price, logistics, etc.) and could increase overall demand (and resulting handling costs) for all users of other modes (both the diverted rail users as well as current users). The long-term result would be a migration of industry away from Iowa to other locations with relatively better rail accessibility and better modal options/mix.

The following analysis identifies the economic impacts associated with industries in Iowa that rely on freight rail transport. To estimate such impacts associated with rail tonnage movements requires an understanding of how the various inbound and outbound/intrastate commodities are used or produced by various industries to generate output, income, and employment. To do so, the IMPLAN® commodity-to-industry matrices and other algorithms were applied to estimate direct impact measures. Indirect and induced multipliers were then applied to the direct impact estimates to derive total economic impacts.

Outbound/Intrastate — 42.3 million tons of freight originating in Iowa is either shipped via rail out-of-state (35.4 million tons) or internally (6.9 million tons). Combined, rail freight originating in Iowa is valued at $34.5 billion (see Table 2), and generates an estimated 120,870 total jobs (Table 5).

Inbound — 35.3 million tons of inbound freight originating beyond Iowa, valued at $13.0 million (Table 2), are used by Iowa industries and institutions to generate 89,350 total jobs (Table 5). Inbound freight user impacts comprise final demand and intermediate demand. Final demand goods are distributed via wholesale or retail outlets, or through direct sales, with economic impacts stemming from the trade margins associated with the transfer of goods from suppliers to end-users. Intermediately demanded physical commodities imported via rail are used/absorbed by Iowa industries in their production processes based on relative commodity absorption patterns.

Freight User Directional Overlap — Impact overlap issues arose between outbound/intra and inbound commodity conversion to economic impacts[11]. To avoid double-counting impacts, such potential overlaps were identified at an aggregate level and subtracted-out of the analysis to ensure conservative estimates. Such potential overlaps comprise between 12% and 23% of the total unadjusted freight user impacts, depending on the impact measure and type.

- ***Direct*** — Combining the directional components of freight users (and reflecting removal of the potential overlap) yields a direct subtotal impact of 66,450 jobs, earning $6.4 billion in labor income, producing $11.2

11 As an example, when commodities, such as seed, are imported by a grain producer, the user impacts quantified allocate a share of the inbound seed to the grain industry and then estimate the industry-associated output. Potential overlap arises when the grain is subsequently transported outbound by rail, since impacts are also estimated for outbound rail movements. So in effect, the output associated with the grain industry would be counted twice: once associated with the inbound movement of seed and fertilizer, and second with the outbound movement of grain.

billion in value-added activity, which equates to $43.0 billion in economic output, with tax revenues (on direct output) of $0.5 billion.
- ***Total*** — Including the multipliers, freight user activity impacts total 210,220 jobs, earning $13.2 billion in labor income, producing $22.7 billion in economic value-added, which equates to a total economic output of $67.0 billion, and yields a tax impact of $1.3 billion.

C.3.3 Total Rail Activity Impacts

Rail service is essential to Iowa's economy. While the basic provision of rail service generates a modest 3,520 direct jobs (8,860 including multipliers), rail users generate 66,680 direct jobs, a significant majority relating to freight users (compared with passengers). Impacts to Iowa by rail activity (transport services and users, differentiated by passenger and freight rail purposes), by impact measure (output, employment, labor income, value-added, and taxes), and by type (direct, indirect, induced, and total) are summarized below in Table C.6.

- ***Direct*** — Combining the various rail-related activities yields a direct impact of 70,200 jobs, earning $6.8 billion in labor income, producing $12.3 billion in value-added activity, which equates to $44.8 billion in economic output, with tax revenues (on direct output) of $0.5 billion.
- ***Total*** — Including the multipliers, the various rail-related activities total 219,380 jobs, earning $13.8 billion in labor income, producing $24.2 billion in economic value-added, which equates to a total economic output of $69.4 billion, and yields a tax impact of $1.4 billion.

Table C.6: Rail Impacts, 2013

MEASURE AND TYPE	TRANSPORT SERVICES			TRANSPORT USERS			TOTAL		
	PASS.	FREIGHT	SERVICES	PASS.	FREIGHT	USERS	PASS.	FREIGHT	TOTAL
EMPLOYMENT*									
Direct	20	3,500	3,520	230	66,450	66,680	250	69,960	70,200
Total	40	8,830	8,860	300	210,220	210,510	330	219,040	219,380
INCOME**									
Direct	$1.1	$365.9	$367.0	$4.8	$6,411.3	$6,416.1	$5.9	$6,777.2	$6,783.1
Total	$1.7	$600.6	$602.4	$7.6	$13,214.2	$13,221.8	$9.4	$13,814.8	$13,824.2
VALUE ADDED**									
Direct	$1.9	$1,075.5	$1,077.4	$7.1	$11,196.9	$11,204.0	$9.0	$12,272.4	$12,281.4
Total	$3.0	$1,448.0	$1,451.0	$12.0	$22,705.5	$22,717.6	$15.0	$24,153.6	$24,168.6
OUTPUT**									
Direct	$3.6	$1,725.8	$1,729.4	$13.4	$43,029.3	$43,042.6	$17.0	$44,755.0	$44,772.0
Total	$5.6	$2,428.0	$2,433.6	$22.3	$66,970.4	$66,992.7	$27.9	$69,398.4	$69,426.3
TAX REVENUE**									
Direct	$0.05	$18.3	$18.4	$1.2	$475.0	$476.2	$1.3	$493.3	$494.6
Total	$0.14	$49.5	$49.6	$1.6	$1,325.5	$1,327.1	$1.8	$1,375.0	$1,376.7

Source: CDM Smith, Amtrak, WAYBILL, and IMPLAN

* Employment rounded to nearest ten job-years; totals may not sum due to rounding
** in millions of 2013 dollars

Impacts as Percentage of Economy — It is important to contextualize the preceding economic impact estimates, as it is difficult to visualize millions of jobs and billions of dollars, etc. As such, the economic impacts can be compared with the existing economic composition of Iowa in 2013, by the same economic measures as the presented economic impacts, per Table C.7.

Table C.7: Iowa Economic Measures, 2013

MEASURE	VALUE
Employment	2,031,434
Income*	$101,512
Value Added*	$164,460
Output*	$356,288
Tax Revenue*	$9,449

Source: IMPLAN

* in millions of 2013 dollars

Total economic impacts related to rail movements in Iowa range between 10.8% (employment) to 19.5% (economic output) of the statewide economy, depending on measure, as seen in Table C.8. Again, the largest relative contribution to the statewide economy from rail pertains to the freight users, with the transport services and passenger-related impacts a mere fraction of freight.

Table C.8: Impacts as Percentage of Iowa Economy

MEASURE AND TYPE	TRANSPORT SERVICES			TRANSPORT USERS			TOTAL		
	PASS.	FREIGHT	SERVICES	PASS.	FREIGHT	USERS	PASS.	FREIGHT	TOTAL
EMPLOYMENT									
Direct	0.001%	0.2%	0.2%	0.011%	3.3%	3.3%	0.012%	3.4%	3.5%
Indirect	0.000%	0.1%	0.1%	0.002%	4.0%	4.0%	0.002%	4.1%	4.1%
Induced	0.000%	0.1%	0.1%	0.002%	3.1%	3.1%	0.002%	3.3%	3.3%
Total	0.002%	0.4%	0.4%	0.015%	10.3%	10.4%	0.016%	10.8%	10.8%
INCOME									
Direct	0.001%	0.4%	0.4%	0.005%	6.3%	6.3%	0.006%	6.7%	6.7%
Indirect	0.000%	0.1%	0.1%	0.001%	4.4%	4.4%	0.002%	4.6%	4.6%
Induced	0.000%	0.1%	0.1%	0.001%	2.3%	2.3%	0.002%	2.4%	2.4%
Total	0.002%	0.6%	0.6%	0.008%	13.0%	13.0%	0.009%	13.6%	13.6%
VALUE ADDED									
Direct	0.001%	0.7%	0.7%	0.004%	6.8%	6.8%	0.005%	7.5%	7.5%
Indirect	0.000%	0.1%	0.1%	0.002%	4.4%	4.4%	0.002%	4.6%	4.6%
Induced	0.000%	0.1%	0.1%	0.001%	2.6%	2.6%	0.002%	2.7%	2.7%
Total	0.002%	0.9%	0.9%	0.007%	13.8%	13.8%	0.009%	14.7%	14.7%
OUTPUT									
Direct	0.001%	0.5%	0.5%	0.004%	12.1%	12.1%	0.005%	12.6%	12.6%
Indirect	0.000%	0.1%	0.1%	0.001%	4.6%	4.6%	0.002%	4.8%	4.8%
Induced	0.000%	0.1%	0.1%	0.001%	2.1%	2.1%	0.001%	2.2%	2.2%
Total	0.002%	0.7%	0.7%	0.006%	18.8%	18.8%	0.008%	19.5%	19.5%
TAX REVENUE									
Direct	0.001%	0.2%	0.2%	0.013%	5.0%	5.0%	0.013%	5.2%	5.2%
Indirect	0.000%	0.1%	0.1%	0.002%	4.8%	4.8%	0.002%	5.0%	5.0%
Induced	0.001%	0.2%	0.2%	0.002%	4.2%	4.2%	0.003%	4.4%	4.4%
Total	0.001%	0.5%	0.5%	0.017%	14.0%	14.0%	0.019%	14.6%	14.6%

Source: CDM Smith, Amtrak, WAYBILL, and IMPLAN

Employment by Industry — In Table C.9 and Figure C.1, the employment impacts to Iowa from the combined transport services and user-related impacts are presented by industry (according to the North American Industry Classification System, or NAICS, at the two-digit industry aggregation level).

More than 50% of the total (i.e., direct and multiplier) 219,380 employment impacts stemming from rail are concentrated within the top five NAICS-defined industry sectors: *Manufacturing, Retail Trade, Forestry, Fishing, and Hunting, Health and Social Services, and, Transportation and Warehousing Services*. Direct *Manufacturing* employment (38,580) is a noted portion of the impacts, and the *Manufacturing* industry subcategories are thus detailed further in Figure C.2. As depicted, the largest *Manufacturing* subsector impacts pertain to *Food Product*s and *Chemical Manufacturing*. The finding is intuitive, given the large movements of food and ethanol products.

In contrast to *Manufacturing*, many of the other top industries impacts by rail are predominately done via indirect and induced-related impacts; that is, those industries supplying materials to the *Manufacturing* and other industries, and via the re-spending of income earned by the directly and indirectly affected employee base. Also notably, *Health and Social Services* employment impacts attributable to rail total 17,578, of which 84% (14,852) reflect induced impacts. This illustrates how the respending of direct and indirect income circulates through the economy.

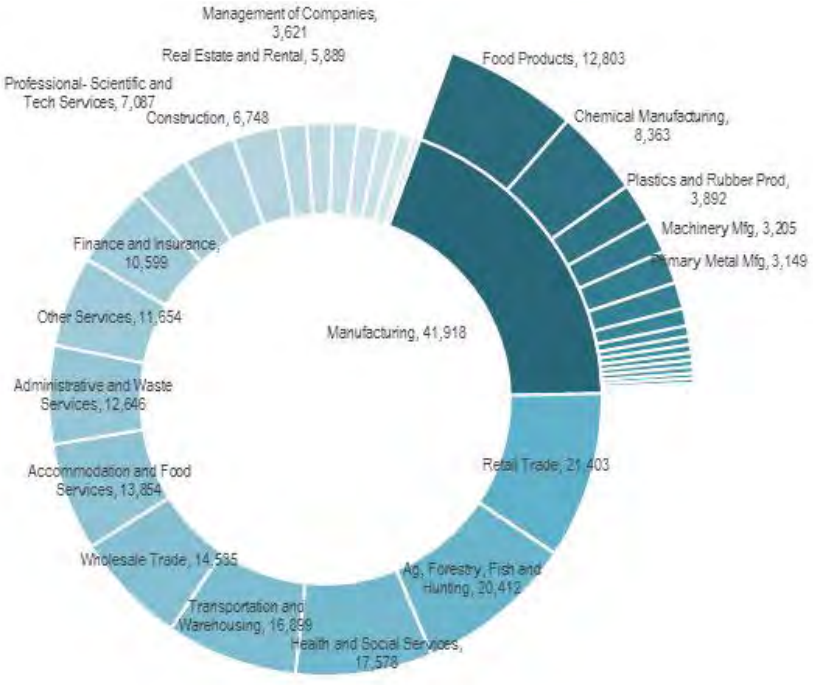
Table 9: Rail Employment Impacts by Industry

INDUSTRY	DIRECT	INDIRECT	INDUCED	TOTAL
31-33 Manufacturing	38,580	2,715	622	41,918
44-45 Retail Trade	4,572	5,322	11,509	21,403
11 Ag, Forestry, Fish and Hunting	5,944	14,282	186	20,412
62 Health and Social Services	2,715	11	14,852	17,578
48-49 Transportation and Warehousing	4,929	10,575	1,395	16,899
42 Wholesale Trade	528	12,324	1,683	14,535
72 Accommodation and Food Services	3,059	2,127	8,669	13,854
56 Administrative and Waste Services	1,211	8,513	2,923	12,646
81 Other Services	1,513	2,823	7,317	11,654
52 Finance and Insurance	84	5,588	4,927	10,599
54 Professional- Scientific and Tech Services	443	4,616	2,028	7,087
23 Construction	3,567	2,541	639	6,748
53 Real Estate and Rental	445	2,978	2,465	5,889
55 Management of Companies	65	3,246	310	3,621
71 Arts- Entertainment and Recreation	333	747	2,188	3,268
61 Educational Services	385	85	2,784	3,255
51 Information	287	1,459	1,059	2,805
22 Utilities	1,200	1,003	231	2,434
92 Government and Non NAICS	221	1,295	474	1,990
21 Mining	122	620	42	783
Total	**70,203**	**82,872**	**66,302**	**219,377**

Source: CDM Smith, Amtrak, WAYBILL, and IMPLAN

Figure C.1: Employment Impacts by Industry and Type

Figure C.2: Total Employment Impact Composition



C.4 Conclusion

Rail accommodates the movement of both goods (freight) and people (passengers), which facilitates economic activity. Freight movements reflect the reallocation of intermediate goods for production and final goods for consumption; and, passenger movements are linked with personal consumption patterns. Both such movements are supported by rail and can be captured by economic impact metrics via tracing the movement volumes, translated into applicable values (and, subject to economic/geographic factors) through the various interrelationships within the economy.

Translation of rail passenger and freight volumes into economic impacts demonstrates the vital role rail provides in Iowa's economy. Such economic impact analysis provides a complementary perspective for traditional freight-related analysis that predominately emphasizes the volume (units and/or tons) of the movements and the capacity of the transportation route.

An economic analysis supplies an alternative means to assess the relative importance of freight rail. In instances, the volume of a certain commodity movement is substantial and would thus be considered relevant from a traditional freight analysis perspective; however, that same high-volume movement may be a low-value (per weight) commodity with little economic relevance (e.g., certain waste material movements). Consequently, not all traditionally-assessed freight movements (from a volume perspective) would be considered equally relevant, as compared with other freight movements observed from an economic perspective. In effect, volumes do not always translate into relevant values, and into direct economic impacts (and thus, into total impacts, reflective of multiplier effects as economic activity permeates through the economy).

Impacts, as measured in terms such as employment, income, value added, and output, span all industries and reach every region of the state:

- ***Employment*** — Economic impacts of rail extend beyond the 3,520 direct employed in the provision of rail transport (both passenger and freight). When the freight and visitor user impact activities and multiplier impacts are included, rail-related employment in Iowa totals 219,380 jobs, which represent 10.8% of the 2.0 million jobs statewide.
- ***Income*** — $13.8 billion earned by these total impacted employees represent 13.6% of Iowa's total labor income.
- ***Value-Added*** — And, the combined value-added impact, $24.2 billion, associated with the rail services and users represent 14.7% of the state's Gross State Product (GSP).

It would be erroneous to conclude that all of these impacts are entirely and solely dependent on rail and would disappear if rail ceased operating (i.e., no modal substitutability). Rather, the findings show that rail service facilitates business throughout the State. Specifically, these impacts highlight the magnitude of freight rail use by manufacturers across the State, as well as dealers, retailers, and others who transport materials, component parts, and products.

Of the rail activities analyzed, passenger-related economic impacts are relatively insignificant in comparison to the comparatively large-scale freight-related impacts; and, the rail users (especially the freight users, including both outbound/intrastate and inbound movements, pertaining to production and absorption, respectively) far exceed the economic impacts associated with provisioning the services that facilitate the movement of both people and goods. In conclusion, the rail industry provides some economic activity, in itself; but, it facilitates far more economic activity via the services rendered to people and industries, particularly by enabling the movement of goods necessary to conduct economic pursuits.

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Iowa State Rail Plan Final

Appendix D

Commodity Movements

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Contents

D.1 Introduction

The purpose of this appendix is to provide tables to support Section 2.2.2 (Freight Demand and Growth) of the Iowa State Rail Plan. The data in these tables reflects freight movements only and should not necessarily be construed as a direct reflection of production and/or consumption in the state. This section includes tables showing:

- Rail Movement by Commodity (All Directions), 2013
- Rail Outbound Movement by Commodity, 2013
- Rail Inbound Movement by Commodity, 2013
- Rail Intra Movement by Commodity, 2013
- Rail Through Movement by Commodity, 2013
- Rail Outbound Tons by Geography, 2013
- Rail Inbound Tons by Geography, 2013
- FHWA FAF Rail Tons by SCTG, 2013 and 2040

Table D.1: Rail Movement by Commodity (All Directions), 2013

STCC2	COMMODITY	TONS		UNITS (CARLOADS)	
		AMOUNT	PERCENT	AMOUNT	PERCENT
01	Farm Prods.	20,042,353	6.9%	214,088	4.8%
08	Forest Prods.	8,920	0.0%	280	0.0%
09	Fresh Fish or Marine Prods.	15,200	0.0%	440	0.0%
10	Metallic Ores	1,452,258	0.5%	14,791	0.3%
11	Coal	134,395,851	46.3%	1,215,557	27.1%
13	Crude Petrol. or Natural Gas	3,338,685	1.2%	35,954	0.8%
14	Nonmetallic Minerals	17,358,788	6.0%	169,889	3.8%
19	Ordnance or Accessories	10,640	0.0%	440	0.0%
20	Food or Kindred Prods.	37,994,887	13.1%	526,973	11.8%
21	Tobacco Prods.	0	0.0%	0	0.0%
22	Textile Mill Prods.	42,560	0.0%	3,160	0.1%
23	Apparel or Related Prods.	1,262,440	0.4%	98,480	2.2%
24	Lumber or Wood Prods.	3,945,156	1.4%	52,108	1.2%
25	Furniture or Fixtures	264,400	0.1%	27,240	0.6%
26	Pulp, Paper or Allied Prods.	2,108,960	0.7%	53,720	1.2%
27	Printed Matter	204,080	0.1%	10,960	0.2%
28	Chemicals or Allied Prods.	31,244,820	10.8%	402,477	9.0%
29	Petroleum or Coal Prods.	3,912,492	1.3%	49,684	1.1%
30	Rubber or Misc Plastics	539,720	0.2%	40,480	0.9%
31	Leather or Leather Prods.	7,960	0.0%	520	0.0%
32	Clay, Concrete, Glass, or Stone	3,415,660	1.2%	39,144	0.9%
33	Primary Metal Prods.	4,773,064	1.6%	59,880	1.3%
34	Fabricated Metal Prods.	417,780	0.1%	28,876	0.6%
35	Machinery	406,992	0.1%	20,762	0.5%
36	Electrical Equipment	295,374	0.1%	26,330	0.6%

37	Transportation Equipment	5,766,574	2.0%	317,018	7.1%
38	Instrum., Photo Eq., Optical Eq.	21,360	0.0%	1,800	0.0%
39	Misc Manufacturing Prods.	232,240	0.1%	24,560	0.5%
40	Waste or Scrap Materials	2,427,380	0.8%	32,524	0.7%
41	Misc Freight Shipments	448,816	0.2%	61,492	1.4%
42	Shipping Containers	512,040	0.2%	88,160	2.0%
43	Mail or Contract Traffic	3,760	0.0%	520	0.0%
44	Freight Forwarder Traffic	141,280	0.0%	8,000	0.2%
45	Shipper Association Traffic	0	0.0%	0	0.0%
46	Misc Mixed Shipments	12,529,640	4.3%	837,920	18.7%
47	Small Packaged Shipments	110,080	0.0%	8,760	0.2%
48	Waste	623,421	0.2%	6,611	0.1%
49	Hazardous Materials	0	0.0%	0	0.0%
50	Secondary Traffic	0	0.0%	0	0.0%
60	Unclassified	0	0.0%	0	0.0%
	Total	**290,275,631**	**100.0%**	**4,479,598**	**100.0%**

Source: Prepared by CDM Smith, based on the STB Waybill Sample data for 2013

Table D.2: Rail Outbound Movement by Commodity, 2013

STCC2	COMMODITY	TONS		UNITS (CARLOADS)	
		AMOUNT	PERCENT	AMOUNT	PERCENT
01	Farm Prods.	3,053,980	8.6%	29,378	7.3%
08	Forest Prods.	0	0.0%	0	0.0%
09	Fresh Fish or Marine Prods.	0	0.0%	0	0.0%
10	Metallic Ores	0	0.0%	0	0.0%
11	Coal	0	0.0%	0	0.0%
13	Crude Petrol. or Natural Gas	0	0.0%	0	0.0%
14	Nonmetallic Minerals	1,293,345	3.7%	11,876	3.0%
19	Ordnance or Accessories	0	0.0%	0	0.0%
20	Food or Kindred Prods.	18,490,932	52.2%	193,089	48.2%
21	Tobacco Prods.	0	0.0%	0	0.0%
22	Textile Mill Prods.	0	0.0%	0	0.0%
23	Apparel or Related Prods.	14,960	0.0%	920	0.2%
24	Lumber or Wood Prods.	0	0.0%	0	0.0%
25	Furniture or Fixtures	0	0.0%	0	0.0%
26	Pulp, Paper or Allied Prods.	162,480	0.5%	2,280	0.6%
27	Printed Matter	0	0.0%	0	0.0%
28	Chemicals or Allied Prods.	9,632,687	27.2%	102,799	25.6%
29	Petroleum or Coal Prods.	135,368	0.4%	1,548	0.4%

30	Rubber or Misc Plastics	400	0.0%	40	0.0%
31	Leather or Leather Prods.	0	0.0%	0	0.0%
32	Clay, Concrete, Glass, or Stone	599,464	1.7%	5,876	1.5%
33	Primary Metal Prods.	928,544	2.6%	10,836	2.7%
34	Fabricated Metal Prods.	0	0.0%	0	0.0%
35	Machinery	107,236	0.3%	3,156	0.8%
36	Electrical Equipment	0	0.0%	0	0.0%
37	Transportation Equipment	191,030	0.5%	7,145	1.8%
38	Instrum., Photo Eq., Optical Eq.	0	0.0%	0	0.0%
39	Misc Manufacturing Prods.	0	0.0%	0	0.0%
40	Waste or Scrap Materials	387,632	1.1%	5,572	1.4%
41	Misc Freight Shipments	0	0.0%	0	0.0%
42	Shipping Containers	31,840	0.1%	4,280	1.1%
43	Mail or Contract Traffic	0	0.0%	0	0.0%
44	Freight Forwarder Traffic	0	0.0%	0	0.0%
45	Shipper Association Traffic	0	0.0%	0	0.0%
46	Misc Mixed Shipments	398,800	1.1%	22,040	5.5%
47	Small Packaged Shipments	0	0.0%	0	0.0%
48	Waste	0	0.0%	0	0.0%
49	Hazardous Materials	0	0.0%	0	0.0%
50	Secondary Traffic	0	0.0%	0	0.0%
60	Unclassified	0	0.0%	0	0.0%
	Total	**35,428,698**	**100.0%**	**400,835**	**100.0%**

Source: Prepared by CDM Smith, based on the STB Waybill Sample data for 2013

Table D.3: Rail Inbound Movement by Commodity, 2013

STCC2	COMMODITY	TONS		UNITS (CARLOADS)	
		AMOUNT	PERCENT	AMOUNT	PERCENT
01	Farm Prods.	2,277,752	6.4%	23,563	6.5%
08	Forest Prods.	8,520	0.0%	240	0.1%
09	Fresh Fish or Marine Prods.	0	0.0%	0	0.0%
10	Metallic Ores	0	0.0%	0	0.0%
11	Coal	22,363,841	63.2%	187,395	51.9%
13	Crude Petrol. or Natural Gas	132	0.0%	76	0.0%
14	Nonmetallic Minerals	430,140	1.2%	4,652	1.3%
19	Ordnance or Accessories	0	0.0%	0	0.0%
20	Food or Kindred Prods.	2,510,984	7.1%	25,140	7.0%
21	Tobacco Prods.	0	0.0%	0	0.0%
22	Textile Mill Prods.	0	0.0%	0	0.0%

23	Apparel or Related Prods.	4,040	0.0%	320	0.1%
24	Lumber or Wood Prods.	285,320	0.8%	3,160	0.9%
25	Furniture or Fixtures	960	0.0%	80	0.0%
26	Pulp, Paper or Allied Prods.	268,040	0.8%	3,640	1.0%
27	Printed Matter	2,440	0.0%	120	0.0%
28	Chemicals or Allied Prods.	4,229,255	11.9%	45,730	12.7%
29	Petroleum or Coal Prods.	387,588	1.1%	4,604	1.3%
30	Rubber or Misc Plastics	720	0.0%	40	0.0%
31	Leather or Leather Prods.	0	0.0%	0	0.0%
32	Clay, Concrete, Glass, or Stone	773,756	2.2%	7,388	2.0%
33	Primary Metal Prods.	500,324	1.4%	5,388	1.5%
34	Fabricated Metal Prods.	0	0.0%	0	0.0%
35	Machinery	0	0.0%	0	0.0%
36	Electrical Equipment	1,600	0.0%	80	0.0%
37	Transportation Equipment	173,128	0.5%	7,304	2.0%
38	Instrum., Photo Eq., Optical Eq.	0	0.0%	0	0.0%
39	Misc Manufacturing Prods.	0	0.0%	0	0.0%
40	Waste or Scrap Materials	754,940	2.1%	8,960	2.5%
41	Misc Freight Shipments	1,480	0.0%	80	0.0%
42	Shipping Containers	59,640	0.2%	5,760	1.6%
43	Mail or Contract Traffic	0	0.0%	0	0.0%
44	Freight Forwarder Traffic	0	0.0%	0	0.0%
45	Shipper Association Traffic	0	0.0%	0	0.0%
46	Misc Mixed Shipments	367,000	1.0%	27,000	7.5%
47	Small Packaged Shipments	840	0.0%	40	0.0%
48	Waste	0	0.0%	0	0.0%
49	Hazardous Materials	0	0.0%	0	0.0%
50	Secondary Traffic	0	0.0%	0	0.0%
60	Unclassified	0	0.0%	0	0.0%
	Total	**35,402,440**	**100.0%**	**360,760**	**100.0%**

Source: Prepared by CDM Smith, based on the STB Waybill Sample data for 2013

Table D.4: Rail Intra Movement by Commodity, 2013

STCC2	COMMODITY	TONS		UNITS (CARLOADS)	
		AMOUNT	PERCENT	AMOUNT	PERCENT
01	Farm Prods.	1,357,201	19.7%	17,390	18.5%
08	Forest Prods.	0	0.0%	0	0.0%
09	Fresh Fish or Marine Prods.	0	0.0%	0	0.0%
10	Metallic Ores	0	0.0%	0	0.0%

11	Coal	3,115,724	45.2%	26,180	27.9%
13	Crude Petrol. or Natural Gas	0	0.0%	0	0.0%
14	Nonmetallic Minerals	137,524	2.0%	1,372	1.5%
19	Ordnance or Accessories	0	0.0%	0	0.0%
20	Food or Kindred Prods.	924,631	13.4%	19,252	20.5%
21	Tobacco Prods.	0	0.0%	0	0.0%
22	Textile Mill Prods.	0	0.0%	0	0.0%
23	Apparel or Related Prods.	0	0.0%	0	0.0%
24	Lumber or Wood Prods.	0	0.0%	0	0.0%
25	Furniture or Fixtures	0	0.0%	0	0.0%
26	Pulp, Paper or Allied Prods.	0	0.0%	0	0.0%
27	Printed Matter	0	0.0%	0	0.0%
28	Chemicals or Allied Prods.	648,250	9.4%	19,776	21.1%
29	Petroleum or Coal Prods.	0	0.0%	0	0.0%
30	Rubber or Misc Plastics	0	0.0%	0	0.0%
31	Leather or Leather Prods.	0	0.0%	0	0.0%
32	Clay, Concrete, Glass, or Stone	173,440	2.5%	1,560	1.7%
33	Primary Metal Prods.	53,000	0.8%	600	0.6%
34	Fabricated Metal Prods.	0	0.0%	0	0.0%
35	Machinery	0	0.0%	0	0.0%
36	Electrical Equipment	0	0.0%	0	0.0%
37	Transportation Equipment	67,968	1.0%	2,848	3.0%
38	Instrum., Photo Eq., Optical Eq.	0	0.0%	0	0.0%
39	Misc Manufacturing Prods.	0	0.0%	0	0.0%
40	Waste or Scrap Materials	416,988	6.0%	4,932	5.3%
41	Misc Freight Shipments	0	0.0%	0	0.0%
42	Shipping Containers	0	0.0%	0	0.0%
43	Mail or Contract Traffic	0	0.0%	0	0.0%
44	Freight Forwarder Traffic	0	0.0%	0	0.0%
45	Shipper Association Traffic	0	0.0%	0	0.0%
46	Misc Mixed Shipments	0	0.0%	0	0.0%
47	Small Packaged Shipments	0	0.0%	0	0.0%
48	Waste	0	0.0%	0	0.0%
49	Hazardous Materials	0	0.0%	0	0.0%
50	Secondary Traffic	0	0.0%	0	0.0%
60	Unclassified	0	0.0%	0	0.0%
	Total	**6,894,726**	**100.0%**	**93,910**	**100.0%**

Source: Prepared by CDM Smith, based on the STB Waybill Sample data for 2013

Table D.5: Rail Through Movement by Commodity, 2013

STCC2	COMMODITY	TONS		UNITS (CARLOADS)	
		AMOUNT	PERCENT	AMOUNT	PERCENT
01	Farm Prods.	13,353,420	6.3%	143,757	4.0%
08	Forest Prods.	400	0.0%	40	0.0%
09	Fresh Fish or Marine Prods.	15,200	0.0%	440	0.0%
10	Metallic Ores	1,452,258	0.7%	14,791	0.4%
11	Coal	108,916,286	51.2%	1,001,982	27.6%
13	Crude Petrol. or Natural Gas	3,338,553	1.6%	35,878	1.0%
14	Nonmetallic Minerals	15,497,779	7.3%	151,989	4.2%
19	Ordnance or Accessories	10,640	0.0%	440	0.0%
20	Food or Kindred Prods.	16,068,340	7.6%	289,492	8.0%
21	Tobacco Prods.	0	0.0%	0	0.0%
22	Textile Mill Prods.	42,560	0.0%	3,160	0.1%
23	Apparel or Related Prods.	1,243,440	0.6%	97,240	2.7%
24	Lumber or Wood Prods.	3,659,836	1.7%	48,948	1.4%
25	Furniture or Fixtures	263,440	0.1%	27,160	0.7%
26	Pulp, Paper or Allied Prods.	1,678,440	0.8%	47,800	1.3%
27	Printed Matter	201,640	0.1%	10,840	0.3%
28	Chemicals or Allied Prods.	16,734,628	7.9%	234,172	6.5%
29	Petroleum or Coal Prods.	3,389,536	1.6%	43,532	1.2%
30	Rubber or Misc Plastics	538,600	0.3%	40,400	1.1%
31	Leather or Leather Prods.	7,960	0.0%	520	0.0%
32	Clay, Concrete, Glass, or Stone	1,869,000	0.9%	24,320	0.7%
33	Primary Metal Prods.	3,291,196	1.5%	43,056	1.2%
34	Fabricated Metal Prods.	417,780	0.2%	28,876	0.8%
35	Machinery	299,756	0.1%	17,606	0.5%
36	Electrical Equipment	293,774	0.1%	26,250	0.7%
37	Transportation Equipment	5,334,448	2.5%	299,721	8.3%
38	Instrum., Photo Eq., Optical Eq.	21,360	0.0%	1,800	0.0%
39	Misc Manufacturing Prods.	232,240	0.1%	24,560	0.7%
40	Waste or Scrap Materials	867,820	0.4%	13,060	0.4%
41	Misc Freight Shipments	447,336	0.2%	61,412	1.7%
42	Shipping Containers	420,560	0.2%	78,120	2.2%
43	Mail or Contract Traffic	3,760	0.0%	520	0.0%
44	Freight Forwarder Traffic	141,280	0.1%	8,000	0.2%
45	Shipper Association Traffic	0	0.0%	0	0.0%
46	Misc Mixed Shipments	11,763,840	5.5%	788,880	21.8%

47	Small Packaged Shipments	109,240	0.1%	8,720	0.2%
48	Waste	623,421	0.3%	6,611	0.2%
49	Hazardous Materials	0	0.0%	0	0.0%
50	Secondary Traffic	0	0.0%	0	0.0%
60	Unclassified	0	0.0%	0	0.0%
	Total	**212,549,767**	**100.0%**	**3,624,093**	**100.0%**

Source: Prepared by CDM Smith, based on the STB Waybill Sample data for 2013

Table D.6: Rail Outbound Tons by Geography, 2013

STCC2	ORIGINATING IOWA COUNTIES							
	POTTAWATTAMIE	WAPELLO	CLINTON	WOODBURY	LINN	REMAINING	Total	Percent
20 Food or Kindred Prods.	2,567,292	2,837,823	1,406,656	1,799,898	1,756,578	8,122,685	**18,490,932**	**52.2%**
28 Chemicals or Allied Prods.	197,900	56,360	909,872	303,922	71,778	8,092,855	**9,632,687**	**27.2%**
01 Farm Prods.	1,205,882	0	94,216	174,944	11,520	1,567,418	**3,053,980**	**8.6%**
14 Nonmetallic Minerals	152,320	4,640	0	84,885	0	1,051,500	**1,293,345**	**3.7%**
33 Primary Metal Prods.	3,040	0	191,680	0	0	733,824	**928,544**	**2.6%**
Remaining Commodities	532,956	15,560	61,256	60,400	188,160	1,170,878	**2,029,210**	**5.7%**
Total	**4,659,390**	**2,914,383**	**2,663,680**	**2,424,049**	**2,028,036**	**20,739,160**	**35,428,698**	**100.0%**
Percent	**13.2%**	**8.2%**	**7.5%**	**6.8%**	**5.7%**	**58.5%**	**100.0%**	

STCC2	TERMINATING STATE							
	ILLINOIS	TEXAS	CALIFORNIA	MISSOURI	ARIZONA	REMAINING	Total	Percent
20 Food or Kindred Prods.	5,637,863	4,153,627	2,300,692	1,158,872	586,929	4,652,949	**18,490,932**	**52.2%**
28 Chemicals or Allied Prods.	4,497,444	1,513,155	404,589	152,000	500,564	2,564,935	**9,632,687**	**27.2%**
01 Farm Prods.	242,744	127,407	468,726	81,350	258,240	1,875,513	**3,053,980**	**8.6%**
14 Nonmetallic Minerals	83,716	741,784	0	0	0	467,845	**1,293,345**	**3.7%**
33 Primary Metal Prods.	29,880	102,440	26,600	5,160	0	764,464	**928,544**	**2.6%**
Remaining Commodities	418,460	137,076	287,800	18,120	0	1,167,754	**2,029,210**	**5.7%**
Total	**10,910,107**	**6,775,489**	**3,488,407**	**1,415,502**	**1,345,733**	**11,493,460**	**35,428,698**	**100.0%**
Percent	**30.8%**	**19.1%**	**9.8%**	**4.0%**	**3.8%**	**32.4%**	**100.0%**	

Source: Prepared by CDM Smith, based on the STB Waybill Sample data for 2013

Note: Though Linn County produces a large volume of ethanol, included in the Chemical and Allied Products category, the data includes a large quantity of outbound movements to adjoining Johnson County for repositioning.

Table D.7: Rail Inbound Tons by Geography, 2013

STCC2	ORIGINATING STATE							
	WYOMING	ILLINOIS	MINNESOTA	NEBRASKA	SASKATCHEWAN	REMAINING	Total	Percent
11 Coal	22,097,744	266,097	0	0	0	0	**22,363,841**	**63.2%**
28 Chemicals or Allied Prods.	254,927	391,434	144,500	3,600	207,696	3,227,098	**4,229,255**	**11.9%**
20 Food or Kindred Prods.	0	295,260	247,032	1,065,448	228,996	674,248	**2,510,984**	**7.1%**
01 Farm Prods.	0	202,897	880,463	49,812	521,268	623,312	**2,277,752**	**6.4%**
32 Clay, Concrete, Glass, or Stone	38,000	58,400	0	80,808	0	596,548	**773,756**	**2.2%**
Remaining Commodities	7,400	411,300	220,016	228,228	25,120	2,354,788	**3,246,852**	**9.2%**
Total	**22,398,071**	**1,625,388**	**1,492,011**	**1,427,896**	**983,080**	**7,475,994**	**35,402,440**	**100.0%**
Percent	**63.3%**	**4.6%**	**4.2%**	**4.0%**	**2.8%**	**21.1%**	**100.0%**	

STCC2	TERMINATING IOWA COUNTIES							
	POTTAWATTAMIE	WAPELLO	WOODBURY	LINN	LEE	REMAINING	Total	Percent
20 Food or Kindred Prods.	5,745,710	5,531,658	4,512,618	2,652,985	1,624,716	2,296,154	**22,363,841**	**63.2%**
28 Chemicals or Allied Prods.	203,960	200,560	664,240	45,160	148,040	2,967,295	**4,229,255**	**11.9%**
01 Farm Prods.	1,015,412	113,632	339,980	182,680	0	859,280	**2,510,984**	**7.1%**
14 Nonmetallic Minerals	96,212	0	28,017	512,063	76,476	1,564,984	**2,277,752**	**6.4%**
33 Primary Metal Prods.	23,988	0	27,928	0	0	721,840	**773,756**	**2.2%**
Remaining Commodities	927,848	34,720	215,552	122,204	50,268	1,896,260	**3,246,852**	**9.2%**
Total	**8,013,130**	**5,880,570**	**5,788,335**	**3,515,092**	**1,899,500**	**10,305,813**	**35,402,440**	**100.0%**
Percent	**22.6%**	**16.6%**	**16.4%**	**9.9%**	**5.4%**	**29.1%**	**100.0%**	

Source: Prepared by CDM Smith, based on the STB Waybill Sample data for 2013

Note: For Nebraska's Food and Kindred Products, 76 percent of such inbound movement goes to just one Iowa county (Pottawattamie) to rail yards for repositioning.

Table D.8: FHWA FAF Rail Tons by SCTG, 2013 and 2040

SCTG	DESCRIPTION	OUTBOUND			INBOUND			INTRA		
		2013	2040	CAGR	2013	2040	CAGR	2013	2040	CAGR
	Agricultural									
1	Live Animals/ Fish	0	0	#N/A	0	0	#N/A	0	0	#N/A
2	Cereal Grains	6,334,523	4,851,376	-1.0%	2,187,039	8,040,631	4.9%	2,506,016	5,058,032	2.6%
3	Other Ag Prods.	755,577	1,377,145	2.2%	21,577	40,966	2.4%	416,559	993,129	3.3%
4	Animal Feed	6,092,010	8,417,124	1.2%	186,998	366,394	2.5%	431,587	858,608	2.6%
5	Meat/Seafood	23,532	21,556	-0.3%	77	202	3.6%	0	0	#N/A
6	Milled Grain Prods.	1,564,079	1,157,541	-1.1%	79,765	469,372	6.8%	132,593	232,699	2.1%

7	Other Foodstuffs	6,197,705	8,321,280	1.1%	627,830	1,581,406	3.5%	186,403	281,196	1.5%
8	Alcoholic Beverages	2,166,355	6,624,060	4.2%	255	1,793	7.5%	12,835	26,077	2.7%
9	Tobacco Prods.	0	0	#N/A	0	0	#N/A	0	0	#N/A
	SUBTOTAL	**23,133,781**	**30,770,081**	**1.1%**	**3,103,540**	**10,500,764**	**4.6%**	**3,685,994**	**7,449,741**	**2.6%**
	Mining/ Extraction									
10	Building Stone	0	0	#N/A	0	0	#N/A	0	0	#N/A
11	Natural Sands	0	0	-5.7%	0	0	#N/A	0	0	#N/A
12	Gravel	221,305	154,786	-1.3%	1,123,432	1,685,276	1.5%	1,340,938	1,976,559	1.4%
13	Nonmetallic Minerals	215,147	197,663	-0.3%	478,903	1,455,514	4.2%	0	0	#N/A
14	Metallic Ores	1,346	1,417	0.2%	206	289	1.3%	0	0	#N/A
15	Coal	0	0	#N/A	21,608,858	20,218,593	-0.2%	0	0	#N/A
16	Crude Petroleum	0	0	#N/A	0	0	#N/A	0	0	#N/A
	SUBTOTAL	**437,799**	**353,866**	**-0.8%**	**23,211,400**	**23,359,672**	**0.0%**	**1,340,938**	**1,976,559**	**1.4%**
	Manufacturing									
17	Gasoline	0	0	#N/A	7,452	5,415	-1.2%	0	0	#N/A
18	Fuel Oils	0	0	#N/A	0	0	#N/A	0	0	#N/A
19	Coal NEC	499,342	308,037	-1.8%	418,266	511,689	0.7%	38,922	35,983	-0.3%
20	Basic Chemicals	605,156	360,140	-1.9%	1,731,864	2,953,554	2.0%	108,771	107,688	0.0%
21	Pharmaceuticals	1,215	9,043	7.7%	0	0	#N/A	0	0	#N/A
22	Fertilizers	88,764	46,712	-2.3%	1,965,818	5,000,200	3.5%	61,238	27,243	-3.0%
23	Chemical Prods.	156,016	1,023,870	7.2%	890,418	1,890,721	2.8%	12,194	33,385	3.8%
24	Plastics/Rubber	684,132	993,910	1.4%	270,405	543,014	2.6%	117,026	223,172	2.4%
25	Logs	954	4,072	5.5%	0	0	#N/A	0	0	#N/A
26	Wood Prods.	12,242	12,809	0.2%	267,377	381,942	1.3%	16,114	11,347	-1.3%
27	Newsprint/ Paper	24,197	12,100	-2.5%	260,769	665,767	3.5%	0	0	#N/A
28	Paper Articles	7,583	8,327	0.3%	125,620	316,954	3.5%	0	0	#N/A
29	Printed Prods.	73,467	66,249	-0.4%	70	57	-0.7%	5,575	7,232	1.0%
30	Textiles/Leather	31,698	33,767	0.2%	1,036	2,646	3.5%	0	0	#N/A
31	Nonmetal Min. Prods.	1,221,430	1,970,745	1.8%	340,558	582,459	2.0%	138,217	235,164	2.0%
32	Base Metals	798,552	1,223,861	1.6%	832,978	1,302,988	1.7%	331,398	271,462	-0.7%
33	Articles-Base Metal	102,222	163,415	1.8%	71,822	91,786	0.9%	11,311	11,522	0.1%
34	Machinery	19,845	84,723	5.5%	11,047	82,799	7.7%	0	0	#N/A
35	Electronics	5,985	4,199	-1.3%	39	186	6.0%	0	0	#N/A
36	Motorized Vehicles	43,251	59,395	1.2%	34	56	1.9%	0	0	#N/A
37	Transport Equip.	7,215	10,478	1.4%	19,436	127,100	7.2%	0	0	#N/A
38	Precision Instruments	1,784	29,016	10.9%	1	4	5.2%	0	0	#N/A

39	Furniture	4,918	7,948	1.8%	62	417	7.3%	0	0	#N/A
40	Misc. Mfg. Prods.	5,215	30,646	6.8%	2,590	8,345	4.4%	0	0	#N/A
	SUBTOTAL	4,395,184	6,463,458	1.4%	7,217,659	14,468,100	2.6%	840,765	964,198	0.5%
	Other									
41	Waste/Scrap	298,402	466,431	1.7%	525,576	716,333	1.2%	558,015	1,159,021	2.7%
43	Mixed Freight	111	267	3.3%	3,358	11,394	4.6%	0	0	#N/A
99	Unknown	2,432	19,613	8.0%	0	0	#N/A	0	0	#N/A
	SUBTOTAL	300,945	486,311	1.8%	528,934	727,727	1.2%	558,015	1,159,021	2.7%
	Total	**28,267,709**	**38,073,716**	**1.1%**	**34,061,534**	**49,056,264**	**1.4%**	**6,425,712**	**11,549,518**	**2.2%**

Source: Prepared by CDM Smith, based on the FHWA FAFv3.5 and v3.6

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Iowa State Rail Plan Final

Appendix E

Highway-Railroad Crossing Safety Program and Grade Crossing Improvement Projects in Iowa, 2015-2017

IOWA DOT

Contents

E.1 Federal Highway-Railroad Crossing Safety Program and Grade Crossing Improvement Projects in Iowa, 2015-2017

Presented below is a list Federal Highway-Railroad Crossing Safety Program and Grade Crossing Improvement Projects in Iowa for 2015-2017. Iowa DOT will also receive additional Federal Highway Safety Improvement Program funding for 2016 that is yet to be programmed to specific projects.

Federal-Aid Highway-Railroad Safety Fund
Proposed 2015 Accomplishment Program Candidates

B/C	FEDERAL ID#	APPLICANT*	RAILROAD	HIGHWAY JURISDICTION	ROAD LOCATION	PRESENT WARNING DEVICE	TYPE OF IMPROVEMENT	FEDERAL FUNDS
3.9	3075908	HA	CC	Cherokee County	J Aveneue	Crossbucks	Signals w/gate arms	$190,000
3.3	195484E	RR	UP	Iowa DOT (Lake Mills)	Main Street	Signals w/ gate arms	Circuitry upgrade	$285.000
2.5	605731E	RR	UP	Warren County	183rd Avenue	Crossbucks	Signals w/gate arms	$200,000
2.5	307486G	HA	CC	Buena Vista County	160th Avenue	Crossbucks	Signals w/gate arms	$180,000
2.4	190469K	HA	UP	Lisbon	Gillete Lane	Crossbucks	Signals w/gate arms	$200,000
2.4	307594D	HA	CC	Cherokee County	H Avenue	Crossbucks	Signals w/gate arms	$190,000
1.6	875901P	RRIHA	UP	Livermore	Fourth Street	Crossbucks	Signals w/gate arms	$200,000
1.6	875906Y	RR	UP	Humbolt County	Pine Avenue	Crossbucks	Signals w/gate arms	$190,000
1.5	197080R	RR	UP	Story County	140th Street	Crossbucks	Signals w/gate arms	$190,000
1.4	063244H	RR	BNSF	Fort Madison	Sixth Street	Signals w/ gate arms	Circuitry upgrade	$50,000
1.3	079190C	RR	BNSF	West Burlington	North Sunset Drive	Crossbucks	Signals w/gate arms	$200,000
1.3	376144U	HA	DME	Guttenberg	Dekalb Street	Crossbucks	Signals w/gate arms	$190,000
1.3	191033M	HA	UP	Harrison County	128th Trail	Crossbucks	Signals w/gate arms	$200,000
1.1	385164E	RRIHA	DME	Luana	Dolphin Avenue	Crossbucks	Signals w/gate arms	$180,000
1.1	607252G	RR	DME	Cotter	Louisa County Road W 38	Signals	Signals w/gate arms	$150,000
1.1	192641K	RR	UP	Des Moines	Dean Avenue	Signals	Signals w/gate arms	$190,000
1.1	382070T	RRIHA	BNSF	Sioux City	Hamilton Boulevard	Signals	Signals w/gate arms	$240,000
1.1	380025S	HA	DME	Plymouth	Broad Street	Crossbucks	Signals w/gate arms	$180,000
1.1	6024710	RR	UP	Polk County	Southeast 60th Street	Signals	Signals w/gate arms	$180,000

1.1	063224W	RR	BNSF	Albia	East Benton Avenue	Signals w/ gate arms	Circuitry upgrade	$120,000
1.0	1904098	HA	UP	Clinton County	122nd Avenue	Crossbucks	Signals w/gate arms	$200,000
1.0	191357P	RRIHA	UP	Sioux City	Dace Avenue	Signals	Signals w/gate arms	$210,000
1.0	191100E	RR	UP	Pottawattamie County	Missouri Avenue	Crossbucks	Signals w/gate arms	$220.000
1.0	195542X	RR	UP	Worth County	Dogwood Avenue	Crossbucks	Signals w/gate arms	$180,000
1.0	079061M	RR	BNSF	Monroe County	180th Avenue	Crossbucks	Signals w/gate arms	$200,000
1.0	067353A	RR	BNSF	Plymouth County	Plymouth County Road G-38	Signals	Signals w/gate arms	$100,000
1.0	079157C	RR	BNSF	Henry County	Marsh Avenue	Signals w/ gate arms	Circuitry upgrade	$75,000
1.0	067349K	RR	BNSF	Merrill	Main street	Signals	Signals w/gate arms	$100,000
1.0	079234A	RR	BNSF	Henry County	Nebraska Avenue	Signals w/ gate arms	Circuitry upgrade	$200,000
1.0	385623X	HA	DME	Kossuth County	Kossuth County Road P 20	Crossbucks	Signals w/gate arms	$125,000
1.0	074107G	RR	BNSF	Union County	Iris Avenue	Crossbucks	Signals w/gate arms	$180,000
0.5	3074768	HA	CC	Newell	Clark Street	Crossbucks	Signals w/gate arms	$185,000
							Crossing closures statewide	$30,000

Total $5,710,000

** HA = Highway Authority*

Source: Iowa DOT

2016 Highway-Railroad Crossing Safety Program

Recommendations for Highway-Railroad Crossing Safety Projects

BENEFIT/ COST RATIO	AWARD	COUNTY	HIGHWAY JURISDICTION	ROAD LOCATION	CROSSING I.D.	RAILROAD	APPLICANT	TYPE OF IMPROVEMENT	"PRESENT WARNING DEVICE"
5.6	$240,000	Plymouth	Le Mars	12th Street SW	307648G	UP	Le Mars / UP	Signals w/gate arms	Signals
3.8	$225,000	Plymouth	Le Mars	18th Street SW	307649N	UP	Le Mars / UP	Signals w/gate arms	Signals
3.4	$180,000	Cerro Gordo	Cerro Gordo County	330th Street	196370V	UP	UP	Signals w/gate arms	Signals
3.1	$220,000	Boone	Boone County	U Avenue	190718N	UP	UP	Signals w/gate arms	Crossbucks
2.8	$160,000	Polk	Des Moines	Fifth Avenue	603720K	IAIS	Des Moines / IAIS	Signals w/gate arms	Signals
2.4	$180,000	Osceola	Osceola County	180th Street	185848A	UP	UP	Signals w/gate arms	Crossbucks
2.3	$180,000	Story	Story County	280th Street	876051F	UP	UP	Signals w/gate arms	Crossbucks
2.0	$180,000	Buena Vista	Alta	Main Street	307526C	CC	Alta	Signals w/gate arms	Signals
1.7	$180,000	Plymouth	Plymouth County	Otter Avenue	307628V	CC	Plymouth County	Signals w/gate arms	Crossbucks
1.6	$195,000	Harrison	Harrison County	125th Street	191223R	UP	UP	Signals w/gate arms	Crossbucks
1.4	$180,000	Webster	Webster County	Hayes Avenue	196553N	UP	UP	Signals w/gate arms	Crossbucks
1.3	$180,000	Webster	Webster County	160th Street	196529M	UP	UP	Signals w/gate arms	Crossbucks
1.0	$210,000	Pottawattamie	Pottawattamie County	Sumac Road	191097Y	UP	UP	Signals w/gate arms	Signals
0.9	$185,000	Worth	Worth County	Wheelerwood Road	195993B	UP	UP	Signals w/gate arms	Crossbucks
0.9	$180,000	Cerro Gordo	Mason City	Eighth Street SE	379986C	DME	Mason City	Signals w/gate arms	Crossbucks
0.9	$190,000	Boone	Boone County	A Avenue	190335L	UP	UP	Signals w/gate arms	Crossbucks
0.9	$180,000	Cerro Gordo	Ventura	360th Street	385520X	DME	UP	Signals w/gate arms	Crossbucks
0.9	$200,000	Cerro Gordo	Cerro Gordo County	300th Street	195980A	UP	UP	Signals w/gate arms	Signals
0.9	$240,000	Cedar	Cedar County	Echo Avenue	190455C	UP	UP	Signals w/gate arms	Crossbucks
0.9	$190,000	Worth	Worth County	425th Street	195549V	UP	UP	Signals w/gate arms	Crossbucks
0.9	$200,000	Greene	Greene County	I Avenue	190738A	UP	UP	Signals w/gate arms	Crossbucks
0.9	$180,000	Wright	Wright County	Nelson Avenue	196440H	UP	UP	Signals w/gate arms	Crossbucks
0.9	$210,000	Greene	Greene County	D Avenue	190747Y	UP	UP	Signals w/gate arms	Crossbucks
0.9	$160,000	Hancock	Hancock County	Yale Avenue	385526N	DME	Hancock County / DME	Signals w/gate arms	Crossbucks
0.8	$200,000	Clarke	Clarke County	300 Avenue	074064R	BNSF	Clarke County / BNSF	Signals w/gate arms	Crossbucks
0.8	$175,000	Cedar	Cedar County	Spicer Avenue	190425K	UP	UP	Signals w/gate arms	Crossbucks
0.8	$180,000	Clinton	Clinton	105th Avenue	190408U	UP	Clinton	Signals w/gate arms	Crossbucks
0.8	$180,000	Cherokee	Cherokee County	L Avenue	307587T	CC	Cherokee County	Signals w/gate arms	Crossbucks
0.8	$180,000	Lucas	Lucas County	270th Avenue	079121U	BNSF	Lucas County	Signals w/gate arms	Crossbucks
0.7	$180,000	Black Hawk	Raymond	Lafayette Road	307103C	CC	Raymond / CC	Signals w/gate arms	Crossbucks
	$15,000		Statewide					Crossing closure	
Total	**$5,735,000**								

Source: Iowa DOT

2017 Highway-Railroad Crossing Safety Program

Recommendations for Highway-Railroad Crossing Safety Projects

BENEFIT/ COST RATIO	AWARD	COUNTY	HIGHWAY JURISDICTION	ROAD LOCATION	CROSSING I.D.	RAILROAD	APPLICANT	TYPE OF IMPROVEMENT	"PRESENT WARNING DEVICE"
3.8	$200,000	Bremer	Bremer County	205th Street	308835T	CEDR	Bremer County	Signals w/gate arms	Crossbucks
3.5	$180,000	Johnson	Iowa County	Johnson Iowa Road	608030B	IAIS	Iowa County	Signals w/gate arms	Crossbucks
2.7	$250,000	Woodbury	Sioux City	Grant Street	307687X	UP	Sioux City / UP	Signals w/gate arms	Crossbucks
2.4	$180,000	Delaware	Delaware County	Fairview Drive	307012W	CC	Delaware County	Signals w/gate arms	Crossbucks
2.1	$180,000	Buena Vista	Storm Lake	Barton Street	307516W	CC	Storm Lake	Signals w/gate arms	Crossbucks
1.9	$190,000	Hardin	Ackley	Cerro Gordo Street	307258U	CC	Ackley	Signals w/gate arms	Crossbucks
1.8	$185,000	Osceola	Osceola County	250th Street	185855K	UP	UP	Signals w/gate arms	Crossbucks
1.6	$180,000	Pocahontas	Pomeroy	Ontario Street	307447R	CC	Pomeroy	Signals w/gate arms	Crossbucks
1.4	$200,000	Kossuth	Kossuth County	230th Avenue	608587A	UP	UP	Signals w/gate arms	Crossbucks
1.2	$380,000	Polk	Des Moines	Maury Street	864238S	NS	Des Moines	Signals w/gate arms	Crossbucks
1.1	$300,000	Union	Union County	Tulip Avenue	074097D	BNSF	BNSF	Signals w/gate arms	Crossbucks
0.9	$185,000	Pocahontas	Pocahontas County	Jackson Street	200956M	UP	UP	Signals w/gate arms	Crossbucks
0.8	$180,000	Buchanan	Jesup	1st Street	307088C	CC	Jesup	Signals w/gate arms	Signals
0.8	$200,000	Wayne	Wayne County	Main Street	605746U	UP	UP	Signals w/gate arms	Crossbucks
0.7	$180,000	Buena Vista	Storm Lake	Oneida Street	307503V	CC	Storm Lake	Signals w/gate arms	Crossbucks
0.7	$200,000	Wayne	Wayne County	Central Avenue	605747B	UP	UP	Signals w/gate arms	Signals
0.7	$300,000	Greene	Greene County	C Avenue	190750G	UP	UP	Signals w/gate arms	Crossbucks
0.7	$180,000	Story	Gilbert	Mathews Street	196988H	UP	Gilbert	Signals w/gate arms	Signals
0.7	$190,000	Crawford	Dow City	Franklin Street	191010F	UP	UP	Signals w/gate arms	Crossbucks
0.7	$175,000	Clinton	Camanche	7th Street	865547H	DME	Camanche	Signals w/gate arms	Signals
0.7	$180,000	Harrison	Harrison County	Easton Trail	191219B	UP	UP	Signals w/gate arms	Signals
0.6	$180,000	Plymouth	Plymouth County	Marble Avenue	307632K	CC	Plymouth County	Signals w/gate arms	Crossbucks
0.6	$190,000	Marshall	Gilman	Church Street	193067N	UP	UP	Signals w/gate arms	Crossbucks
0.6	$200,000	Bremer	Waverly	20th Street NW	308830J	CC	Waverly	Signals w/gate arms	Crossbucks
0.6	$180,000	Cherokee	Cherokee County	C Avenue	307603A	CC	Cherokee County	Signals w/gate arms	Crossbucks
0.6	$190,000	Lucas	Lucas County	450th Street	604489V	UP	UP	Signals w/gate arms	Crossbucks
0.5	$180,000	Buena Vista	Storm Lake	Hudson	307502N	CC	Storm Lake	Signals w/gate arms	Crossbucks
0.3	$190,000	Bremer	Waverly	20th Street NW	201964H	CC	Waverly	Signals w/gate arms	Crossbucks
	$15,000		Statewide					Crossing closure	
Total	**$5,720,000**								

Source: Iowa DOT

E.2 State Highway-Railroad Crossing Surface Repair Program Grade Crossing Improvement Projects in Iowa, 2015-2017

Presented below is a list of State Highway-Railroad Crossing Surface Repair Program Grade Crossing Improvement Projects in Iowa for 2015-2017. Iowa DOT will also receive additional Federal Highway Safety Improvement Program funding for 2016 that is yet to be programmed to specific projects.

State Highway-Railroad Crossing Surface Repair Program
Fiscal Year 2015

COUNTY	FEDERAL ID#	RAILROAD	HIGHWAY JURISDICTION	ROAD LOCATION	STATE SURFACE REPAIR FUND (60%)
Cerro Gordo	873328P	IATR	Mason City	S. Benjamin Avenue	$36,600
Cerro Gordo	874088N	IATR	Mason City	S. Taft Avenue	$51,000
Pocahontas	307459K	CCP	Fonda	Main Street	$111,075
Black Hawk	908227F	CCP	Waterloo	ML King Jr Drive	$87,420
Black Hawk	931824V	CCP	Waterloo	Rooff Avenue	$56,340
Muscatine	606737Y	DM&E	Muscatine County	Pettibone Avenue	$163,567
Muscatine	606736S	DM&E	Muscatine County	Pettibone Avenue	$114,953
Hancock	599323C	IANR	Hancock	Taft Avenue (240th St)	$27,960
Muscatine	606821G	IAIS	Muscatine County	Co Rd Y14 (Taylor Avenue)	$41,872
Hancock	599346J	IANR	Forest City	Crystal Lake Road	$24,840
Clayton	376146H	DM&E	Guttenberg	Schiller Street	$88,200
Louisa	607234H	DM&E	Louisa County	2nd Street (in Fredonia)	$45,600
O'Brien	385745C	DM&E	O'Brien County	Warbler Avenue	$42,600
Black Hawk	307180C	CCP	Waterloo	West Arline Ave	$69,000
				Total	**$961,027**

Source: Iowa DOT

State Highway-Railroad Crossing Surface Repair Program
Fiscal Year 2016

COUNTY	FEDERAL ID#	RAILROAD	HIGHWAY JURISDICTION	ROAD LOCATION	STATE SURFACE REPAIR FUND (60%)
Mitchell	308975V	CEDR	St. Ansgar	West Fourth Street	$207,000
Polk	603717C	IAIS	Des Moines	Southwest Second Avenue	$54,000
Polk	603718J	IAIS	Des Moines	Third Street	$53,100
Mitchell	308952N	CEDR	Osage	State Street and South Third Street intersection	$124,200
Mitchell	308973G	CEDR	St. Ansgar	Sixth Street	$114,000
Buchanan	307088C	CCP	Jesup	First Street	$62,400
Mitchell	308971T	CEDR	St. Ansgar	Church Street	$103,800
Mitchell	308954C	CEDR	Osage	Chase Street	$133,200
Polk	917605X	IAIS	Urbandale	Aurora Avenue	$44,400
Boone	271479R	BSVR	City of Boone	Greene Street	$23,040
				Total	**$919,140**

Source: Iowa DOT

Recommendations for State Highway-Railroad Crossing Surface Repair Projects
Fiscal Year 2017

AWARD	COUNTY	HIGHWAY JURISDICTION	ROAD LOCATION	CROSSING ID#	RAILROAD	APPLICANT	TYPE OF IMPROVEMENT
$57,600	Jackson	Bellevue	Jefferson Avenue/399th Street	376099C	DME	Bellevue	Roadway surface repair
$54,600	Jackson	Bellevue	Motte Street	376097N	DME	Bellevue	Roadway surface repair
$66,600	Jackson	Bellevue	Market Street	376089W	DME	Bellevue	Roadway surface repair
$46,200	Clinton	City of Clinton	McKinley Street	376046D	DME	City of Clinton	Roadway surface repair
$51,000	Clinton	City of Clinton	32nd Avenue North	376045W	DME	City of Clinton	Roadway surface repair
$67,800	Clinton	City of Clinton	Main Avenue	376040M	DME	City of Clinton	Roadway surface repair
$52,800	Clinton	City of Clinton	15th Avenue North	376033C	DME	City of Clinton	Roadway surface repair
$66,000	Clinton	City of Clinton	5th Avenue South	376022P	DME	City of Clinton	Roadway surface repair
$66,000	Clinton	City of Clinton	6th Avenue South	376021H	DME	City of Clinton	Roadway surface repair
$60,600	Clinton	City of Clinton	25th Avenue North	376041U	DME	City of Clinton	Roadway surface repair
$54,000	Clinton	City of Clinton	23rd Avenue North	376039T	DME	City of Clinton	Roadway surface repair
$195,000	Black Hawk	Waterloo	East Fourth Street	307122G	CCP	Waterloo	Roadway surface repair
$76,800	Linn	Cedar Rapids	42nd Street NE	307839S	CCP	Cedar Rapids	Roadway surface repair
$62,400	Black Hawk	Waterloo	Nevada Street	307117K	CCP	Waterloo	Roadway surface repair
$83,400	Linn	Cedar Rapids	Blairs Ferry Road NE	307836W	CCP	Cedar Rapids	Roadway surface repair
$1,060,800	**Total**						

Source: Iowa DOT

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Iowa State Rail Plan Final

Appendix F

Outreach Elements and Comments

IOWA DOT

Contents

F.1 HLSC Meeting Summaries and Committee Invitee Lists

Iowa Department of Transportation
State Freight Plan and State Rail Plan
High Leverage Stakeholder Committee Meeting #1
Summary

Prepared for the Iowa Department of Transportation

HDR

November 2015

Iowa Department of Transportation
State Rail Plan and State Freight Plan
HLSC Meeting Summary

2016 IOWA RAIL PLAN

Contents

Meeting Summary

Meeting Overview

The Iowa Department of Transportation (Iowa DOT) hosted the first of three High Leverage Stakeholder Committee (HLSC) meetings to engage a specific group of of stakeholders in the development of the State Freight and Rail Plans. The meeting was held on Wednesday, November 18, 2015, in Ankeny, Iowa, and consisted of two interactive exercises that focused on the following:

- *Determining the level of effort and impact of the State Freight Plan strategies and*
- *Discussing the draft goals of the State Rail Plan.*

Outreach

Invitations were distributed to 40 of recipients and several emails were sent. Table 1 summarizes the invitational outreach efforts for this meeting. See Appendix A: Meeting Invitation. The Iowa DOT followed up with invitees through phone calls.

Table 1

Outreach	Date	Number of Emails Distributed
Agenda Email	11/13/2015	40

Attendees

Twenty-nine stakeholders attended the meeting including representatives from the Iowa DOT, industries related to freight and rail transportation and special interest groups. See Appendix B: Invitation Mailing and Attendee List.

Meeting Roles and Responsibilities

The table below, Table 2, summarizes the roles and responsibilities of each team member.

Table 2

Name	Responsibility
Jara Sturdivant-Wilson	Floater/Facilitator/Registration
Theresa McClure	Facilitator
Kevin Keller	Facilitator
Amanda Martin	IADOT representative, Facilitator
Sam Hiscocks	IADOT representative, Scribe
Garrett Pedersen	IADOT representative
Craig Markley	IADOT representative
Kyle Barichello	IADOT representative
Diane McCauley	IADOT representative, Scribe
Phil Meraz	IADOT representative
Jeff Von Brown	IADOT representative
Laura Hutzell	IADOT representative
Phil Mescher	IADOT representative
Sam Shea	IADOT representative

Meeting Agenda and Outcomes

The meeting was held Wednesday, November 18, 2015, at the Courtyard Des Moines Ankeny located at 2405 SE Creekview Dr, Ankeny, Iowa. Registration began at 11:00 a.m.

11:00 – 11:15 am: Welcome, Safety Briefing, Meeting Purpose

11:15 – 11:25 am: State Freight Plan and State Rail Plan Background

11:25 – 11:35 am: Issues Analysis Discussion and Public Involvement Update

11:35 – 2:00 pm: Input Exercises and Working Lunch

11:35 – 12:30 pm: State Freight Plan

12:30 – 1:00 pm: Working Lunch

1:00 – 2:00 pm: State Rail Plan

2:00 pm: Next Steps and Wrap-up

Welcome, State Freight Plan and State Rail Plan Background, Issues Analysis Discussion and Public Involvement Update

The workshop included a brief introduction from HDR Consultant Theresa McClure. The introduction included background for both the State Freight Plan and State Rail Plan. The introduction also included an update on the public involvement activities to date that include the Issues-Based Workshop and online survey. After presenting the public involvement activity update, McClure introduced the input activities. Participants received a registration packet with a handout, State Freight Plan strategies and a Railroad Service map. See Appendix C: Attendee Handout Packet.

State Freight Plan Input Exercise

McClure introduced the draft State Freight Plan strategies to participants. Although the participants did not have strategies to add, they offered general feedback to current draft strategies. In addition to advancing efforts on the M-35 Marine Highway Corridor (strategy #12, see Appendix D: Draft Freight Plan Strategies), participants proposed adding M-29, Sioux City/Kansas City as an additional corridor to advance efforts on. Participants indicated that including information about the Tiger Grant for strategy #13 could be appropriate. They also recommended adding additional information in the description strategy #14 leveraging information from users of the system to support advanced decision-making and incident avoidance. Participants also mentioned grade crossing mitigation and assistance to smaller railroads with technology as other strategies to consider.

After introducing each of the strategies, McClure walked the group through each of the strategies before moving into a voting technology exercise where participants identified the level of impact and effort it would take to implement each strategy. Participants voted that a majority of the draft strategies would have high effort and impact while also being a moderate priority to implement. The full voting results are located in Appendix E: Draft Freight Plan Strategy Voting Results. The full draft strategies are located in Appendix D: Draft Freight Plan Strategies.

State Rail Plan Input Exercises

Participants, Iowa DOT team members and consultants participated in a working lunch while McClure introduced the State Rail Plan draft vision statement.

State Rail Plan draft vision

> A safe and efficient state rail system that enables the economic wellbeing of Iowans by expanding access and enhancing mobility for people and goods in an environmentally sustainable manner.

Participants responded that this vision sets the tone and meets the needs of the State Rail Plan but needs a statement reflecting the global, far-reaching aspects of rail in Iowa that includes items for both state and regional rail. Although the Federal Railroad Administration (FRA) guidance has a regional perspective, the draft vision could be bolstered by adding emphasis on the regional aspect. In terms of sustainability, the groups were mixed on their thoughts on the term sustainable. Some recommended deleting “environmentally sustainable” as environmental sustainability is a part of everything that the State Rail Plan offers. Others recommended leaving the “environmentally sustainable” statement in the current draft vision.

This conversation continued when the participants broke into separate groups to discuss the State Rail Plan draft goals and objectives. Each group had a facilitator who led them in a discussion about the draft goals and objectives. At the end of the session, facilitators shared themes from each breakout session. After the breakout session, participants voted on the level of impact that each draft goal would have on optimizing rail operations in the state of Iowa. See the following appendices for more information:

- *Appendix F: State Rail Plan draft vision, goals and objectives breakout session results*
- *Appendix G: State Rail Plan draft vision, goals and objectives*
- *Appendix H: State Rail Plan Voting Results*

Next Steps

McClure closed the meeting with a description of the next HLSC meetings.

Appendix A: Meeting Invitation

IOWADOT
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www.iowadot.gov

November 13, 2015

Meeting Details:
Wednesday, November 18
Courtyard Des Moines Ankeny
2405 SE Creekview Dr
Ankeny, IA 50021
Please park on the south or east side of the building.
Lunch will be provided!

Thank you for your interest and participation in the High Leverage Stakeholder Committee for the Iowa State Rail and Freight Plans. At the first meeting, scheduled for Wednesday, November 18th, we are seeking your input on strategies developed for the State Freight Plan and the draft vision and goals for the State Rail Plan. For your convenience, we have outlined below the meeting agenda and provided links to materials that we will review during the meeting. If you were not able to attend the Issues-Based Workshop, please review the workshop presentation and the results portion of the workshop summary that begins on page 20.

Agenda
- 11:00 – 11:15 am: Welcome, Safety Briefing, Meeting Purpose
- 11:15 – 11:25 am: State Freight Plan, State Rail Plan Background
- 11:25 – 11:35 am: Issues Analysis Discussion and Public Involvement Update
- 11:35 – 12:30 pm: State Freight Plan Input Exercise
- 12:30 – 1:00 pm: Working Lunch
- 1:00 – 2:00 pm: State Rail Plan Input Exercise
- 2:00 pm: Next Steps & Wrap-up

Background Materials
- Detailed Agenda
- Freight, Rail Background
- DRAFT State Freight Plan Goals
- DRAFT State Freight Plan Strategies
- DRAFT State Freight Strategies and Goals Consistency Matrix
- Railroad Service Map

We are excited to see you at our meeting!

Stuart Anderson, Director
Planning, Programming and Modal Division

800 Lincoln Way
Ames, IA 50010

Opt Out

Appendix B: Invitation Mailing and Attendee List

First Name	Last Name	Organization	Attended?
Chandra	Ravada	Dubuque MPO	✓
Stacy	Timperley	Forbs	✓
Kelli	O'Brien	Union Pacific Railroad	✓
Ron	White	ARTCO Fleeting Service	✓
Jeff	Woods	CRANDIC	✓
John	Dill	Iowa Motor Truck Association	✓
Steve	Lallier	J. B. Hunt Transport	✓
Michael	Heckart	John Deere	✓
Michael	Helgerson	Metropolitan Area Planning Agency	✓
Richard	Grenville	PortKC, Kansas City, MO	✓
David	Toyer	Greater Burlington Partnership	✓
Steve	Falck	Environmental Law and Policy Center	✓
Derrick	James	Amtrak	✓
Gena	McCullough	Bi-State	✓
Greg	Lofstedt		✓
Greg	Reeder	City of Council Bluffs	✓
Bill	Neese	West Central Co-Op	✓
Beth	Bilyeu	Forest City Economic Development	✓
Ned	Lewis	Office of Motor Vehicle Enforcement	✓
Craig	Markley	Iowa DOT	✓
Garrett	Pedersen	Iowa DOT	✓
Amanda	Martin	Iowa DOT	✓
Sam	Hiscocks	Iowa DOT	✓
Diane	McCauley	Iowa DOT	✓
Phil	Meraz	Iowa DOT	✓
Kyle	Barichello	Iowa DOT	✓
Jeff	Von Brown	Iowa DOT	✓

Iowa Department of Transportation
State Rail Plan and State Freight Plan
HLSC Meeting Summary

First Name	Last Name	Organization	Attended?
Laura	Hutzell	Iowa DOT	✓
Phil	Mescher	Iowa DOT	✓
Sam	Shea	Iowa DOT	✓

Appendix C: Attendee Handout Packet

2016 **IOWA RAIL PLAN**

HIGH LEVERAGE STAKEHOLDER COMMITTEE

November 2015

WELCOME!

The purpose of today's meeting is to introduce you to details of the High Leverage Stakeholder Committee membership, explain your role in the development of both the State Rail and Freight Plans, provide an update on both plans, and answer questions and receive your comments.

Today we will:

- Discuss the vision and goals for both plans;
- Provide a summary of the Issues-Based Workshop; and
- Gather input on draft strategies for the State Freight Plan and draft goals for the State Rail Plan.

Background

In September 2013, the Federal Railroad Administration (FRA) published its Final State Rail Plan Guidance, which provided direction for State Rail Plan stakeholder and public involvement. We are actively engaging private sector rail and freight infrastructure owners, freight, public planning agencies, transit operators, rail authorities, railroad and freight organizations, and passenger rail stakeholders. The State Rail Plan will identify proposed improvements in urban and rural areas for those who travel through it. The State Freight Plan outlines freight planning activities that will achieve the objective for the State to provide a safe, efficient and convenient freight transportation system to Iowans. The State Freight Plan is a way to connect all planning initiatives and allow each to move forward towards a common goal of optimal freight transportation throughout the state. In addition, the State Freight Plan will guide our investment decisions to maintain and improve the freight transportation system, and ultimately strengthen Iowa's economy and raise the quality of life for our citizens.

The development of a comprehensive State Rail Plan in collaboration with the implementation of the State Freight Plan offers an opportunity for us to accurately define what the rail and freight system in the state looks like today and what it needs to look like in the future.

State Rail and State Freight Plan Overlap

The State Rail and Freight Plans are closely related and have several overlapping activities. Combining public engagement efforts of both the State Rail and State Freight Plans allow us to integrate the feedback appropriately. Due to the subject matter, there is natural overlap of information, data and analysis for both rail and freight.

State Rail Plan Goals

- Create a state rail vision and a supporting program of proposed public rail investments and improvements that will result in quantifiable economic benefits to Iowa.
- Enable Iowa to implement an efficient and effective approach for merging passenger and freight rail elements into the larger multimodal and intermodal transportation framework.
- Incorporate initiatives from the federal and state level, aligning the priorities of Iowa rail stakeholders.
- Provide a vision for integrated freight and passenger rail planning in the state, unifying the common interests of the various stakeholders within Iowa.
- Coordinate with the development of the State Freight Plan and the State Transportation Plan.
- Ensure an open and inclusive process.
- Provide an outline to educate the public on Iowa's rail system.

State Freight Plan Goals

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

Rail Plan SWOT Analysis

Issues-Based Workshop

September 2015

2016 IOWA RAIL PLAN

Issues-Based Workshop Analysis

STRENGTHS

1. Private ownership and funding
2. Efficiency driven
3. The need to move large quantities of bulk freight
4. Class 2 and 3 railroad connection to community
5. Connection of modes

WEAKNESSES

1. Bottlenecks associated with yard capacity
2. No major intermodal hub
3. Too many grade crossings
4. High volume of pass-through traffic
5. Availability of railcars – for lease or purchase

OPPORTUNITIES

1. Expand transload and intermodal load facilities
2. Additional state funding for railroads
3. Economic development
4. Railroad capacity expansion
5. Congestion reduction on highway system

THREATS

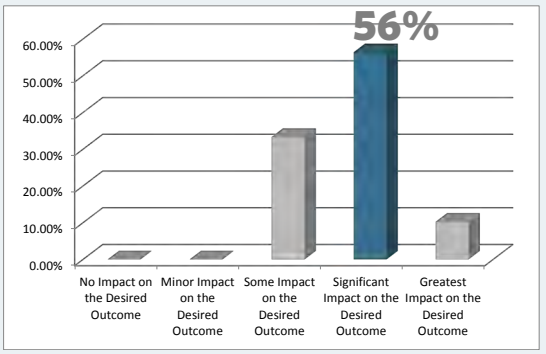
1. Aging infrastructure
2. Truck size and weight – 33' trailers specifically
3. Uncertainty about renewal of 45G rail tax credit
4. Regulatory issues – Positive Train Control (PTC)
5. Passenger rail – lower performance of freight rail

Freight Plan - Goal Verification

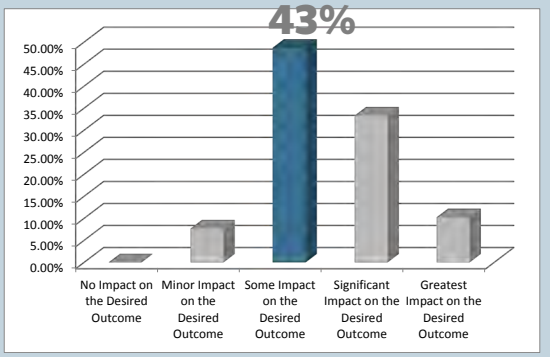
Issues-Based Workshop

September 2015

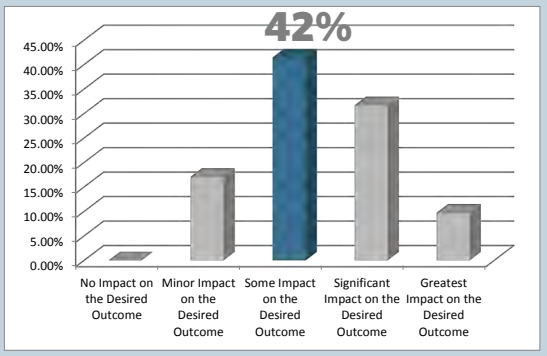
Freight Goals & Percentage of Impact



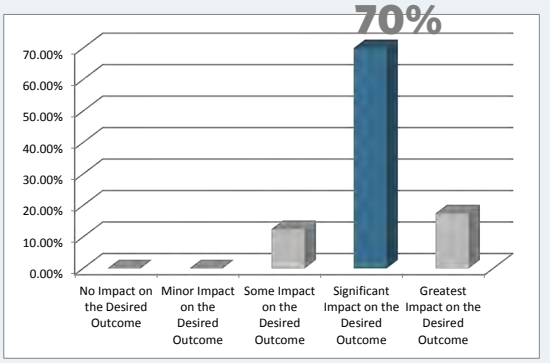
- Improve the contribution of the freight transportation system to economic efficiency, productivity, and competitiveness



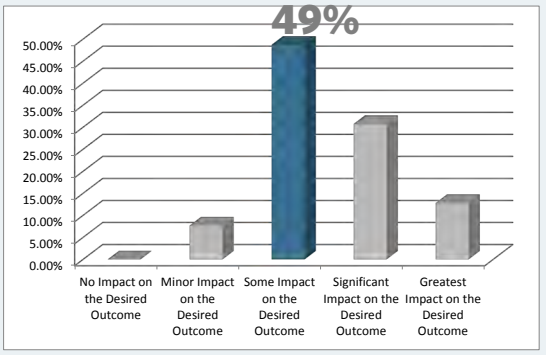
- Reduce congestion on the freight transportation system



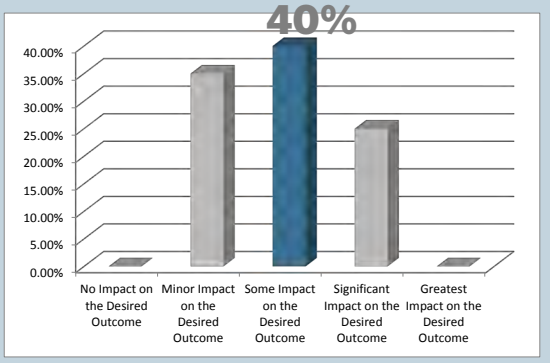
- Improve the safety, security, and resiliency of the freight transportation system



- Improve the state of good repair of the freight transportation system



- Use advanced technology, performance management, innovation, competition, and accountability in operating and maintaining the freight transportation system

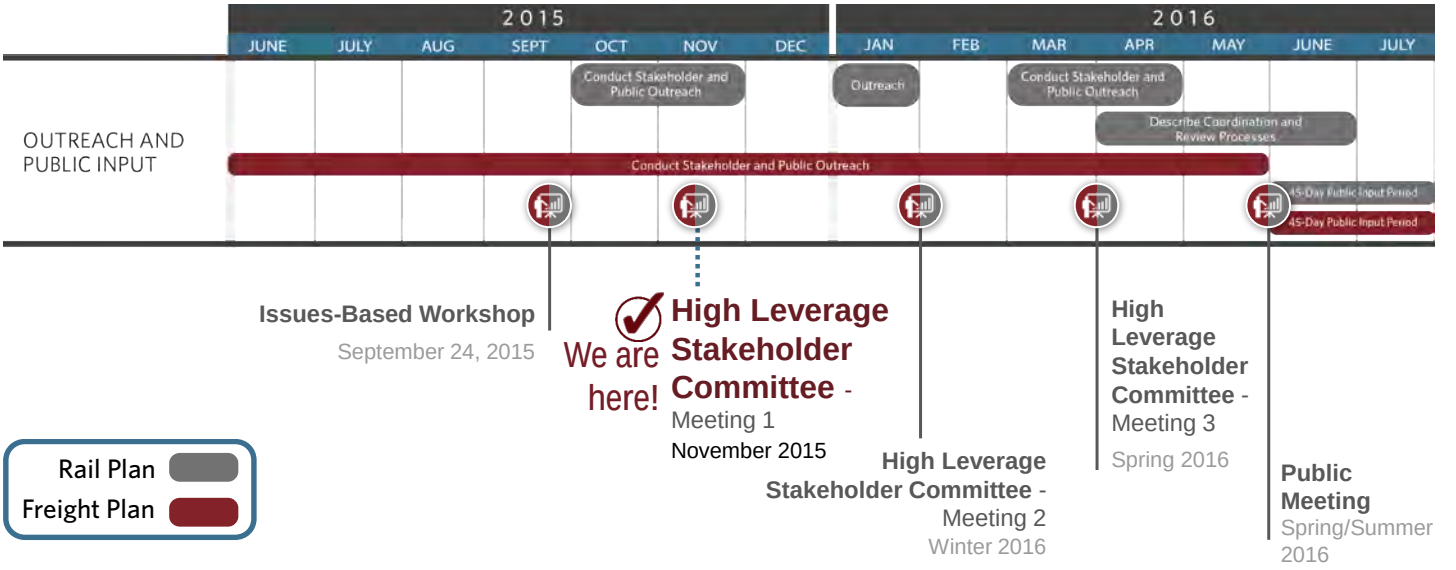


- Reduce adverse environmental and community impacts of the freight system

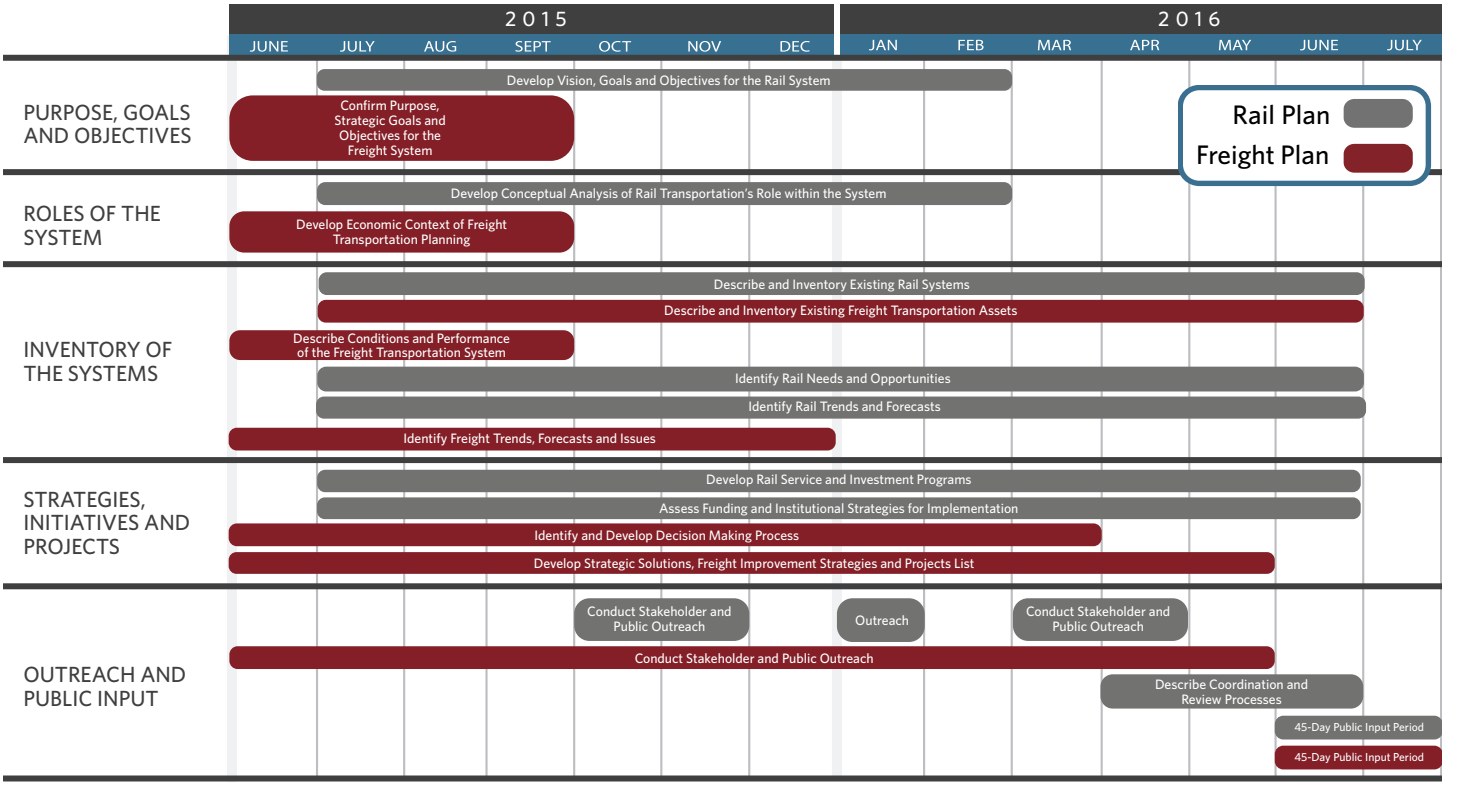
After discussing the current goals, participants discussed additions that could be considered:

- Adding a goal for regulatory environment
- Adding a goal that reflects regional differentiation
- Separating broad goals

What's Next?



What is the Schedule for the Plans?



STAY INVOLVED

- Visit us at: http://engagefreightrailplans.iowadot.gov
- Email us at: info@EngageRailFreightPlans.com

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Survey Responses

The State Rail Plan and State Freight Plan Survey

Online Survey

October 23, 2015 to November 11, 2015

2016 **IOWA RAIL PLAN**

Survey Themes

ECONOMIC WORKFORCE AND DEVELOPMENT

- The condition of infrastructure should be improved.
- Smaller railroads should be, and have support to be, more competitive.
- The connection between transportation modes should increase.
- Railroads should be included to share in improvements.
- While maintaining existing routes, expansion can also be a priority.

PASSENGER RAIL

- People are more likely to use passenger rail for leisure than business.
- Passenger rail should be treated equally with other transportation modes.
- The current routes should expand.
- Legislators need to be educated on the importance of passenger rail.
- There should be an increase in connection with other cities.

MULTIMODAL LINK

- Truck permits are easy to obtain.
- There is a need for increased funding of infrastructure.
- There is a need for more education about transportation opportunities in Iowa (future of transportation).
- There could be additional pipeline networks supported in Iowa. However, the importance of pipelines is overblown. It is only part of the answer to help with freight movement.
- Air cargo is a weak link for Iowa.
- Many businesses either use International and Domestic container transportation, or none at all. Domestic container transport is a low priority.
- Intermodal access is not sufficient.
- There are not enough containers in Iowa.
- Transloading facilities largely make sense and should be located throughout Iowa. There is not enough information available to assess whether or not transloading facilities are the solution for specific businesses.

Survey Themes

SAFETY AND SECURITY

- Progress has been made, but there's still some work needed to make freight transport safe.
- Rail is too loud and quiet zones need stricter enforcement.
- Vehicular accidents account for the majority of safety concerns on highways.
- Infrastructure improvements would likely lead to increase in safety.
- People are at least a little concerned about the volume of oversize/overweight trucks on the highway and believe this is one of the largest causes for road decay.
- High concern for increasing weight and size regulations.
- The majority of respondents do not ship hazardous materials.
- Respondents have some level of concern for rail/freight terrorism and do not know how to prevent it while many also have no concern about this ... not many in between.
- Iowa DOT does an excellent job of promoting safety. Respondents are generally satisfied with effectiveness of Iowa DOT.

MULTIMODAL NETWORKS

- Greater access to modes will reduce rates and improve connectivity.
- Some funding should be directed to barge/river transportation.
- There should be an increase in number of intermodal facilities within Iowa.
- Expanding concentration to other modes (other than just road) will increase freight transportation effectiveness, efficiency.
- Obtaining additional federal interest in the importance of assisting in Iowa infrastructure is important.

Freight Strategies and Goals Consistency Matrix

November 2015

	Iowa's Freight Improvement Strategies	National Freight Goals						
		Improve economic efficiency, productivity, and competitiveness	Reduce congestion	Improve safety, security, and resiliency	Improve state of good repair	Use advanced technology, innovation, and competition	Use performance management and accountability	Reduce adverse environmental and community impacts
1	Maximize the advantages inherent to Iowa's geographic proximity	✔	✔			✔	✔	✔
2	Explore/create other funding sources to increase investment in the freight transportation system	✔	✔	✔	✔	✔	✔	✔
3	Target investment to address mobility issues that impact freight facilities	✔	✔	✔	✔	✔	✔	
4	Utilize designs that are compatible with oversize/overweight freight movements	✔	✔	✔		✔		✔
5	Target investment on the interstate system at a level that reflects the importance of this system for moving freight	✔	✔	✔	✔	✔	✔	✔
6	Right-size the highway system and apply cost-effective solutions to locations with existing and anticipated issues	✔	✔	✔	✔	✔	✔	✔
7	Advance a 21st century Farm to Market system that moves products seamlessly across road, rail, and water to global marketplaces	✔			✔	✔	✔	
8	Implement asset management tools and practices and promote their use at the local level	✔	✔	✔	✔	✔	✔	✔
9	Optimize the freight transportation network to minimize cost and travel time and improve supply chain efficiency	✔	✔	✔	✔	✔	✔	✔
10	Optimize the availability and use of freight shipping containers	✔	✔			✔	✔	✔
11	Explore opportunities for increasing value-added production within the state	✔				✔	✔	
12	Continue to advance efforts on the M-35 Marine Highway Corridor	✔	✔	✔	✔	✔	✔	✔
13	Provide real-time information on system conditions to support the movement of freight	✔	✔	✔		✔	✔	✔
14	Leverage information from users of the system to support advanced decision-making and incident avoidance	✔	✔	✔		✔	✔	✔
15	Provide measured, clear, non-technical performance results for the freight system	✔	✔	✔	✔	✔	✔	✔
16	Streamline and align freight-related regulations and minimize unintended consequences	✔				✔	✔	
17	Act as a point of contact and educator on freight transportation options	✔	✔			✔	✔	

IOWA

RAILROAD SERVICE MAP

Prepared by

IOWA DOT

Phone (515) 239 - 1664

In Cooperation with
United States
Department of Transportation
July 1, 2015

0 10 20 30 40 50
Miles

0 10 20 30 40 50
Kilometers

N
W E
S

Special Notes

1. CBRX -- Six Miles of track in the Council Bluffs area
2. IATR -- Thirteen miles of track in Mason City
3. BJRY -- Five miles of track in Burlington
4. CGAQ -- Privately owned track south of Eddyville

Operating Railroads

Amtrak	AMTK
Appanoose County Community R.R. Co.	APNC
Boone Scenic Valley R.R.	BSV
Burlington Junction Ry. Co.	BJRY
BNSF Railway Co.	BNSF
Cedar Rapids and Iowa City Ry. Co.	CIC
Cedar River Railroad Co.	CEDR
Chicago, Central & Pacific Railroad	CC
D & I Railroad Co.	DAIR
Dakota, Minnesota and Eastern R.R. Co.	DME
Iowa Interstate R.R. Ltd.	IAIS
Iowa Northern Ry. Co.	IANR
Iowa River Railroad Co.	IARR
Iowa Traction R.R. Co.	IATR
Keokuk Junction Ry.	KJRY
Norfolk and Southern Railway Co.	NS
Soo Line	SOO
Union Pacific Railroad	UP
Private Track – Cargill Alliance	CGAQ

Non-Operating Railroad Owners

Canadian National Railway Co.	CN
Canadian Pacific Railroad	CP
CBEC Railway Co.	CBRX
D & W Railroad Inc.	DWRV
North Central Iowa Rail Corridor	NCIRC
Pioneer Rail Corp.	PNRC
Progressive Rail	PGR
State of South Dakota	SD
Trackage Rights Only	( )
Primary Operator	(<>)

Trackage Rights

(BNSF)		(IANR)	
(CC)		(KJRY)	
(DAIR)		(NS)	
(DME)		(SOO)	
(IAIS)		(UP)	

8 - 19 -2015

Appendix D: Draft Freight Plan Strategies

Freight Strategies and Goals Consistency Matrix

November 2015

	Iowa's Freight Improvement Strategies	National Freight Goals						
		Improve economic efficiency, productivity, and competitiveness	Reduce congestion	Improve safety, security, and resiliency	Improve state of good repair	Use advanced technology, innovation, and competition	Use performance management and accountability	Reduce adverse environmental and community impacts
1	Maximize the advantages inherent to Iowa's geographic proximity	✔	✔			✔	✔	✔
2	Explore/create other funding sources to increase investment in the freight transportation system	✔	✔	✔	✔	✔	✔	✔
3	Target investment to address mobility issues that impact freight facilities	✔	✔	✔	✔	✔	✔	
4	Utilize designs that are compatible with oversize/overweight freight movements	✔	✔	✔		✔		✔
5	Target investment on the interstate system at a level that reflects the importance of this system for moving freight	✔	✔	✔	✔	✔	✔	✔
6	Right-size the highway system and apply cost-effective solutions to locations with existing and anticipated issues	✔	✔	✔	✔	✔	✔	✔
7	Advance a 21st century Farm to Market system that moves products seamlessly across road, rail, and water to global marketplaces	✔			✔	✔	✔	
8	Implement asset management tools and practices and promote their use at the local level	✔	✔	✔	✔	✔	✔	✔
9	Optimize the freight transportation network to minimize cost and travel time and improve supply chain efficiency	✔	✔	✔	✔	✔	✔	✔
10	Optimize the availability and use of freight shipping containers	✔	✔			✔	✔	✔
11	Explore opportunities for increasing value-added production within the state	✔				✔	✔	
12	Continue to advance efforts on the M-35 Marine Highway Corridor	✔	✔	✔	✔	✔	✔	✔
13	Provide real-time information on system conditions to support the movement of freight	✔	✔	✔		✔	✔	✔
14	Leverage information from users of the system to support advanced decision-making and incident avoidance	✔	✔	✔		✔	✔	✔
15	Provide measured, clear, non-technical performance results for the freight system	✔	✔	✔	✔	✔	✔	✔
16	Streamline and align freight-related regulations and minimize unintended consequences	✔				✔	✔	
17	Act as a point of contact and educator on freight transportation options	✔	✔			✔	✔	

Appendix E: Draft Freight Plan Strategy Voting Results

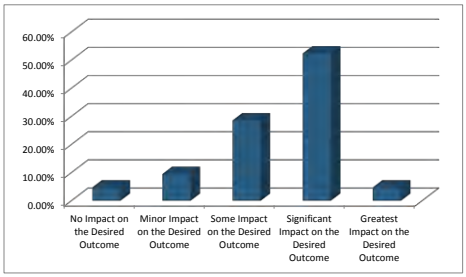
Session Name
New Session 11-18-2015 12-04 PM_freight

Date Created	Active Participants	Total Participants
11/18/2015 10:39:52 AM	21	21

Average Score	Questions
0.00%	36

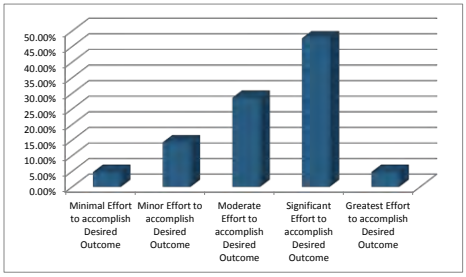
2. Maximize the advantages inherent to Iowa's geographic proximity (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	4.76%	1
Minor Impact on the Desired Outcome	9.52%	2
Some Impact on the Desired Outcome	28.57%	6
Significant Impact on the Desired Outcome	52.38%	11
Greatest Impact on the Desired Outcome	4.76%	1
Totals	**100%**	**21**



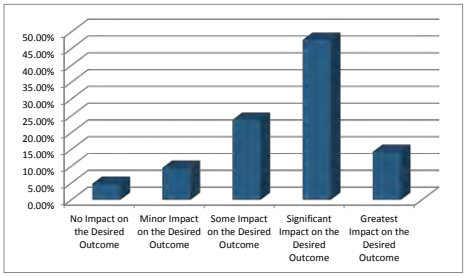
3. Maximize the advantages inherent to Iowa's geographic proximity (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	4.76%	1
Minor Effort to accomplish Desired Outcome	14.29%	3
Moderate Effort to accomplish Desired Outcome	28.57%	6
Significant Effort to accomplish Desired Outcome	47.62%	10
Greatest Effort to accomplish Desired Outcome	4.76%	1
Totals	**100%**	**21**



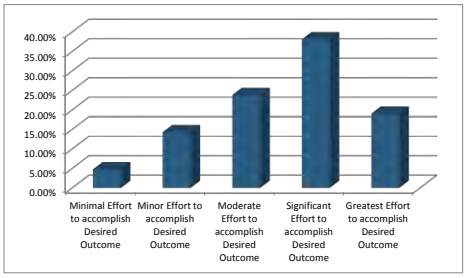
4. Explore/create other funding sources to increase investment in the freight transportation system (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	4.76%	1
Minor Impact on the Desired Outcome	9.52%	2
Some Impact on the Desired Outcome	23.81%	5
Significant Impact on the Desired Outcome	47.62%	10
Greatest Impact on the Desired Outcome	14.29%	3
Totals	**100%**	**21**



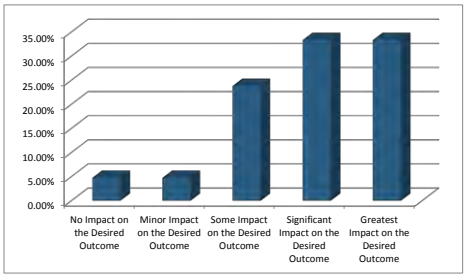
5. Explore/create other funding sources to increase investment in the freight transportation system (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	4.76%	1
Minor Effort to accomplish Desired Outcome	14.29%	3
Moderate Effort to accomplish Desired Outcome	23.81%	5
Significant Effort to accomplish Desired Outcome	38.10%	8
Greatest Effort to accomplish Desired Outcome	19.05%	4
Totals	**100%**	**21**



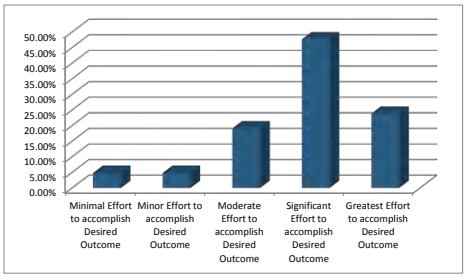
6. Target investments to address mobility issues that impact freight facilities (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	4.76%	1
Minor Impact on the Desired Outcome	4.76%	1
Some Impact on the Desired Outcome	23.81%	5
Significant Impact on the Desired Outcome	33.33%	7
Greatest Impact on the Desired Outcome	33.33%	7
Totals	**100%**	**21**



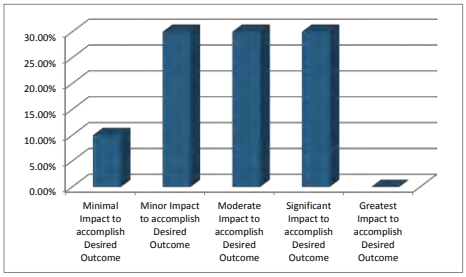
7. Target investments to address mobility issues that impact freight facilities (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	4.76%	1
Minor Effort to accomplish Desired Outcome	4.76%	1
Moderate Effort to accomplish Desired Outcome	19.05%	4
Significant Effort to accomplish Desired Outcome	47.62%	10
Greatest Effort to accomplish Desired Outcome	23.81%	5
Totals	**100%**	**21**



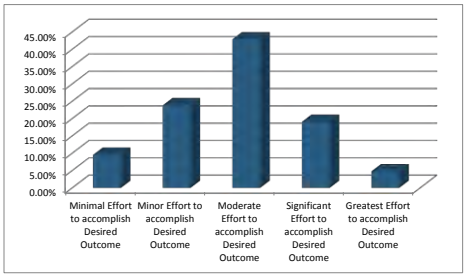
8. Utilize designs that are compatible with oversize/overweight freight movements (Multiple Choice)

	Responses	
	Percent	Count
Minimal Impact to accomplish Desired Outcome	10.00%	1
Minor Impact to accomplish Desired Outcome	30.00%	3
Moderate Impact to accomplish Desired Outcome	30.00%	3
Significant Impact to accomplish Desired Outcome	30.00%	3
Greatest Impact to accomplish Desired Outcome	0.00%	0
Totals	**100%**	**10**



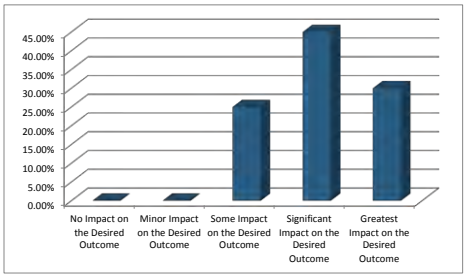
9. Utilize designs that are compatible with oversize/overweight freight movements (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	9.52%	2
Minor Effort to accomplish Desired Outcome	23.81%	5
Moderate Effort to accomplish Desired Outcome	42.86%	9
Significant Effort to accomplish Desired Outcome	19.05%	4
Greatest Effort to accomplish Desired Outcome	4.76%	1
Totals	**100%**	**21**



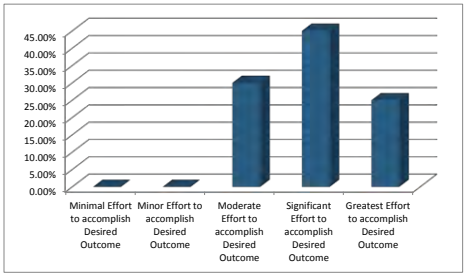
10. Target investments on the interstate system at a level that reflects the importance of this system for moving freight (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	0.00%	0
Some Impact on the Desired Outcome	25.00%	5
Significant Impact on the Desired Outcome	45.00%	9
Greatest Impact on the Desired Outcome	30.00%	6
Totals	**100%**	**20**



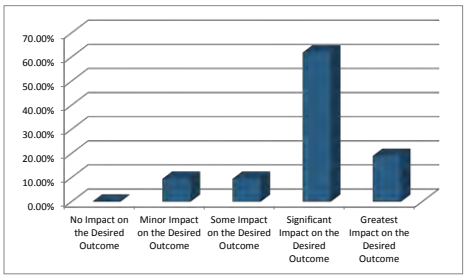
11. Target investments on the interstate system at a level that reflects the importance of this system for moving freight (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	0.00%	0
Minor Effort to accomplish Desired Outcome	0.00%	0
Moderate Effort to accomplish Desired Outcome	30.00%	6
Significant Effort to accomplish Desired Outcome	45.00%	9
Greatest Effort to accomplish Desired Outcome	25.00%	5
Totals	**100%**	**20**



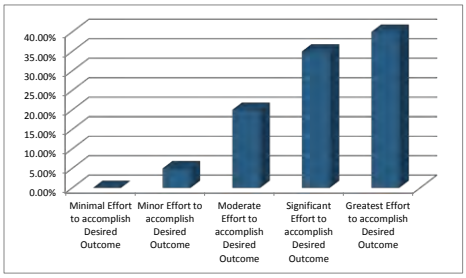
12. Right-size the highway system and apply cost-effective solutions to locations with existing and anticipated issues (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	9.52%	2
Some Impact on the Desired Outcome	9.52%	2
Significant Impact on the Desired Outcome	61.90%	13
Greatest Impact on the Desired Outcome	19.05%	4
Totals	**100%**	**21**



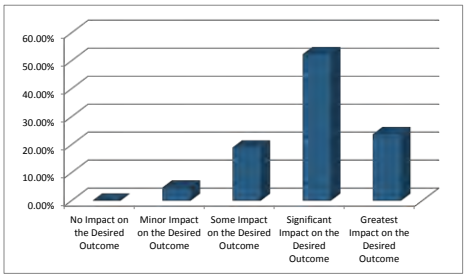
13. Right-size the highway system and apply cost-effective solutions to locations with existing and anticipated issues (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	0.00%	0
Minor Effort to accomplish Desired Outcome	5.00%	1
Moderate Effort to accomplish Desired Outcome	20.00%	4
Significant Effort to accomplish Desired Outcome	35.00%	7
Greatest Effort to accomplish Desired Outcome	40.00%	8
Totals	**100%**	**20**



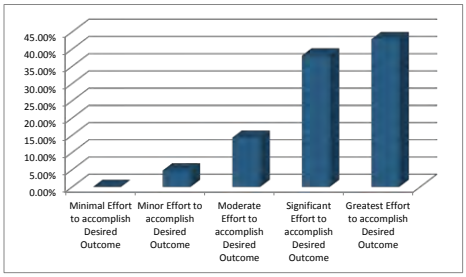
14. Advance a 21st century farm-to-market system that moves products seamlessly across road, rail, and water to global marketplaces (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	4.76%	1
Some Impact on the Desired Outcome	19.05%	4
Significant Impact on the Desired Outcome	52.38%	11
Greatest Impact on the Desired Outcome	23.81%	5
Totals	**100%**	**21**



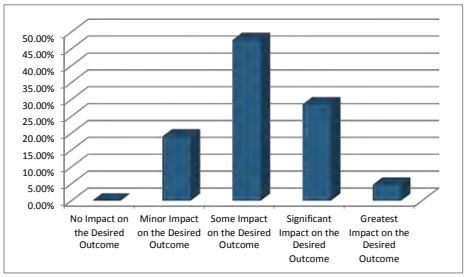
15. Advance a 21st century farm-to-market system that moves products seamlessly across road, rail, and water to global marketplaces (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	0.00%	0
Minor Effort to accomplish Desired Outcome	4.76%	1
Moderate Effort to accomplish Desired Outcome	14.29%	3
Significant Effort to accomplish Desired Outcome	38.10%	8
Greatest Effort to accomplish Desired Outcome	42.86%	9
Totals	**100%**	**21**



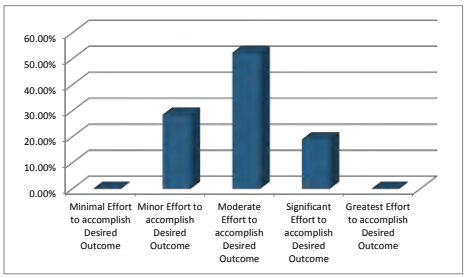
16. Implement asset management tools and practices and promote their use at the local level (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	19.05%	4
Some Impact on the Desired Outcome	47.62%	10
Significant Impact on the Desired Outcome	28.57%	6
Greatest Impact on the Desired Outcome	4.76%	1
Totals	**100%**	**21**



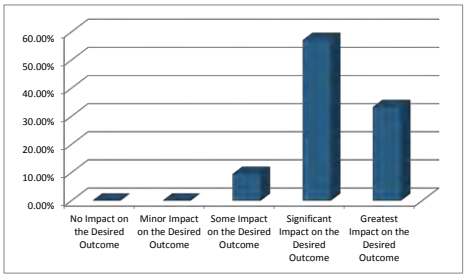
17. Implement asset management tools and practices and promote their use at the local level (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	0.00%	0
Minor Effort to accomplish Desired Outcome	28.57%	6
Moderate Effort to accomplish Desired Outcome	52.38%	11
Significant Effort to accomplish Desired Outcome	19.05%	4
Greatest Effort to accomplish Desired Outcome	0.00%	0
Totals	**100%**	**21**



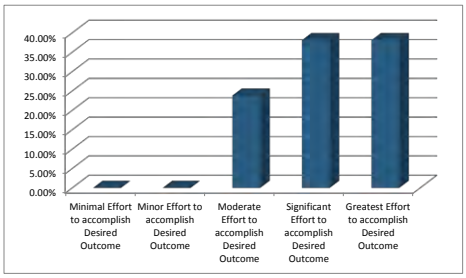
18. Optimize the freight transportation network to minimize cost and travel time and improve supply chain efficiency (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	0.00%	0
Some Impact on the Desired Outcome	9.52%	2
Significant Impact on the Desired Outcome	57.14%	12
Greatest Impact on the Desired Outcome	33.33%	7
Totals	**100%**	**21**



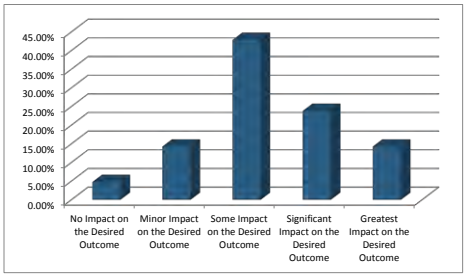
19. Optimize the freight transportation network to minimize cost and travel time and improve supply chain efficiency (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	0.00%	0
Minor Effort to accomplish Desired Outcome	0.00%	0
Moderate Effort to accomplish Desired Outcome	23.81%	5
Significant Effort to accomplish Desired Outcome	38.10%	8
Greatest Effort to accomplish Desired Outcome	38.10%	8
Totals	**100%**	**21**



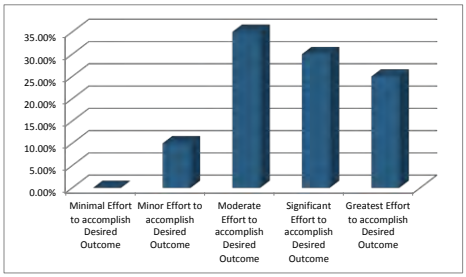
20. Optimize the availability and use of freight shipping containers (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	4.76%	1
Minor Impact on the Desired Outcome	14.29%	3
Some Impact on the Desired Outcome	42.86%	9
Significant Impact on the Desired Outcome	23.81%	5
Greatest Impact on the Desired Outcome	14.29%	3
Totals	**100%**	**21**



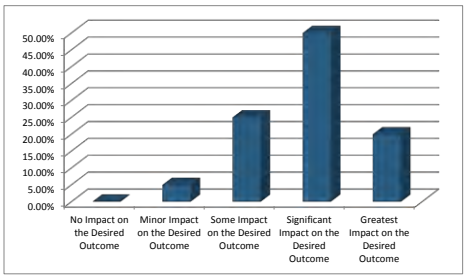
21. Optimize the availability and use of freight shipping containers (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	0.00%	0
Minor Effort to accomplish Desired Outcome	10.00%	2
Moderate Effort to accomplish Desired Outcome	35.00%	7
Significant Effort to accomplish Desired Outcome	30.00%	6
Greatest Effort to accomplish Desired Outcome	25.00%	5
Totals	**100%**	**20**



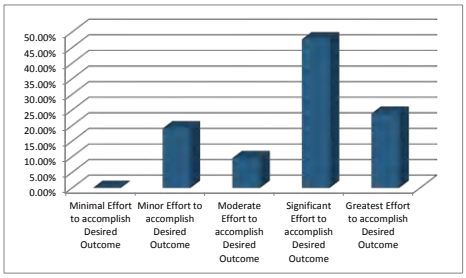
22. Explore opportunities for increasing value-added production within the state (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	5.00%	1
Some Impact on the Desired Outcome	25.00%	5
Significant Impact on the Desired Outcome	50.00%	10
Greatest Impact on the Desired Outcome	20.00%	4
Totals	**100%**	**20**



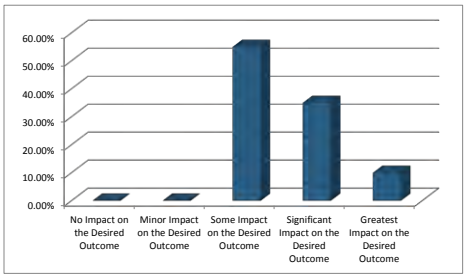
23. Explore opportunities for increasing value-added production within the state (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	0.00%	0
Minor Effort to accomplish Desired Outcome	19.05%	4
Moderate Effort to accomplish Desired Outcome	9.52%	2
Significant Effort to accomplish Desired Outcome	47.62%	10
Greatest Effort to accomplish Desired Outcome	23.81%	5
Totals	**100%**	**21**



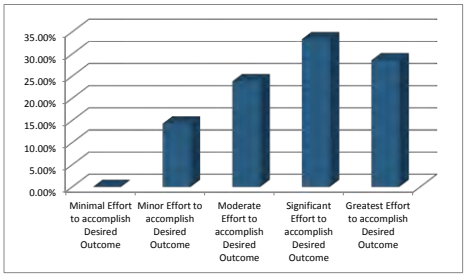
24. Continue to advance efforts on the M-35 Marine Highway Corridor (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	0.00%	0
Some Impact on the Desired Outcome	55.00%	11
Significant Impact on the Desired Outcome	35.00%	7
Greatest Impact on the Desired Outcome	10.00%	2
Totals	**100%**	**20**



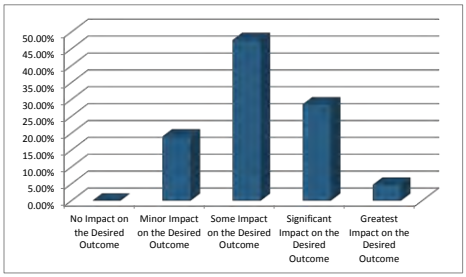
25. Continue to advance efforts on the M-35 Marine Highway Corridor (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	0.00%	0
Minor Effort to accomplish Desired Outcome	14.29%	3
Moderate Effort to accomplish Desired Outcome	23.81%	5
Significant Effort to accomplish Desired Outcome	33.33%	7
Greatest Effort to accomplish Desired Outcome	28.57%	6
Totals	**100%**	**21**



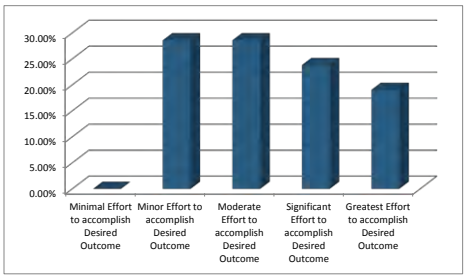
26. Provide real-time information on system conditions to support the movement of freight (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	19.05%	4
Some Impact on the Desired Outcome	47.62%	10
Significant Impact on the Desired Outcome	28.57%	6
Greatest Impact on the Desired Outcome	4.76%	1
Totals	**100%**	**21**



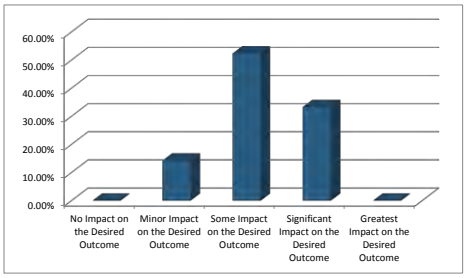
27. Provide real-time information on system conditions to support the movement of freight (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	0.00%	0
Minor Effort to accomplish Desired Outcome	28.57%	6
Moderate Effort to accomplish Desired Outcome	28.57%	6
Significant Effort to accomplish Desired Outcome	23.81%	5
Greatest Effort to accomplish Desired Outcome	19.05%	4
Totals	**100%**	**21**



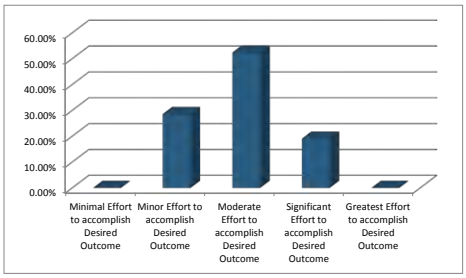
28. Leverage information from users of the system to support advanced decision-making and incident avoidance (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	14.29%	3
Some Impact on the Desired Outcome	52.38%	11
Significant Impact on the Desired Outcome	33.33%	7
Greatest Impact on the Desired Outcome	0.00%	0
Totals	**100%**	**21**



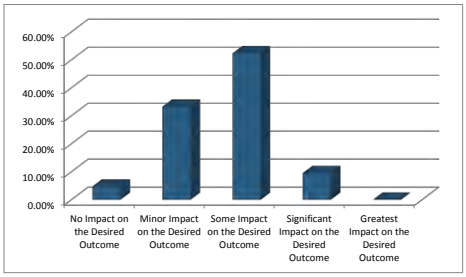
29. Leverage information from users of the system to support advanced decision-making and incident avoidance (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	0.00%	0
Minor Effort to accomplish Desired Outcome	28.57%	6
Moderate Effort to accomplish Desired Outcome	52.38%	11
Significant Effort to accomplish Desired Outcome	19.05%	4
Greatest Effort to accomplish Desired Outcome	0.00%	0
Totals	**100%**	**21**



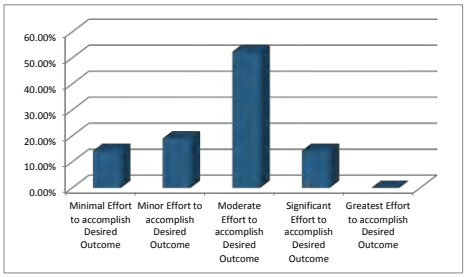
30. Provide measured, clear, non-technical performance results for the freight system (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	4.76%	1
Minor Impact on the Desired Outcome	33.33%	7
Some Impact on the Desired Outcome	52.38%	11
Significant Impact on the Desired Outcome	9.52%	2
Greatest Impact on the Desired Outcome	0.00%	0
Totals	**100%**	**21**



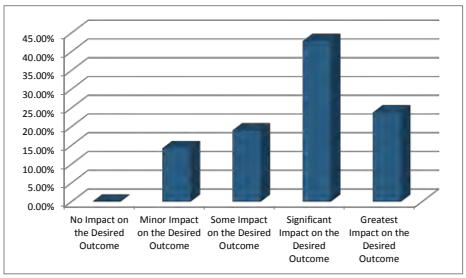
31. Provide measured, clear, non-technical performance results for the freight system (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	14.29%	3
Minor Effort to accomplish Desired Outcome	19.05%	4
Moderate Effort to accomplish Desired Outcome	52.38%	11
Significant Effort to accomplish Desired Outcome	14.29%	3
Greatest Effort to accomplish Desired Outcome	0.00%	0
Totals	**100%**	**21**



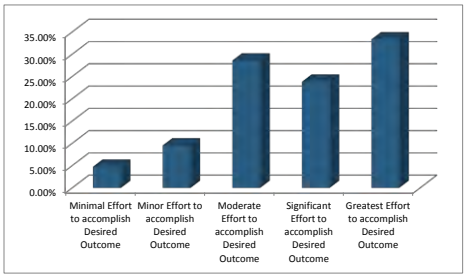
32. Streamline and align freight-related regulations and minimize unintended consequences (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	14.29%	3
Some Impact on the Desired Outcome	19.05%	4
Significant Impact on the Desired Outcome	42.86%	9
Greatest Impact on the Desired Outcome	23.81%	5
Totals	**100%**	**21**



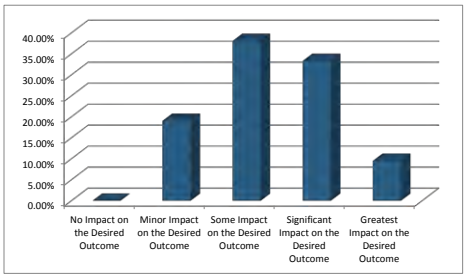
33. Streamline and align freight-related regulations and minimize unintended consequences (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	4.76%	1
Minor Effort to accomplish Desired Outcome	9.52%	2
Moderate Effort to accomplish Desired Outcome	28.57%	6
Significant Effort to accomplish Desired Outcome	23.81%	5
Greatest Effort to accomplish Desired Outcome	33.33%	7
Totals	**100%**	**21**



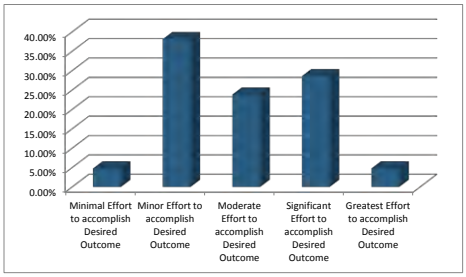
34. Act as a point of contact and educator on freight transportation options (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	19.05%	4
Some Impact on the Desired Outcome	38.10%	8
Significant Impact on the Desired Outcome	33.33%	7
Greatest Impact on the Desired Outcome	9.52%	2
Totals	**100%**	**21**

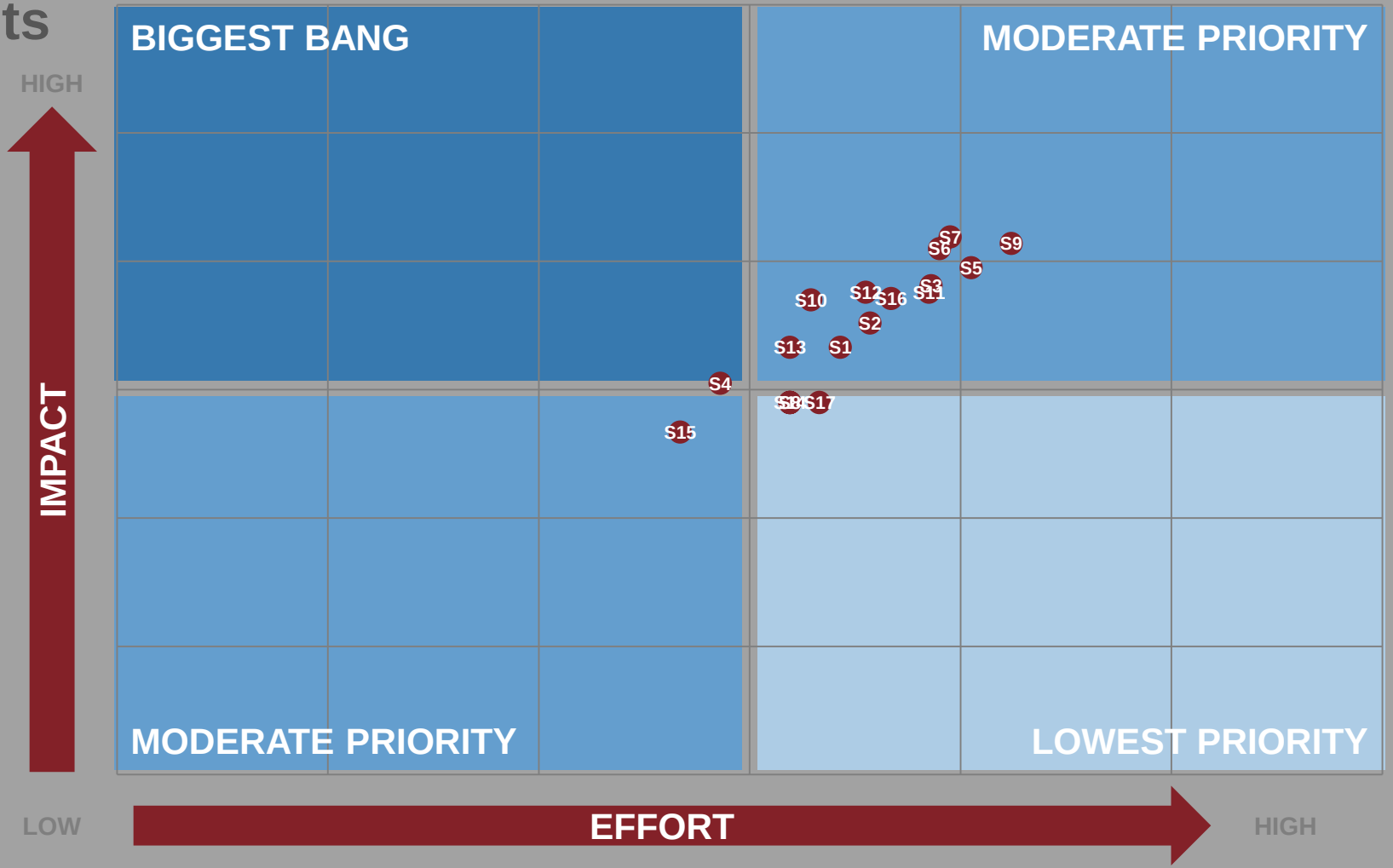


35. Act as a point of contact and educator on freight transportation options (Multiple Choice)

	Responses	
	Percent	Count
Minimal Effort to accomplish Desired Outcome	4.76%	1
Minor Effort to accomplish Desired Outcome	38.10%	8
Moderate Effort to accomplish Desired Outcome	23.81%	5
Significant Effort to accomplish Desired Outcome	28.57%	6
Greatest Effort to accomplish Desired Outcome	4.76%	1
Totals	**100%**	**21**



Results


BIGGEST BANG
MODERATE PRIORITY
MODERATE PRIORITY
LOWEST PRIORITY
HIGH
IMPACT
LOW
EFFORT
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S7
S6
S9
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S3
S12
S10
S16
S11
S2
S13
S1
S4
S18
S17
S15

Appendix F: State Rail Plan Draft Vision, Goals and Objectives Breakout Session

State Rail Plan Goals, Objectives Activity

Participants provided feedback on the draft State Rail Plan goals and objectives.

Goal: Enhance the Safety & Security of the Rail System

- *Divert highway traffic to safer rail*
- *Natural hazards (climate change)*
- *Security from terrorism*
- *Hazardous materials. (not just crude/ethanol)*
- *Emergency management coordination*
- *Need more than "monitor" energy products*
- *Multi state/multi county coordination for incidents*
- *Coordination with local emergency management services on hazmat training*
- *Prevent/mitigate*

Goal: Maintain the rail infrastructure

- *Preservation of rail line services*
- *Incorporate technology*
- *Build for future*
- *Abandonments – trails or keep*
- *Use data to assess condition*

Goal: Provide Access and Connectivity

- ***Passenger Rail***
  - *Intergovernmental funding (local, state, federal)*
  - *Explore potential and future routes within the region/surrounding states*
  - *Improve on-time performance to increase competitiveness*
  - *Education on consumer choice*
  - *Market to targeted demographic groups*
  - *Assisting local communities to be ADA compliant*
- ***Freight Rail***
  - *Regional collaboration for train building and consolidation ("small" shippers)*
  - *Improve collaboration by improving relationships*
  - *Understand designs and destinations*

Goal: Improve Efficiency

- *Bypass congested areas*
- *Innovative solutions to avoiding congested areas*
- *Public-private partnerships to solve problems*
- *Improved/intermodal/transload Access optimize*
- *Dealing with container imbalance – increase communication/collaboration for locating them*

Goal: Ensure Economic Competitiveness and Development

- *Competiveness development need access to intermodal, transload facilities.*
- *Targeted investment that needs to be coordinated matching business, with facility*
- *Antitrust/competition/territories –*
  - *3rd party operator, class I would out price*
- *Economic competiveness would be supported through coordination with buyers and those who need services and agree on a common plan*
- *Fostering public, private, partnership would provide economic development*
- *Companies need to use rail, working to match those with needs*
- *Distribution system should be shared*
- *Match industry with shipping needs*
- *Communities, companies need strategy to help communicate their constraints and possibilities for changes*

- *Existing facilities need to be clearly identified for use*
- *Transit-oriented development is missing in goals*
- *Opportunities for passenger rail can be fostered through economic development*
- *Can promote passenger rail as an excursion to overcome passenger rail as inconvenient or costly.*
- *Need a workforce to support economic development and coordination at state level and agencies*
- *Opportunity for marketing of passenger rail for economic development.*
- *Could have RISE type funding, revolving grant loan mentioned in his strategy.*

The following goals, objectives could be grouped together:

- *Group 1*
  - *Encourage new and enhanced industrial spurs or industrial parks when suitable*
  - *Improve access to the national rail network via new or enhanced industrial leads and spurs*
  - *Continue to promote the research opportunities for intermodal and transload facilities*
- *Group 2*
  - *Continue to support efforts that attract and sustain businesses in Iowa*
  - *Encourage economic development in Iowa through investments in rail system*

Goal: Sustain the Environment

- *Groups discussed that sustaining should go beyond the environment and be a part of all goals.*
- *By investing in infrastructure, sustainability is impacted.*
- *Through creating the right system, expansion and reduction in some areas, would sustain the system.*
- *Renewable energy should be promoted.*
- *Rail should be promoted as an efficient mode of transportation with low emissions. Those who use rail would have a role in identifying those efficiencies.*
- *Through connecting customers to what transportation option they are using, incentives could be provided for shipping and eventually play a role in educating the community on systems.*
- *By promoting and educating consumers about the benefits and choices they have for transportation modes could potentially make those consumers captive to a specific transportation form.*

Appendix G: State Rail Plan Draft Vision, Goals and Objectives

Goals:	Objectives:	Actions:
Enhance the Safety & Security of the Rail System	• *Minimize accidents, injuries and fatalities at highway at-grade crossing in Iowa* • *Continue Grade Crossing Safety Improvement Actions* • *Provide Public Education Programs* • *Continue to build upon coordination with and between the railroads* • *Reduce track-caused accidents* • *Monitor crude oil and ethanol routes for safety*	• *Improve highway-rail crossing safety* o *Repair and Upgrade existing crossing passive warning devices and active traffic-control systems* o *Rehabilitate existing crossing surfaces* o *Encourage crossing closures* o *Build new grade separations and rehabilitate existing separations* • *Monitor rail track, equipment and security operations* o *Continue the track inspection program* o *Analyze and monitor the movement of hazardous materials* • *Promote rail safety* o *Support and promote Operation Lifesaver activities and programs* o *Provide education and marketing information for rail safety issues* o *Continue to work closely with law enforcement to promote active enforcement of traffic laws relating to crossings and private property rights related to trespassing*
Maintain the rail infrastructure	• *Upgrade rail line segments and bridges to accommodate heavier railcars and address aging infrastructure to meet current/future needs of modern rail transport* • *Continue to promote the research opportunities for intermodal and transload facilities* • *Support the improvement of passenger rail service throughout the state* • *Leverage public-private partnerships for funding rail improvements*	• *Improve the physical infrastructure of the rail system in partnership with Iowa's shippers and railroads* o *Rehabilitate branch lines* o *Build or improve spur tracks* o *Build or improve rail transfer facilities* o *Build or improve rail yards, terminals, sidings, connections, and passing tracks.* o *Serve as an information/advocacy role for federal programs that benefit rail transportation (passenger and freight)* o *Rail station improvements activities* o *Rehabilitate bridges* • *Preserve Rail Service* o *Promote economic development that is served by rail transportation* o *Acquire rail rights of way for future rail use* o *Advise communities/shippers of options when rail service is at risk*
Provide Access and Connectivity	• *Passenger Rail* o *Improve existing station facilities* o *Encourage multimodal integration with transit, air and highway travel.* o *Continue to study the implementation of enhanced passenger rail services on existing corridors and new service on intercity corridors* o *Support a federal funding*	• *Promote the importance of passenger rail transportation* o *Continue outreach with stakeholders* o *Provide information on our website and social media outlets* • *Promote the importance of freight rail transportation* o *Coordinate activities with the rail users and providers* o *Take a leadership role in regional and national coalitions* o *Develop and present education and marketing information* ▪ *Provide tools that assist shippers*

	program for passenger rail initiatives • *Freight Rail* o *Continue to promote the research opportunities for intermodal and transload facilities* o *Continue to promote railroads and a shipping option for new and existing customers* o *Fund feasibility studies*	*in using railroads (e.g. Rail Toolkit)* ▪ *Conduct rail economic impact studies on the impact of lost rail lines on highways and economic benefit of rail to the state economy*
Improve Efficiency	• *Upgrade rail line segments and bridges to accommodate heavier railcars and meet current/future needs of modern rail transport* • *Leverage public-private partnerships for funding rail improvements* • *Capacity improvements, especially on short lines* • *Promote yard or interchange improvements*	• *Maintain safe, secure rail infrastructure* • *Promote opportunities for railroads to attract new business* • *Provide tools that allow the railroad to be more efficient*
Ensure Economic Competitiveness and Development	• *Encourage new and enhanced industrial spurs or industrial parks when suitable* • *Continue to support efforts that attract and sustain businesses in Iowa* • *Encourage economic development in Iowa through investments in rail system* • *Improve access to the national rail network via new or enhanced industrial leads and spurs* • *Continue to promote the research opportunities for intermodal and transload facilities* • *Upgrade rail line segments and bridges to accommodate heavier railcars* • *Leverage public-private partnerships for funding rail improvements*	• *Promote rail as a possible transportation option* • *Communicate information about using the rail system*
Sustain the Environment	• *Reduce transportation-related congestion and air pollution* o *Provide assistance for rail infrastructure improvements* o *Promote the environmental benefits of rail transportation (passenger and freight)* o *Promote use of emission reduction technologies*	

Appendix H: Draft Rail Plan Strategy Voting Results

Session Name
New Session 11-18-2015 2-10 PM_rail

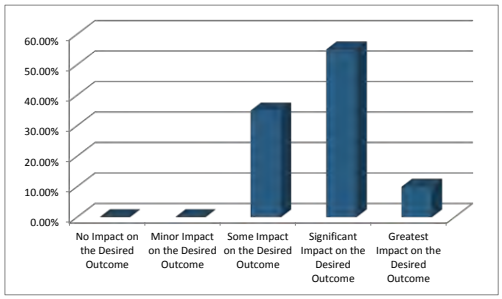
Date Created	Active Participants	Total Participants
11/18/2015 12:18:11 PM	20	20

Average Score	Questions
0.00%	6

Results by Question

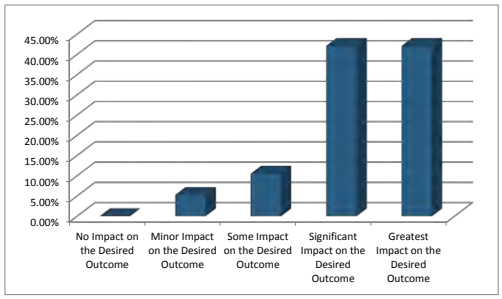
1. Enhance the safety and security of the rail systemThis could lead to grade crossing safety improvements, public education program, enhanced coordination between railroads (Multiple Choice)

	Responses	
	Percent	Count
Impact on the Desired Outcome	0.00%	0
Impact on the Desired Outcome	0.00%	0
Impact on the Desired Outcome	35.00%	7
Impact on the Desired Outcome	55.00%	11
Impact on the Desired Outcome	10.00%	2
Totals	**100%**	**20**



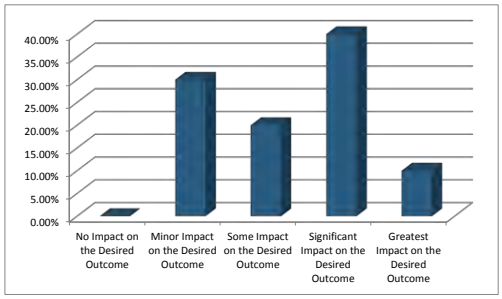
2. Maintain the infrastructureImprovements such as 286,000 (track and bridge upgrades); new and enhanced industrial spurs or industrial parks; development of an intermodal facility (Multiple Choice)

	Responses	
	Percent	Count
Impact on the Desired Outcome	0.00%	0
Impact on the Desired Outcome	5.26%	1
Impact on the Desired Outcome	10.53%	2
Impact on the Desired Outcome	42.11%	8
Impact on the Desired Outcome	42.11%	8
Totals	**100%**	**19**



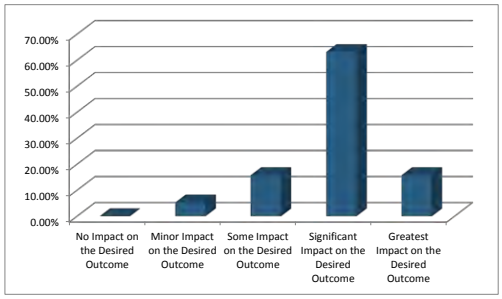
3. Provide access and connectivityAdvances to improve existing station facilities used by Amtrak, improve connectivity with existing and potential future transit systems and airports in Iowa (Multiple Choice)

	Responses	
	Percent	Count
Impact on the Desired Outcome	0.00%	0
Impact on the Desired Outcome	30.00%	6
Impact on the Desired Outcome	20.00%	4
Impact on the Desired Outcome	40.00%	8
Impact on the Desired Outcome	10.00%	2
Totals	**100%**	**20**



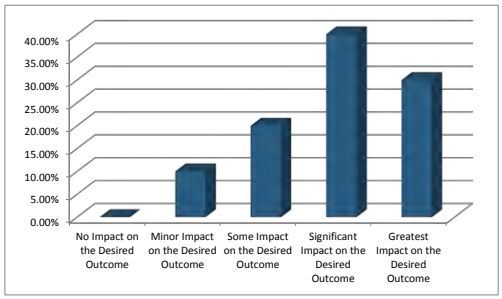
4. Improve efficiencyImprove the capacity, efficiency, and safety of railroad operations in Iowa (Multiple Choice)

	Responses	
	Percent	Count
Impact on the Desired Outcome	0.00%	0
Impact on the Desired Outcome	5.26%	1
Impact on the Desired Outcome	15.79%	3
Impact on the Desired Outcome	63.16%	12
Impact on the Desired Outcome	15.79%	3
Totals	**100%**	**19**



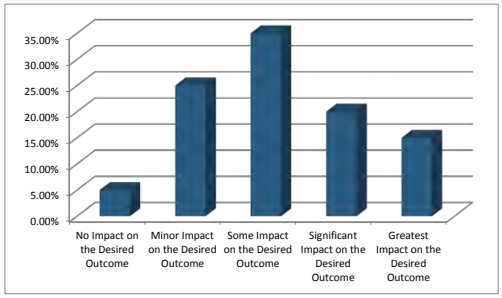
5. Ensure economic competitiveness and development that would support business in Iowa (Multiple Choice)

	Responses	
	Percent	Count
Impact on the Desired Outcome	0.00%	0
Impact on the Desired Outcome	10.00%	2
Impact on the Desired Outcome	20.00%	4
Impact on the Desired Outcome	40.00%	8
Impact on the Desired Outcome	30.00%	6
Totals	**100%**	**20**



6. Sustain the environmentReduction of greenhouse gas (GHG) emissions and fuel savings (Multiple Choice)

	Responses	
	Percent	Count
Impact on the Desired Outcome	5.00%	1
Impact on the Desired Outcome	25.00%	5
Impact on the Desired Outcome	35.00%	7
Impact on the Desired Outcome	20.00%	4
Impact on the Desired Outcome	15.00%	3
Totals	**100%**	**20**



Iowa Department of Transportation
State Freight Plan and State Rail Plan
High Leverage Stakeholder Committee Meeting #2 Summary

Prepared for the Iowa Department of Transportation
by HDR
March 2016

Contents

Meeting Summary

Meeting Overview

The Iowa Department of Transportation (Iowa DOT) hosted the second of three High Leverage Stakeholder Committee (HLSC) meetings to engage stakeholders in the rail and freight industry in the development of the State Freight and Rail Plans. The meeting was held on Thursday, February 25, 2016, in Ankeny, Iowa, and consisted of four interactive exercises that sought to gather input on the current strategies for improvements and the location-specific projects relative to each plan.

Outreach

Invitations were distributed to 41 recipients via email. Table 1 summarizes the outreach efforts for this meeting. See Appendix A: Meeting Invitation for the invitation content. The consultant team followed up with invitees through phone calls.

Table 1. Meeting Outreach

Outreach	Date	Number of Emails Distributed/Phone Calls
HLSC #2 Invitation Email	1/8/2016	41
HLSC #2 Reminder Invitation Email	2/12/2016	41
HLSC #2 Agenda Email	2/19/2016	41
HLSC #2 Follow-up Phone Calls	2/22/2016	6

Attendees

Twenty-six stakeholders attended the meeting including representatives from the Iowa DOT, industries related to freight and rail transportation and special interest groups. See Appendix B: Invitation Mailing and Attendee List.

Meeting Roles and Responsibilities

Table 2 summarizes the roles and responsibilities of each team member in attendance.

Table 2. Staff Roles and Responsibilities

Name	Organization	Responsibility
Jara Sturdivant-Wilson	HDR	Floater/Facilitator/Registration Freight Activity 1: District 6 Scribe
Laura Heilman	HDR	Facilitator Freight Activity 1: District 5 Scribe
Kevin Keller	HDR	Facilitator Freight Activity 1: District 1 Scribe Rail Activity 1: Category 4 Scribe
Justin Fox	CDM Smith	Facilitator

Name	Organization	Responsibility
		Freight Activity 1: District 3 Scribe Rail Activity 1: Category 2 Scribe
Chris Goepel	HDR	Facilitator Freight Activity 1: District 2 Scribe Rail Activity 1: Category 1 Scribe
Barb Wells	CDM Smith	Facilitator Freight Activity 1: District 4 Scribe Rail Activity 1: Category 3 Scribe
Amanda Martin	Iowa DOT	IADOT representative
Sam Hiscocks	Iowa DOT	IADOT representative
Garrett Pedersen	Iowa DOT	IADOT representative
Tammy Nicholson	Iowa DOT	IADOT representative
Craig Markley	Iowa DOT	IADOT representative
Kyle Barichello	Iowa DOT	IADOT representative
Diane McCauley	Iowa DOT	IADOT representative
Phil Meraz	Iowa DOT	IADOT representative/Timekeeper
Jeff Von Brown	Iowa DOT	IADOT representative
Laura Hutzell	Iowa DOT	IADOT representative
Sam Shea	Iowa DOT	IADOT representative
Ed Engle	Iowa DOT	IADOT representative

Meeting Agenda and Outcomes

The meeting was held Thursday, February 25, 2016, at the Courtyard Des Moines Ankeny located at 2405 SE Creekview Dr, Ankeny, Iowa. Registration began at 9:30 a.m.

9:30 a.m. – 10:00 a.m.:	Attendee Registration
10:00 a.m. – 10:15 a.m.:	Welcome, Safety Briefing, Meeting Purpose
10:15 a.m. – 10:20 a.m.:	Icebreaker #1
10:20 a.m. – 10:30 a.m.:	State Freight Plan, State Rail Plan Update
10:30 a.m. – 10:40 a.m.:	State Freight Plan Input Exercise #1
10:40 a.m. – 10:45 a.m.:	Icebreaker #2
10:45 a.m. – 12:00 p.m.:	VCAP Introduction and State Freight Plan Input Exercise #2
12:00 p.m. – 12:30 p.m.:	Lunch
12:30 p.m. – 12:35 p.m.:	Icebreaker #3
12:35 p.m. – 2:00 p.m.:	FRA guidance introduction and State Rail Plan Input Exercises 1 and 2

Welcome, Meeting Purpose

Participants received a registration packet at check-in that included the following:

- *Meeting handout*
- *Freight activity materials:*
  - *Modal list improvement handouts (air and waterways)*
  - *Value, Condition and Performance (VCAP) handout*
  - *VCAP maps (statewide, metro and by district)*
- *Rail activity material:*
  - *Railroad service map*

See Appendix C for the attendee registration packet.

The meeting began with a brief introduction from HDR Consultant Kevin Keller. The introduction included the meeting purpose – to provide updates on the status of both plans and to gather input on the current strategies for improvements and location-specific projects relative to each plan. After the welcome, HDR Consultants Jara Sturdivant-Wilson and Laura Heilman facilitated the first of three icebreaker activities of the meeting.

State Freight Plan, State Rail Plan Update

Keller walked participants through the current plan development schedule previewing the next High Leverage Stakeholder Committee Meeting #3 and the upcoming Public Meeting. Iowa DOT Systems Planning team member Sam Hiscocks provided an update on the Freight Plan schedule.

Keller provided participants an update on the voting exercise they participated in at the first High Leverage Stakeholder Committee meeting. This voting exercise asked respondents to indicate the level of effort and impact it would take to implement the freight strategies. Participants were able to see how their voting results compared to the results from the Freight Advisory Council (FAC) meeting and Iowa DOT facilitated-survey. All voting results showed a strong 1:1 correlation between effort and impact, meaning that the measure of impact a certain strategy would have matched the effort it would take to accomplish it. This result made it difficult to identify strategies that could be prioritized (those with high impact and low effort) or discarded (high effort and low impact). These results showed that all groups had a similar assessment of the strategies, and that the strategies identified were appropriate (no strategies were voted as having very low impact).

Iowa DOT Rail Planning team member Amanda Martin updated participants on the Rail Plan status. Keller concluded this portion of the meeting by highlighting the results of the rail plan goal voting exercise from the first HLSC meeting and FAC meeting. Again, these results showed that the two groups had very similar views of the impact of the goals; both groups individually prioritized the goals in the same order.

This portion of the meeting concluded with a brief discussion on the updated Rail Plan vision. No participants suggested any further changes to the vision.

State Freight Plan Input Exercises

Modal Improvement List Review

Hiscocks introduced the current air and waterway improvements. After the introduction, he asked participants to identify any fatal flaws in the identification process or changes to the list of improvements.

Regarding the air improvements, participants questioned why other airports were not highlighted during the exercise (Hiscocks said that this was because the other airports in the state combined had less than 1 percent of the traffic volume in the state), and noted that, although it is out of state, the Omaha Eppley airport does affect freight movement in Iowa and should be considered in the overall assessment and improvement recommendations.

Regarding the waterway improvements, participants noted the following:

- *There are opportunities in the Kansas area.*
- *We should view the Missouri River as a valued resource.*

- *There should be an understanding of the future of the viability of waterways (when do they become inoperable?).*
- *We should do asset planning for our infrastructure, with an understanding of the potential risk for failure.*
- *There should be a contingency plan for infrastructure failure.*
- *Ports to the East and West can serve as contingencies.*
- *Rather than acting in a reactionary way, the industry should focus on forecasting trends and potentialities.*
- *Is there a current study of Iowa locks [it was noted by staff that the Freight Plan does include this].*
- *With the expansion of the Panama Canal, there will be more north-south traffic on inland waterways in the future.*
- *There should be a list of the information the Iowa DOT should and can obtain about facilities on the Iowa side of the Mississippi River.*
- *Ports only function when connected to other modes; there should be a focus on connectivity, access, and linkage points.*
- *There is a need for legislation to connect river and rail.*
- *There is a high regional interest in an intermodal container port; do any currently exist to the east of west of Iowa?*
- *Can we leverage or use data from the LIFTS grant applications or reports?*

Value, Condition, and Performance (VCAP) Highway Improvements Exercise

Hiscocks introduced the Value, Condition and Performance (VCAP) process to participants. After the introduction, participants spent time reviewing the entire highway VCAP list and the corresponding maps by district.

Once finished with the review, participants were able to walk around the room and review the VCAP maps by districts. Technical experts were stationed at each district map and were available to provide background information and answer questions. Scribes were also placed at each of the district maps to capture any notes from participants.

Participants questioned how seasonality is accounted for in rankings, as it affects truck volume, particularly in rural areas. Fall is typically busier than summer and winter, for example. Participants also questioned if rankings were based on bottlenecks at intersections only, or if they were ranked based on bottlenecks of corridors. There was also a comment that the Iowa DOT should compare projects on a district basis in order to prioritize projects.

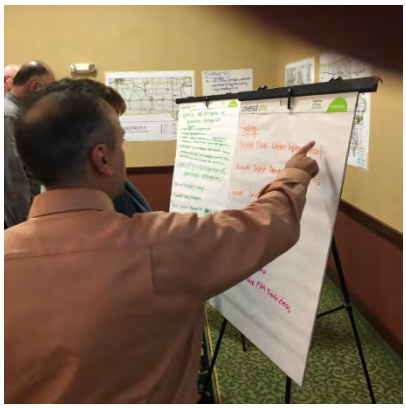
Table 3 provides a summary of notes for each district; see Appendix D for the full list of results by district.

Table 3. District Input Summary

District	District Result Summary
1	• *There was recent construction at Highway 27.*
2	• *There needs to be improved traffic flow and congestion mitigation at point 13.* • *Bigger signs are needed on 380/218 through Waterloo for the Avenue of the Saints route.*
3	• *No district-specific notes.*
4	• *A new bridge crossing the river from I-29 in the Council Bluffs Area to Eppley Airfield in Omaha has been proposed in this District.* • *Iowa DOT should look at the corridors in this district.*

District	District Result Summary
5	• *All comments were in regard to the area around point 41, in Muscatine.* • *Lots of work is currently underway in and around Muscatine, especially on existing Hwy 61 and Old Hwy 61.* • *There is non-recurring congestion in Muscatine due to detours/diversion from I-80. The ongoing safety study (diversion) should be coordinated with current and future efforts in order to mitigate these issues:* • *Increased economic development projects are happening in Muscatine.*
6	• *The US 67 bridge in the Quad Cities should be addressed* • *US 30/IA 136 Clinton Bridges should be addressed* • *The 174 corridor should continue to be a priority project.* • *Iowa should coordinate with Illinois on the replacement of the I-80 bridge*

At the end of review period, facilitators asked participants to identify any fatal flaws with the process and/or changes to the list of improvements.



Participants reviewing District 5 comments.

State Rail Plan Input Exercises

Railroad Capital Investments and Projects in Iowa Exercise

After lunch, consultant team member Kevin Keller introduced the Federal Railroad Administration (FRA) guidance for the development of State Rail Plans. Keller then asked participants to outline their needs for rail within four main project categories:

1. *Capacity and mitigation of operational chokepoints*
2. *Safety*
3. *Economic development*
4. *Modal connectivity*

The consultant team prepared a number of examples under each category before the meeting, which were shown on the flip charts at the beginning of the exercise. Scribes captured additional responses from participants. After the lists were complete, participants had 20 minutes to vote on the lists using a set of colored stickers. Participants were given three red voting stickers to identify types of projects to be prioritized, three blue voting stickers to indicate short-term projects, and three green voting stickers to indicate long-term projects. At the end of the exercise, facilitators asked participants how the Iowa DOT could best facilitate the priorities of their organization.

Table 4 shows the capital investments and projects that received the highest overall number of votes. See Appendix E for the full list of capital investments and projects, priority voting results, and feedback on how the Iowa DOT could best help organizations accomplish their priorities.

Table 4

Category	Capital Investments and Projects	Number of Votes Received			
		RED Priority	GREEN Long Term	BLUE Short Term	TOTAL
Economic Development	Transload/intermodal facility	13	4	4	21
Modal Connectivity	Passenger	7	4	5	16
Safety	Crossing closures	7	2	7	16
Safety	Grade separations	5	8	2	15
Modal Connectivity	Connectivity and interchange	6	4	4	14

Rail Map Exercise

Keller then introduced the last rail exercise and invited participants to walk around the meeting room to view large maps of the existing rail service in the state of Iowa. Meeting participants received three of each color of sticker and unlimited voting tape.

Participants were asked to add stickers and tape to the rail maps with the following guidelines:

- *Yellow stickers identified changes to existing or additional (if applicable) passenger rail stations in Iowa.*
- *Pink stickers identified changes or additions/additional points (if applicable) to existing points of freight rail access in Iowa (i.e. industrial spur, transload).*
- *Green tape identified changes to existing passenger rail services in Iowa or recommended additions (if applicable) (including intercity and commuter rail).*
- *Blue tape identified changes to existing freight rail services in Iowa or recommended additions if applicable (including new routes or reactivated abandoned routes).*

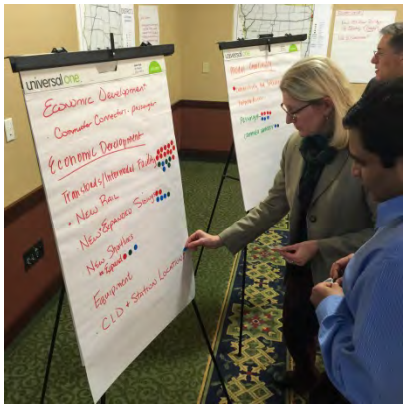
Passenger Rail

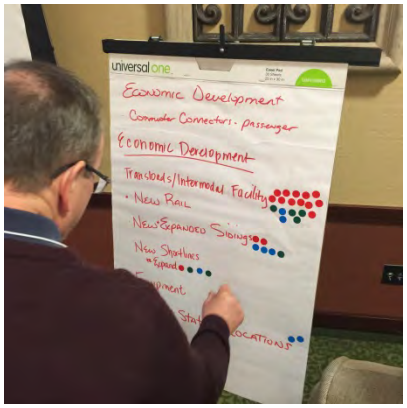
- Participants used green tape to mark routes changes or additions to existing passenger rail services. These routes were either north-south, through the center of the state closely paralleling I-35, or east-west closely paralleling I-80. Marked routes went through the entire state, intended to connect to major population centers in surrounding states.
- Yellow stickers marked changes or additions to existing passenger rail stations. These stickers focused on larger cities and metropolitan areas. Most were found on the east side of the state, along the I-80 corridor, or along a central north-south spine, along the I-35 corridor.

Freight Rail

- Pink stickers identified changes or additions to existing points of freight rail access. Pink stickers were clustered in larger cities and metropolitan areas.
- Participants used blue tape to mark routes for changes or additions to existing freight rail services. Areas along the western edge of the state, as well as straight of Des Moines and straight east of Cedar Rapids, were identified.

See Appendix F for images of the rail maps and the full list of identified additions or changes to rail services.
At the end of the meeting, participants were asked about what studies could inform the State Rail Plan. Study priorities include intermodal, industrial park, and market studies; infrastructure needs; multi-modal and regional network connections; and macroeconomic studies. The Iowa DOT also shared what they needed from the shipping community – public-private partnerships, anchor tenants, network upgrades and infrastructure.





Participants voting during the State Rail Plan exercises. .

Next Steps

Keller closed the meeting with a preview of the next HLSC meeting and upcoming public and online meetings.

Appendix A: Meeting Invitations

IOWA DOT
SMARTER | SIMPLER | CUSTOMER DRIVEN www.iowadot.gov

January 8, 2015

Happy New Year! We hope this email finds you well. We look forward to seeing you again at our second High Leverage Stakeholder Committee meeting on Thursday, February 25th from 10:00 am to 2:00 pm at the Courtyard Des Moines Ankeny. Please note that the start time for this meeting is one hour earlier than the previous meeting.

From the Issues-Based Workshop, online survey and our first High Leverage Stakeholder Committee meeting, stakeholders like you have provided information that will continue to guide us as we move forward in developing both of the Plans. During this meeting, we will provide a summary of the input we have gathered for both the Iowa State Rail and State Freight Plans. **As we head into our second High Leverage Stakeholder meeting, we need your continued support and participation as we begin to refine and further develop the actual Plans.**

Join us Thursday, February 25th, from 10:00 am – 2:00 pm as we move into the next steps of the development of both plans. **Please RSVP to Wendy Thompson at info@engagefreightrailplans.com by February 17, 2016. Please include any dietary restrictions in your RSVP as well.**

Meeting Details:

Date: Thursday, February 25
Time: 10:00 am - 2:00 pm
Location: Courtyard Des Moines Ankeny
2405 SE Creekview Dr
Ankeny, IA 50021
Parking: Please park on the south or east side of the building.
Lunch will be provided!

We are excited to see you at our next meeting!

If you missed the first High Leverage Stakeholder Committee meeting, you can review the meeting summary and materials here.

Stuart Anderson, Director
Planning, Programming and Modal Division

IOWADOT
SMARTER I SIMPLER I CUSTOMER DRIVEN www.iowadot.gov

February 12, 2016

Join us at the second High Leverage Stakeholder Committee meeting on Thursday, February 25th from 10:00 am to 2:00 pm at the Courtyard Des Moines Ankeny. We look forward to seeing you again as we move into the next steps of the development of both plans. **Please RSVP to Wendy Thompson at info@engagefreightrailplans.com by February 17, 2016. Please include any dietary restrictions in your RSVP as well.**

Please note that the start time for this meeting is one hour earlier than the previous meeting.

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Lunch will be provided!

We are excited to see you at February 25th!

If you missed the first High Leverage Stakeholder Committee meeting, you can review the meeting summary and materials here.

Stuart Anderson, Director
Planning, Programming and Modal Division

800 Lincoln Way
Ames, IA 50010

http://engagefreightrailplans.iowadot.gov/

Opt Out

IOWA DOT
SMARTER I SIMPLER I CUSTOMER DRIVEN
www.iowadot.gov

February 19, 2016

Meeting Details:

Date: Thursday, February 25
Time: 10:00 am - 2:00 pm
Location: Courtyard Des Moines Ankeny
2405 SE Creekview Dr
Ankeny, IA 50021
Parking: Please park on the south or east side of the building.
Lunch will be provided!

We are excited to see you at the second High Leverage Stakeholder Committee meeting for the Iowa State Rail and Freight Plans. At this meeting we are seeking your input on the current strategies for improvements and location-specific projects relative to each plan. We will also answer any questions and receive your comments regarding both plans.

For your convenience, we have outlined below the meeting agenda and provided links to materials that we will review during the meeting. We encourage you to familiarize yourself with the meeting materials associated with each activity on the agenda.

Agenda

- 10:00 – 10:20 am: Welcome, Safety Briefing, Meeting Purpose
- 10:20 – 10:30 am: State Freight Plan, State Rail Plan Update
- 10:30 – 10:45 am: State Freight Plan Input Exercise #1
- 10:45 am – 12:00 pm: Value, Condition, Performance Introduction and State Freight Plan Input Exercise #2
- 12:00 – 12:30 pm: Lunch
- 12:30 – 2:00 pm: FRA Guidance Introduction and State Rail Plan Input Exercises
- 2:00 pm: Next Steps & Wrap-up

Meeting Materials

- Freight Activities (To navigate this document, click the bookmark icon in the right hand corner)
- Rail Activities

If you were not able to attend the first High Leverage Stakeholder Committee meeting or the Issues Based Workshop, you can review the meeting summaries and materials here.

We are excited to see you at the meeting next week!

Appendix B: Invitation Mailing and Attendee List

First Name	Last Name	Organization	Attended
Greg	Lofstedt		
Derrick	James	Amtrak	
Todd	Stennis	Amtrak	
Ron	White	ARTCO Fleeting Service	
Denise	Bulat	Bi-State	
Gena	McCullough	Bi-State	✓
Sarod	Dhuru	BNSF	✓
Greg	Reeder	City of Council Bluffs	✓
Dave	Gobin	City of Muscatine	✓
Jeff	Woods	CRANDIC	✓
Chandra	Ravada	Dubuque MPO	✓
Steve	Falck	Environmental Law and Policy Center	✓
Rob	Toncar	FedEx	
Teresa	Valenta	FedEx	
Stacy	Timperley	Forbs	✓
Beth	Bilyeu	Forest City Economic Development	✓
David	Toyer	Greater Burlington Partnership	
Harold	Hommes	Iowa Department of Agriculture and Land Stewardship	
Kyle	Barichello	Iowa DOT	✓
Ed	Engle	Iowa DOT	✓
Sam	Hiscocks	Iowa DOT	✓
Laura	Hutzell	Iowa DOT	✓
Amanda	Martin	Iowa DOT	✓
Diane	McCauley	Iowa DOT	✓

First Name	Last Name	Organization	Attended
Phil	Meraz	Iowa DOT	✓
Phil	Mescher	Iowa DOT	
Tammy	Nicholson	Iowa DOT	✓
Garrett	Pedersen	Iowa DOT	✓
Sam	Shea	Iowa DOT	✓
Jeff	Von Brown	Iowa DOT	✓
Joseph	Rude	Iowa Economic Development Authority	
Joe	Parsons	Iowa Interstate Railroad	✓
John	Dill	Iowa Motor Truck Association	
Don	Egli	Iowa Motor Truck Association	✓
Brenda	Neville	Iowa Motor Truck Association	✓
Steve	Lallier	J. B. Hunt Transport	
Michael	Heckart	John Deere	
Osama	Shihadeh	Kent Corporation	✓
Michael	Helgerson	Metropolitan Area Planning Agency	
Ned	Lewis	Office of Motor Vehicle Enforcement	✓
Richard	Grenville	Port KC, Kansas City, MO	✓
Mike	Coghlan	Sabre Industries Towers and Poles	
Kelli	O'Brien	Union Pacific Railroad	✓
Mark	Peterson	UPS	
Bill	Neese	West Central Co-Op	

Appendix C: Attendee Registration Packet

2016 **IOWA RAIL PLAN**

HIGH LEVERAGE STAKEHOLDER COMMITTEE

February 2016

WELCOME!

The purpose of today's meeting is to gather your input on the current strategies for improvements and location-specific projects, provide an update on both plans, and answer questions and receive comments.

Today we will:

- discuss the updated vision and goals for both plans;
- provide a summary of the online survey and first High Leverage Stakeholder Committee meeting; and
- gather input on strategies for improvements and location-specific improvement projects.

2015 Meeting Highlights

Participants in the Des Moines Issues-Based Workshop voted on the strengths, weaknesses, opportunities, and potential threats to the Iowa rail network.

Background

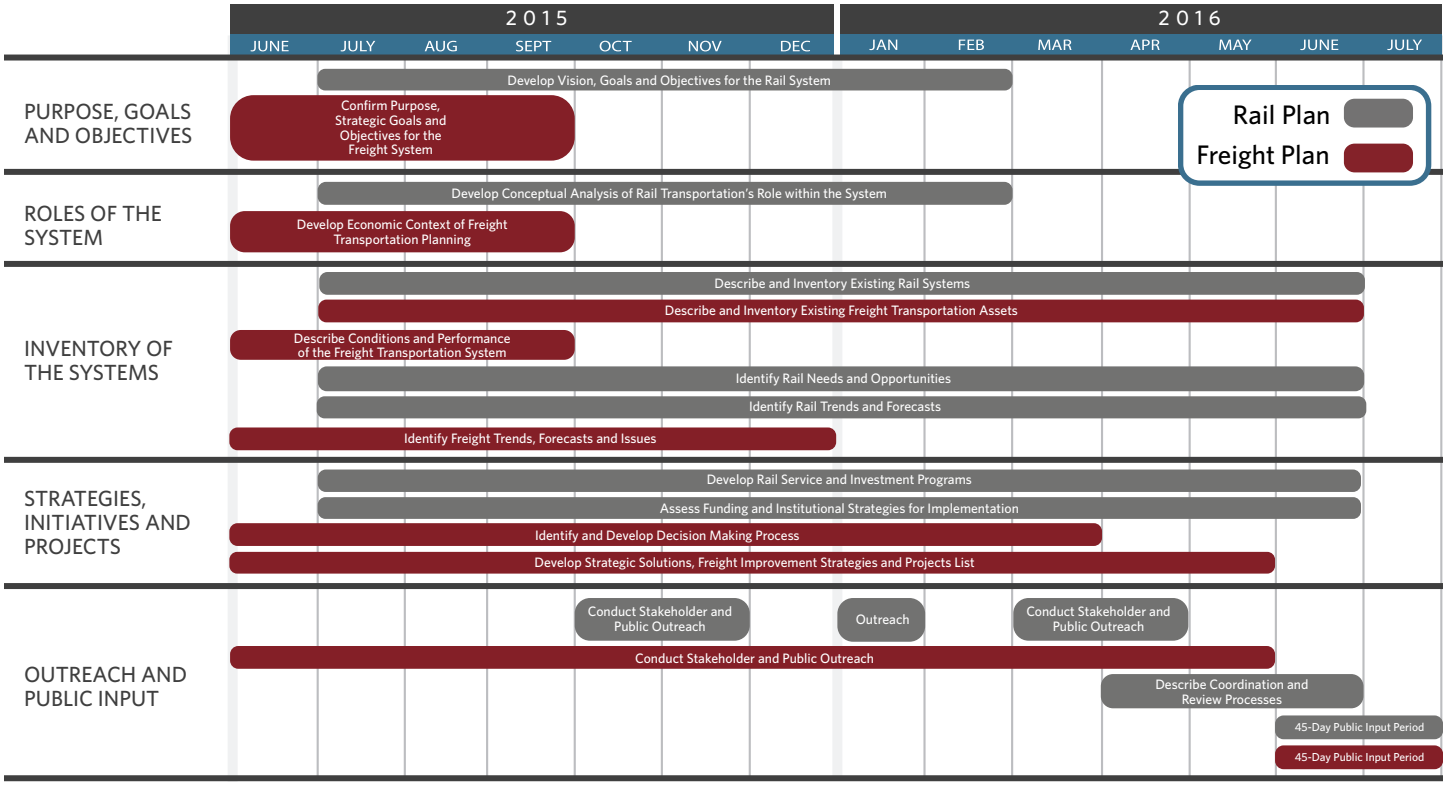
In September 2013, the Federal Railroad Administration (FRA) published its Final State Rail Plan Guidance, which provided direction for State Rail Plan stakeholder and public involvement. We are actively engaging private sector rail and freight infrastructure owners, freight, public planning agencies, transit operators, rail authorities, railroad and freight organizations, and passenger rail stakeholders. The State Rail Plan will identify proposed improvements in urban and rural areas for those who travel through it. The State Freight Plan outlines freight planning activities that will achieve the objective for the State to provide a safe, efficient and convenient freight transportation system to Iowans. The Freight Plan is a way to connect all planning initiatives and allow each to move forward towards a common goal of optimal freight transportation throughout the state. In addition, the Freight Plan will guide our investment decisions to maintain and improve the freight transportation system, and ultimately strengthen the Iowa's economy and raise the quality of life for our citizens.

The development of a comprehensive State Rail Plan in collaboration with the implementation of the Freight Plan offers an opportunity for us to accurately define what the rail and freight system in the state looks like today and what it needs to look like in the future.

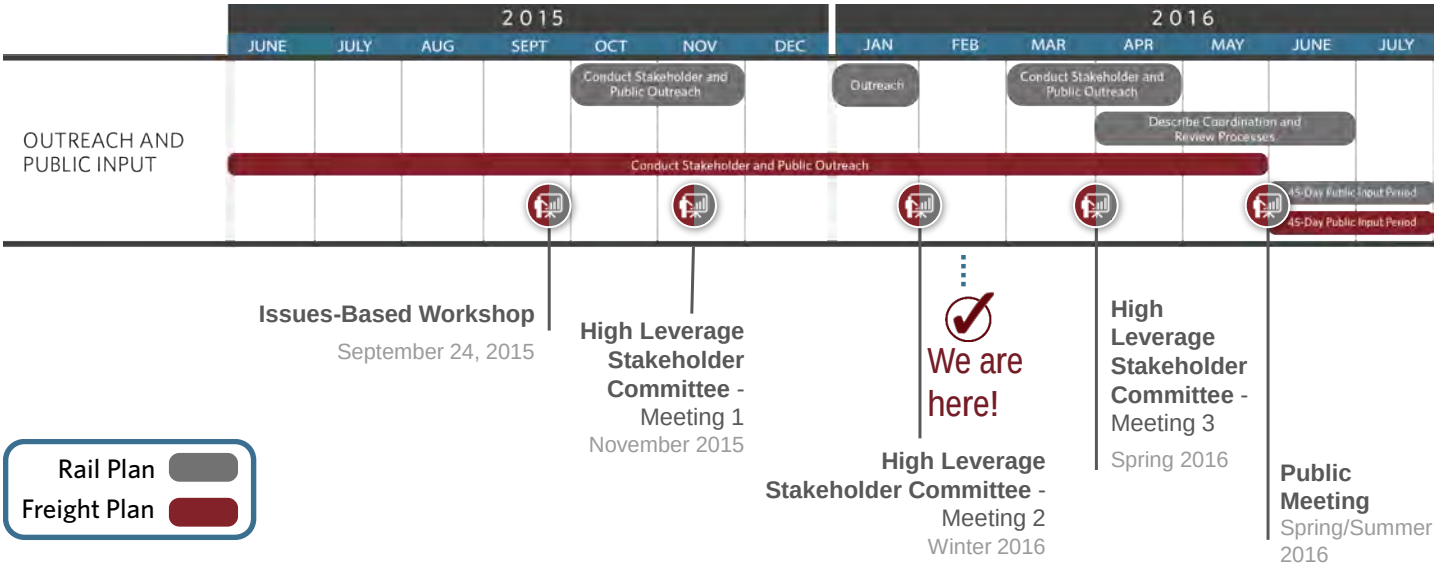
State Rail and Freight Plan Overlap

The State Rail and Freight Plans are closely related and have several overlapping activities. Combining public engagement efforts of both the Rail and Freight Plan allows us to integrate the feedback appropriately. Due to the subject matter, there is natural overlap of information, data and analysis for both rail and freight.

What is the Schedule for the Plans?



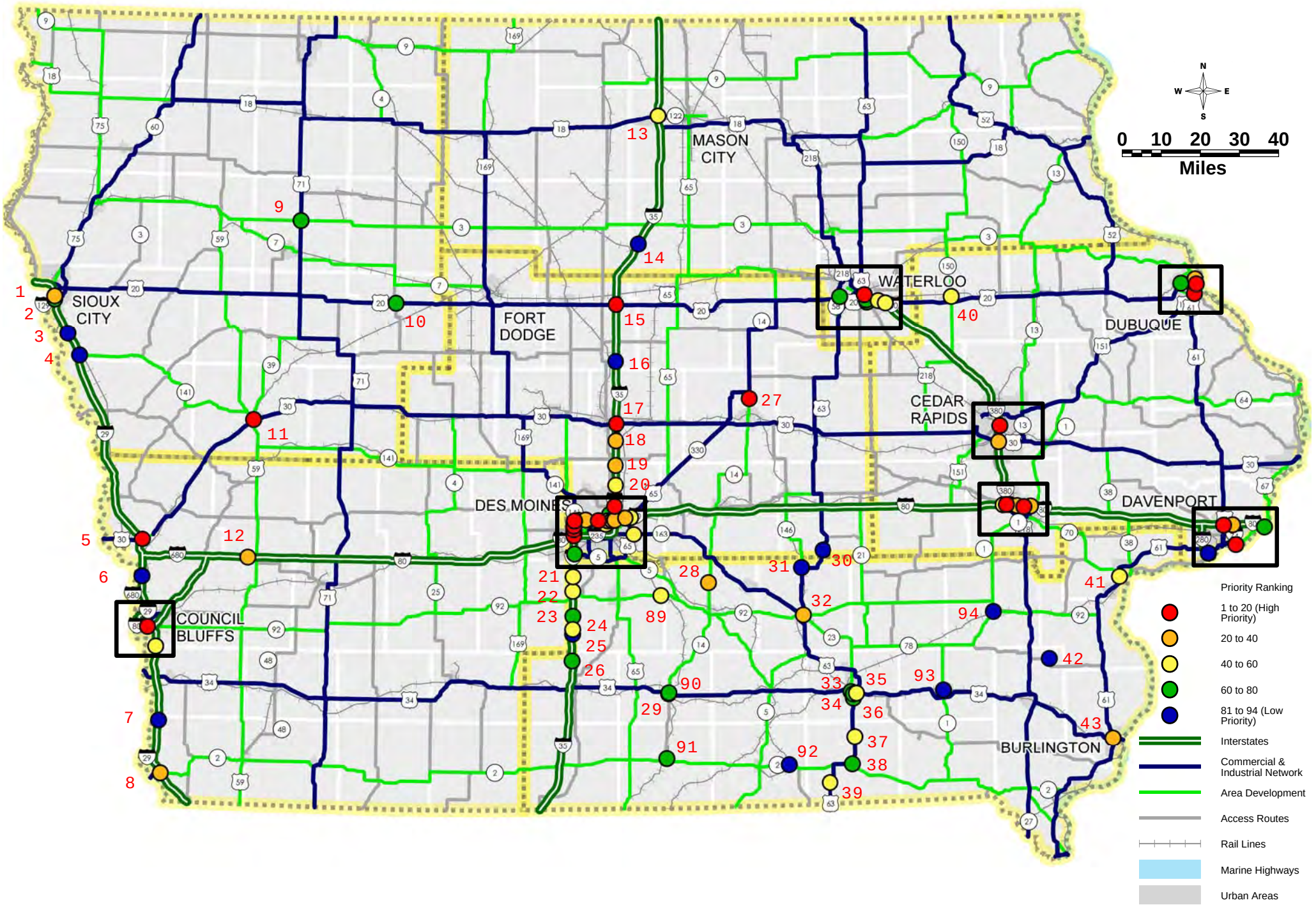
What's Next?



STAY INVOLVED

- Visit us at: http://engagefreightrailplans.iowadot.gov
- Email us at: info@EngageRailFreightPlans.com

IOWA DOT
SMARTER | SIMPLER | CUSTOMER DRIVEN


SIOUX CITY
FORT DODGE
MASON CITY
WATERLOO
DUBUQUE
CEDAR RAPIDS
DAVENPORT
DES MOINES
COUNCIL BLUFFS
BURLINGTON
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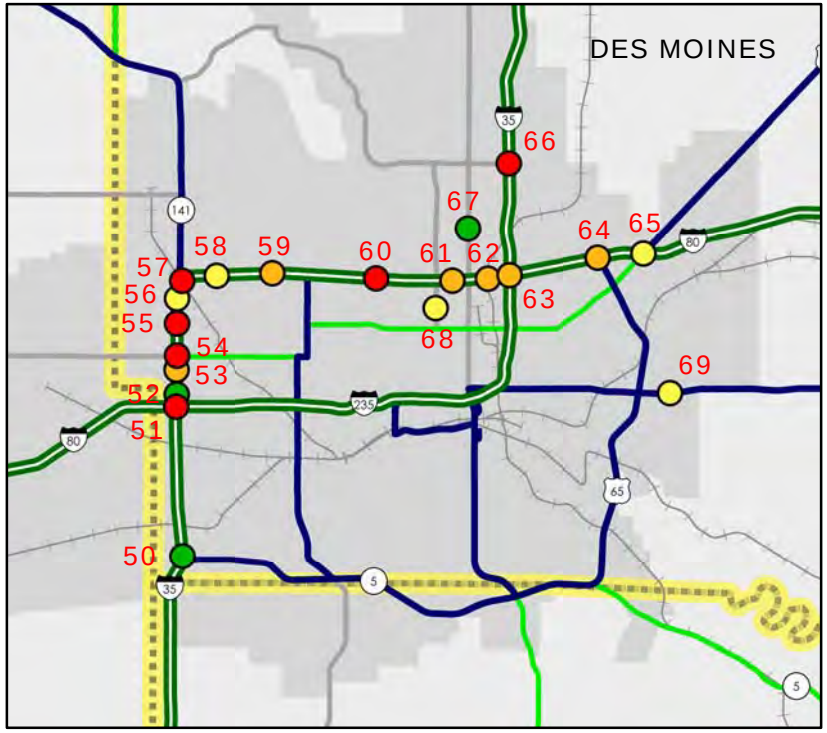
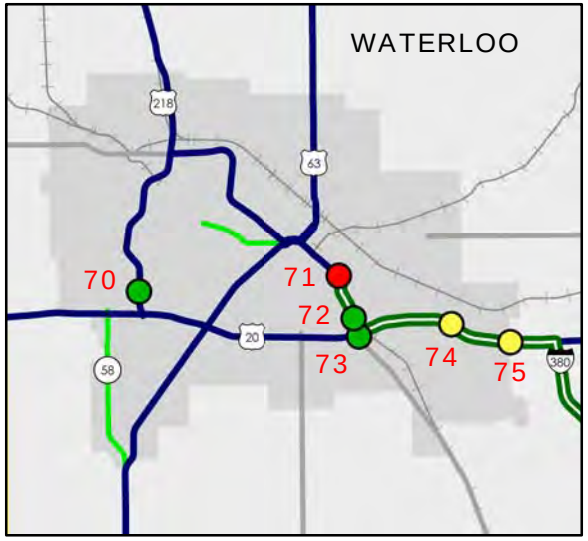
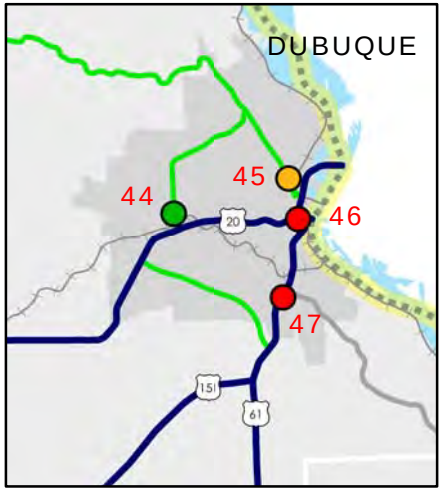
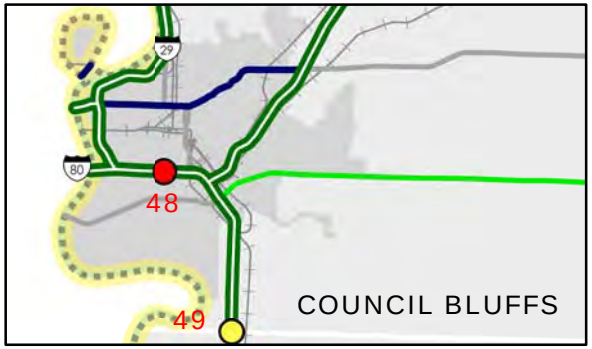
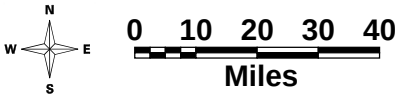
Miles
Priority Ranking
1 to 20 (High Priority)
20 to 40
40 to 60
60 to 80
81 to 94 (Low Priority)
Interstates
Commercial & Industrial Network
Area Development
Access Routes
Rail Lines
Marine Highways
Urban Areas



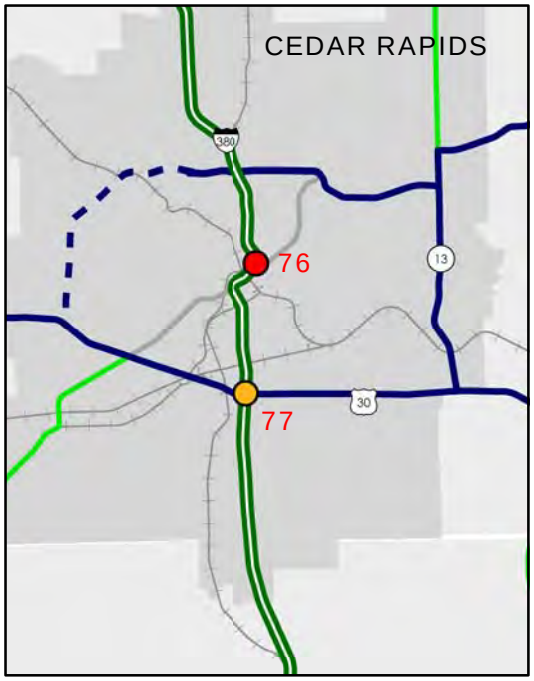


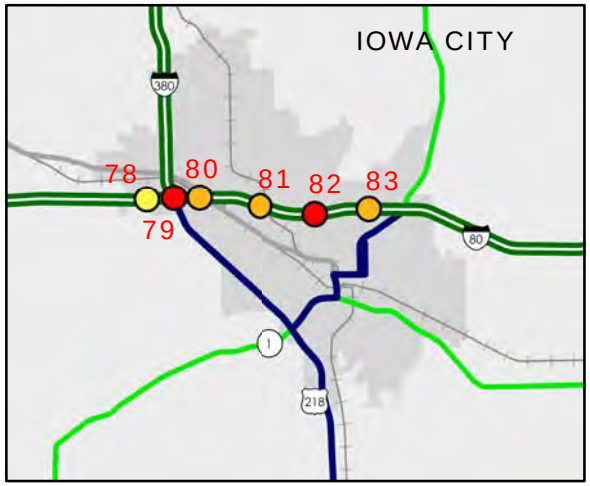


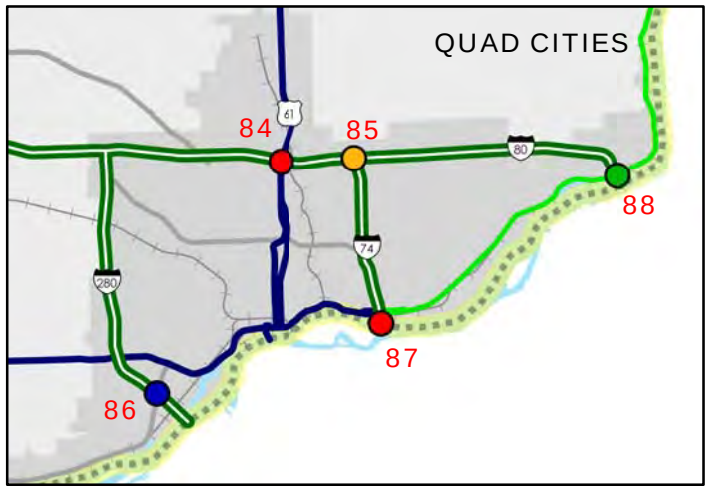


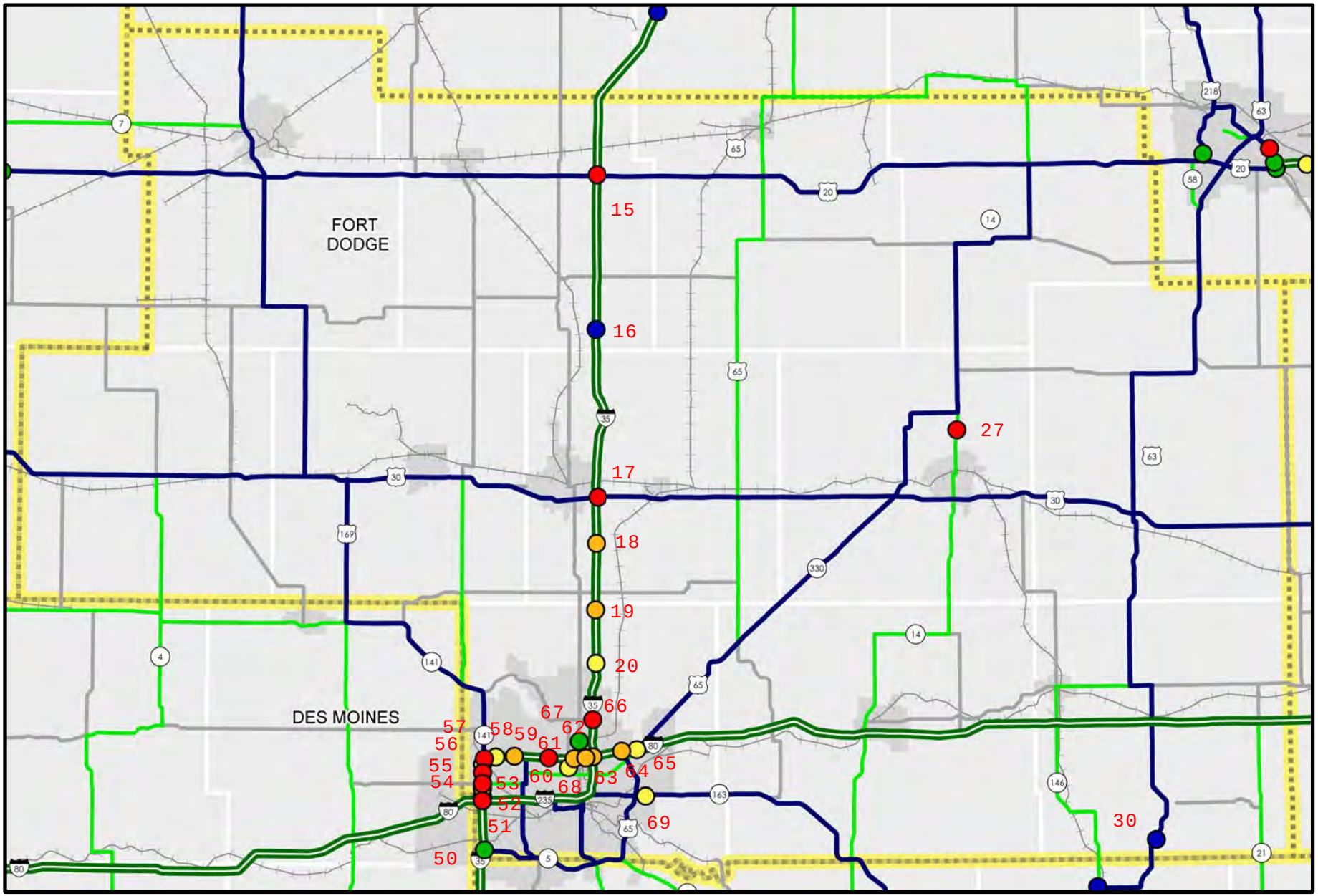


Interstates
Commercial & Industrial Network
Area Development
Access Routes
Rail Lines
Marine Highways
Urban Areas



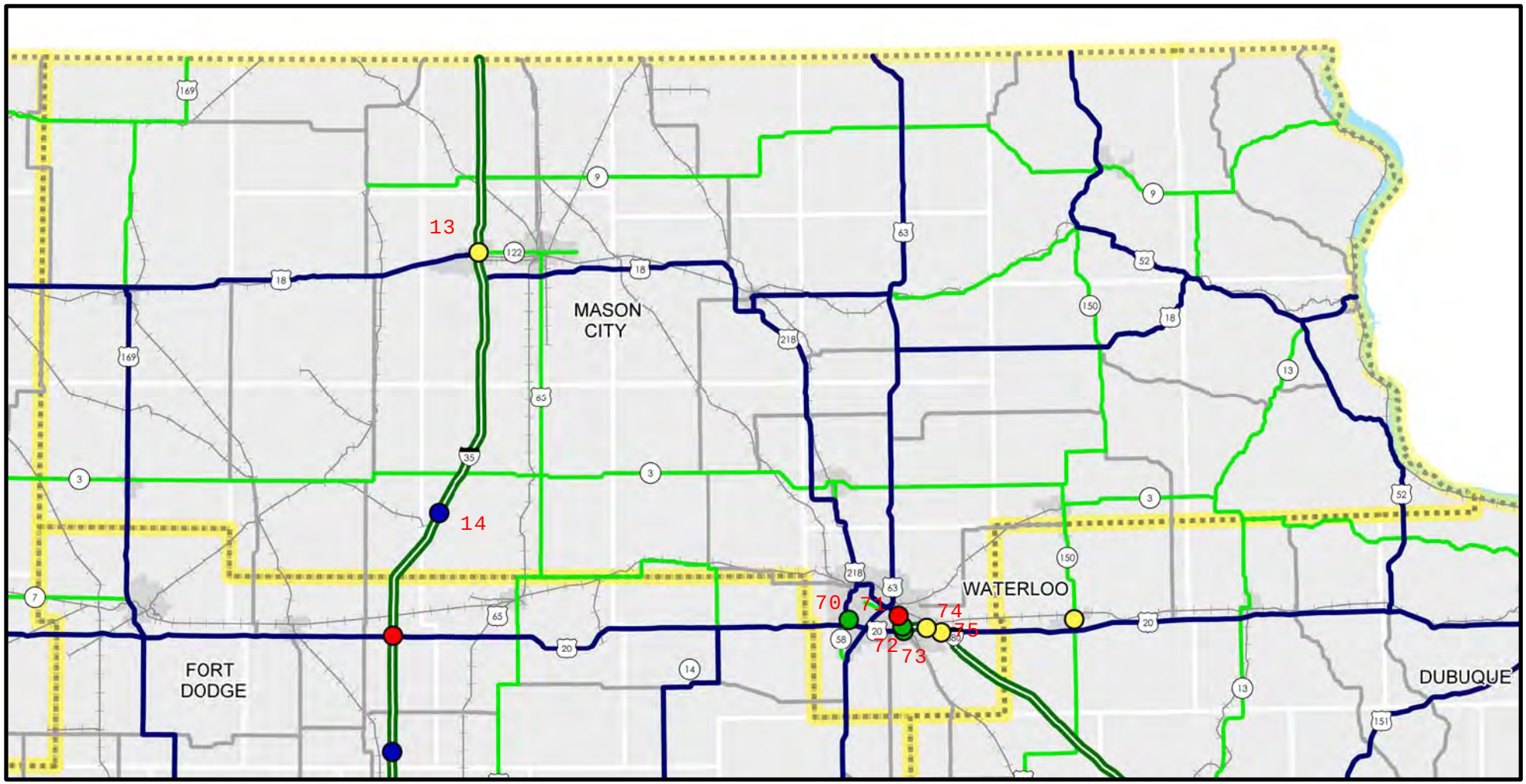






DISTRICT 1

VCAP Highway Improvements

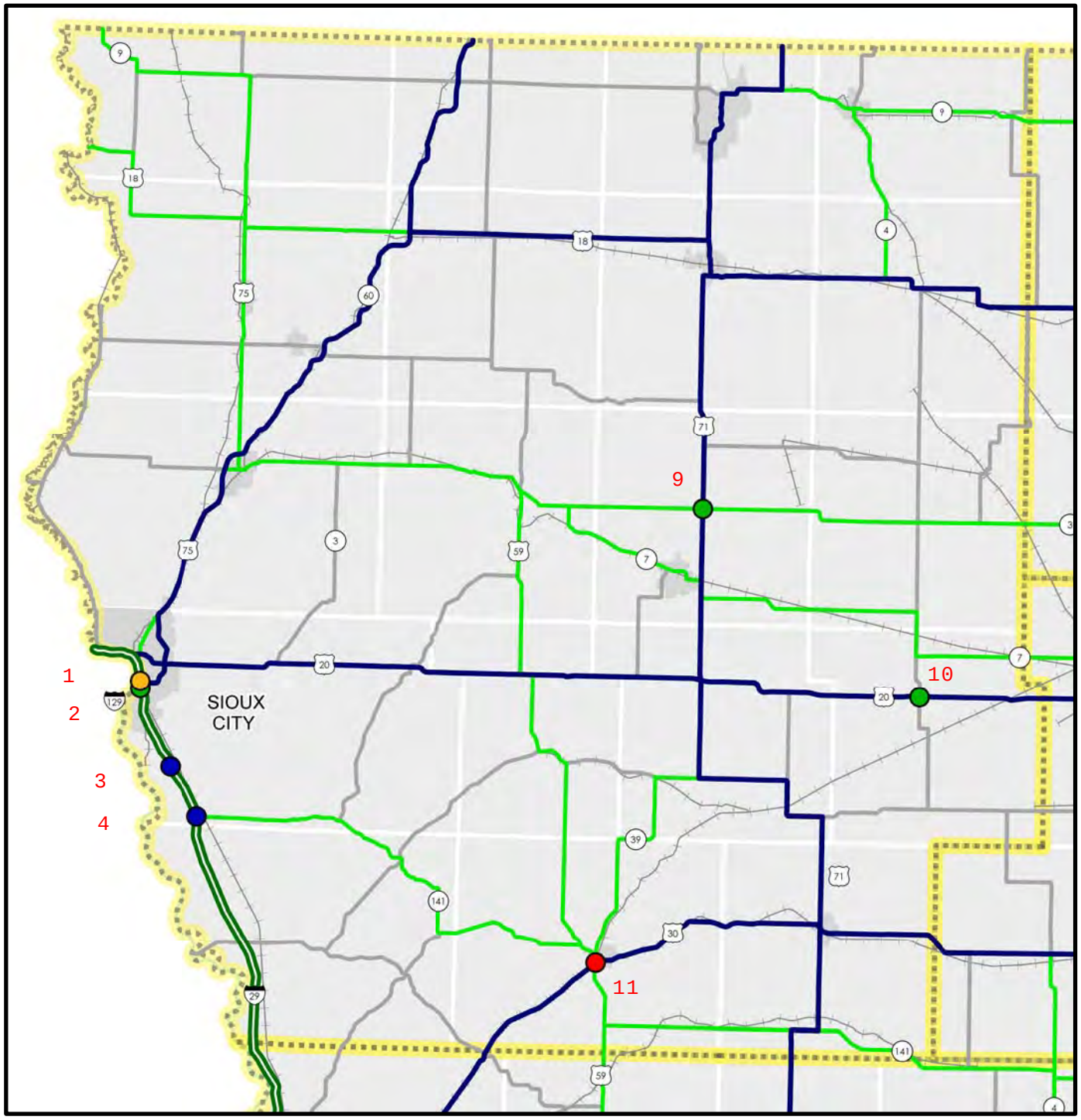


DISTRICT 2

VCAP Highway Improvements

Priority Ranking
- 1 to 20 (High Priority)
- 20 to 40
- 40 to 60
- 60 to 80
- 81 to 94 (Low Priority)

- Interstates
- Commercial & Industrial Network
- Area Development
- Access Routes
- Rail Lines
- Marine Highways
- Urban Areas



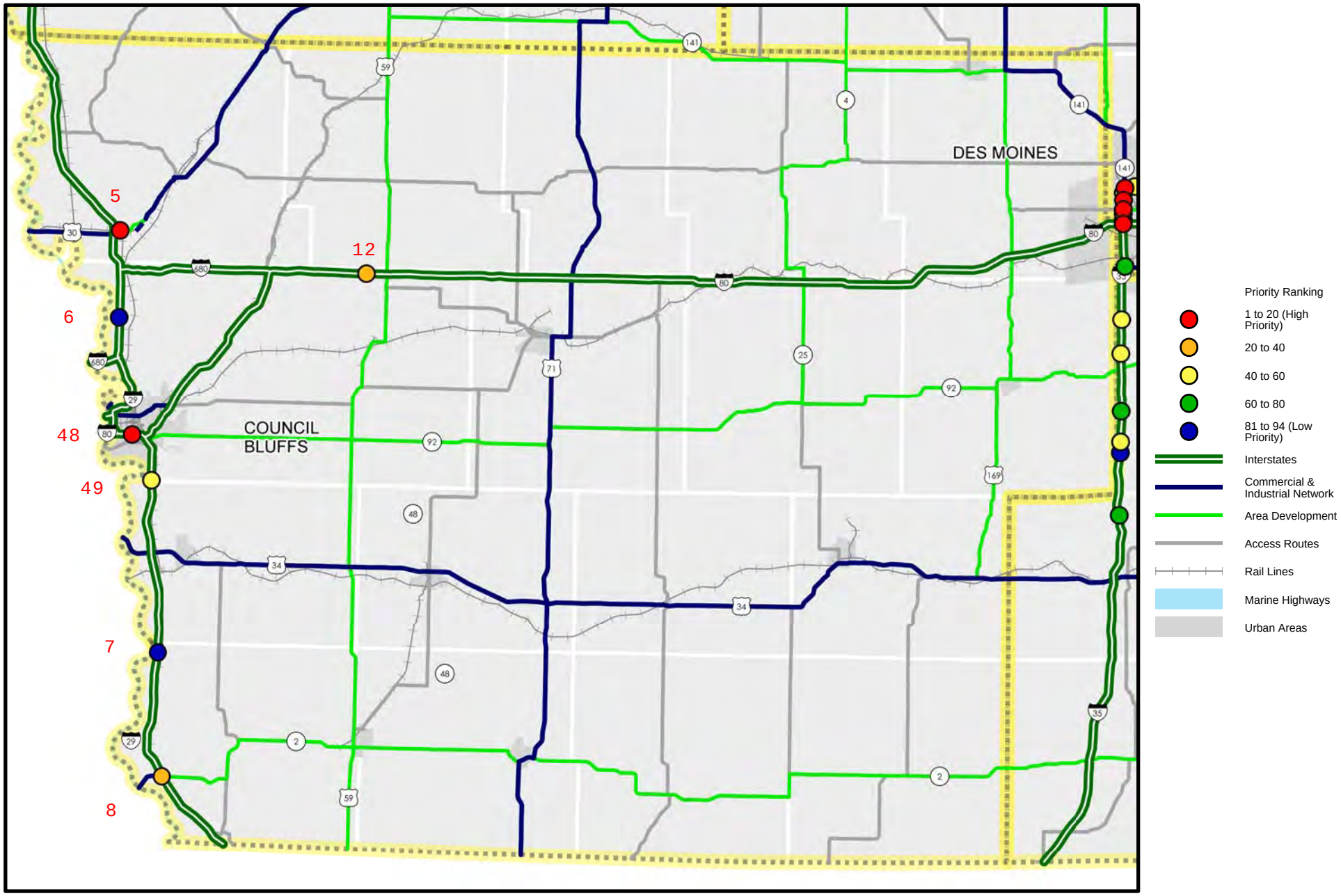
DISTRICT 3

VCAP Highway Improvements

Priority Ranking

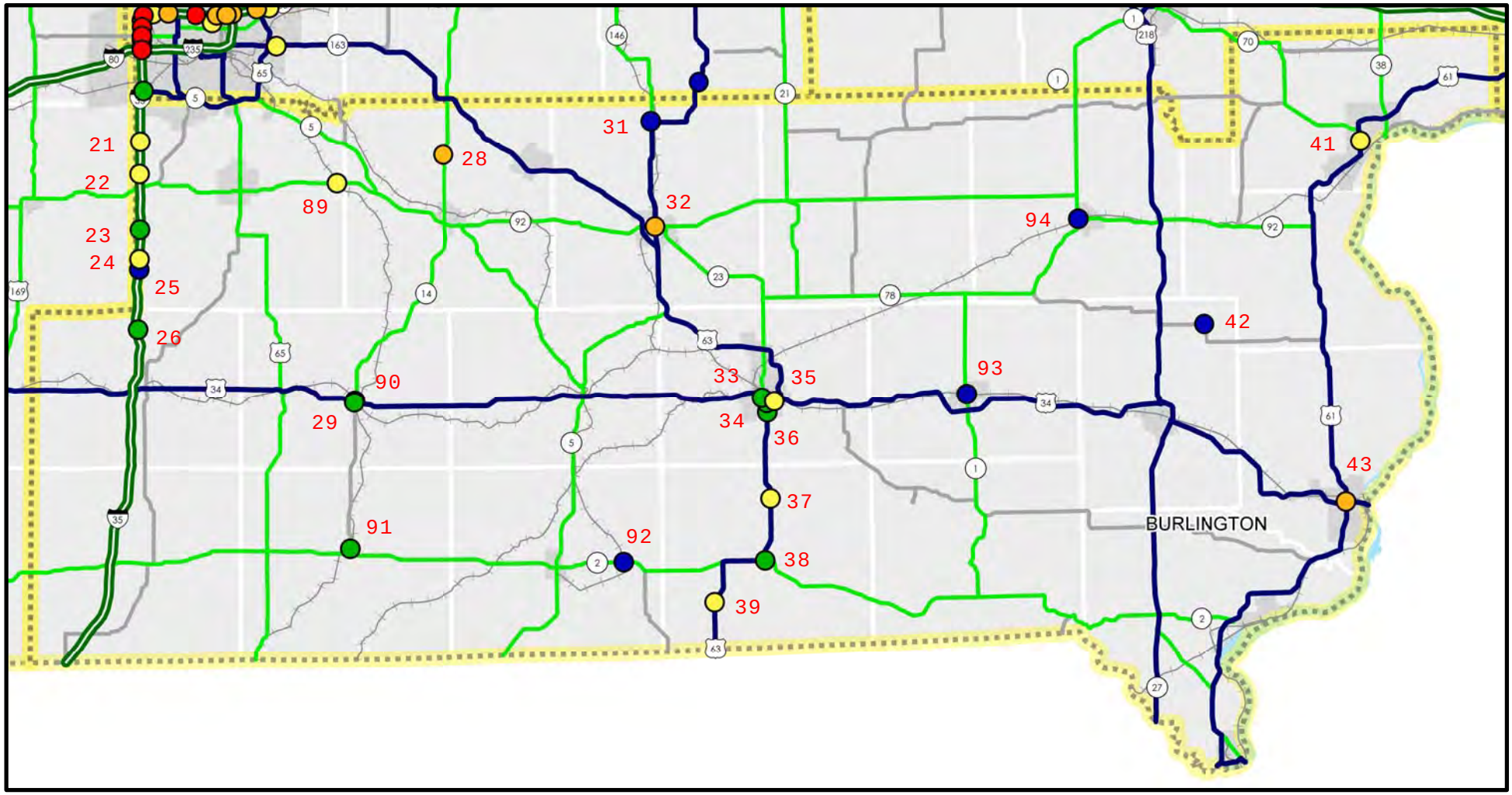
- 1 to 20 (High Priority)
- 20 to 40
- 40 to 60
- 60 to 80
- 81 to 94 (Low Priority)

- Interstates
- Commercial & Industrial Network
- Area Development
- Access Routes
- Rail Lines
- Marine Highways
- Urban Areas



DISTRICT 4

VCAP Highway Improvements

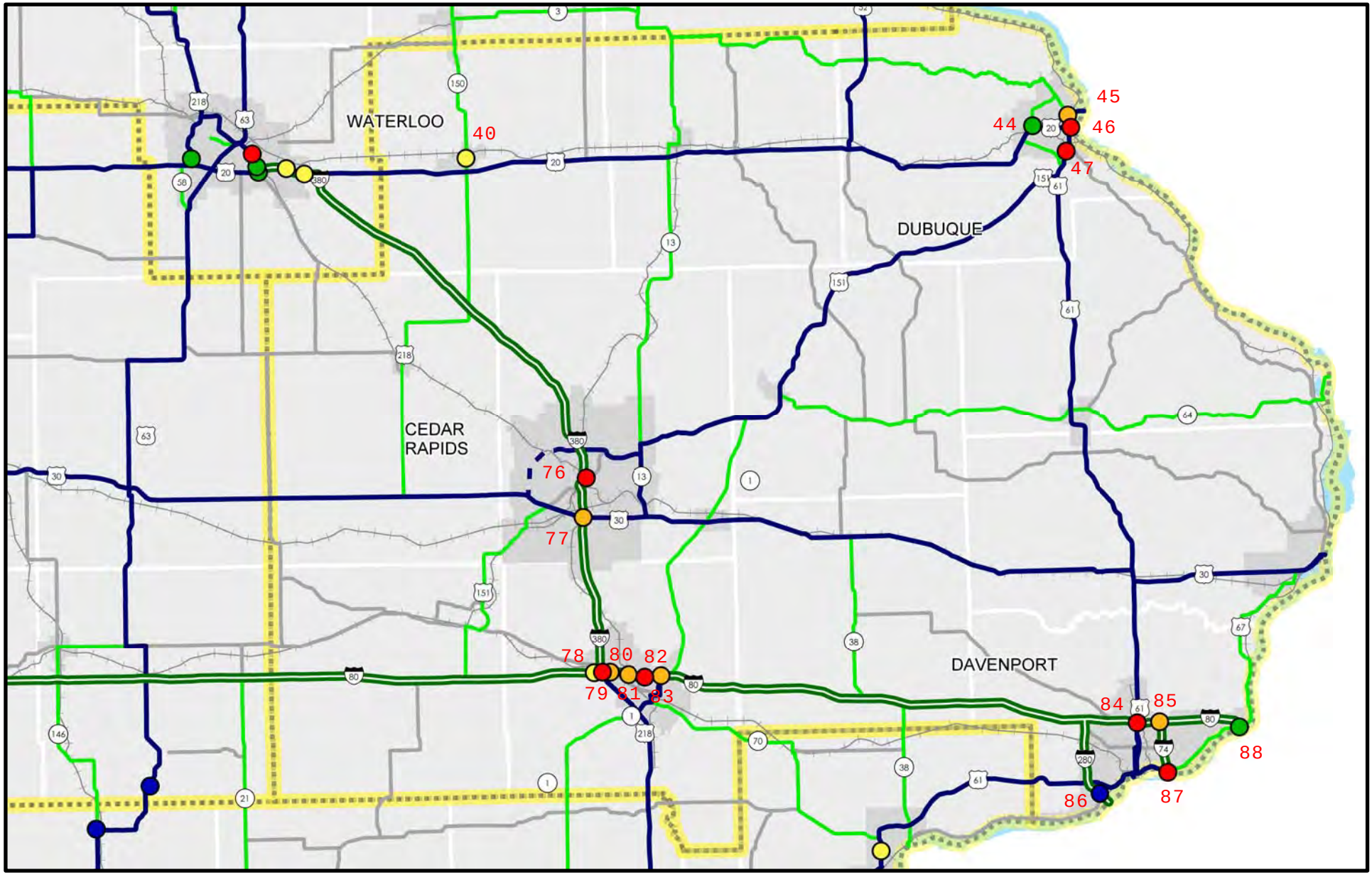


DISTRICT 5

VCAP Highway Improvements

Priority Ranking
- 1 to 20 (High Priority)
- 20 to 40
- 40 to 60
- 60 to 80
- 81 to 94 (Low Priority)

- Interstates
- Commercial & Industrial Network
- Area Development
- Access Routes
- Rail Lines
- Marine Highways
- Urban Areas



DISTRICT 6

VCAP Highway Improvements

IOWA

RAILROAD SERVICE MAP

Prepared by

IOWA DOT

Phone (515) 239 - 1664

In Cooperation with
United States
Department of Transportation
July 1, 2015

0 10 20 30 40 50
Miles

0 10 20 30 40 50
Kilometers

N
W E
S

Special Notes

1. CBRX -- Six Miles of track in the Council Bluffs area
2. IATR -- Thirteen miles of track in Mason City
3. BJRY -- Five miles of track in Burlington
4. CGAQ -- Privately owned track south of Eddyville

Operating Railroads

Amtrak	AMTK
Appanoose County Community R.R. Co.	APNC
Boone Scenic Valley R.R.	BSV
Burlington Junction Ry. Co.	BJRY
BNSF Railway Co.	BNSF
Cedar Rapids and Iowa City Ry. Co.	CIC
Cedar River Railroad Co.	CEDR
Chicago, Central & Pacific Railroad	CC
D & I Railroad Co.	DAIR
Dakota, Minnesota and Eastern R.R. Co.	DME
Iowa Interstate R.R. Ltd.	IAIS
Iowa Northern Ry. Co.	IANR
Iowa River Railroad Co.	IARR
Iowa Traction R.R. Co.	IATR
Keokuk Junction Ry.	KJRY
Norfolk and Southern Railway Co.	NS
Soo Line	SOO
Union Pacific Railroad	UP
Private Track – Cargill Alliance	CGAQ

Non-Operating Railroad Owners

Canadian National Railway Co.	CN
Canadian Pacific Railroad	CP
CBEC Railway Co.	CBRX
D & W Railroad Inc.	DWRV
North Central Iowa Rail Corridor	NCIRC
Pioneer Rail Corp.	PNRC
Progressive Rail	PGR
State of South Dakota	SD
Trackage Rights Only	( )
Primary Operator	(<>)

Trackage Rights

(BNSF)		(IANR)	
(CC)		(KJRY)	
(DAIR)		(NS)	
(DME)		(SOO)	
(IAIS)		(UP)	

8 - 19 -2015

Highway Improvements

In order to identify and prioritize candidates for highway freight improvements, Iowa DOT used the Value, Condition, and Performance (VCAP) matrix. This approach takes advantage of multiple tools available at Iowa DOT including the Freight Mobility Issues Survey, Iowa Travel Analysis Model (iTRAM), Infrastructure Condition Evaluation (ICE) tool, INRIX traffic speed data, and Iowa's annual traffic counts. Below is a description of the prioritization process and an example of the VCAP matrix.

Example VCAP matrix

		VALUE		CONDITION		PERFORMANCE			TIEBREAK	
MAP ID	LOCATION	ITRAM	"V" RANK	ICE	"C" RANK	INRIX	"P" RANK	AVERAGE RANKING	TRUCK VOLUME	PRIORITY RANK
1										1
2										2
3										3
4										4
5										5

Location list (Freight Mobility Issues Survey)

Iowa DOT initially developed a draft list of highway locations with freight mobility issues. This was completed by analyzing INRIX traffic speed data that can, among other things, identify "bottleneck" locations in the state and the number of times each occurs throughout the year. This data was retrieved for 2014 and overlaid with Iowa DOT truck traffic count data. INRIX bottleneck locations that occurred in each quarter of the year and had either 30 percent truck traffic or more than 5,000 total trucks per day were flagged as locations with potential freight mobility issues.

This draft list was presented to the Iowa Freight Advisory Council (FAC) for input and was sent to the Iowa DOT Transportation District offices, Metropolitan Planning Organizations (MPOs), and Regional Planning Affiliations (RPAs). Each of these groups was asked to review the list, make necessary additions, and assign priority votes to each location. This was used to populate the initial candidate list.

Value (Iowa Travel Analysis Model - iTRAM)

iTRAM is a statewide travel demand model used in the evaluation of Iowa's transportation system. The first generation was completed in 2009 and the focus of this model version was to accurately predict the number of automobiles and trucks on the current primary road network, and then project traffic in the future. The second generation of iTRAM builds upon the original statewide model architecture and incorporates two additional model components: passenger and freight movement on the rail system.

This tool is used to evaluate the value of each project location to the overall freight transportation network. A run of the model was completed first to show a base case scenario. Then, a second series of runs was completed that excluded each one of the candidate locations individually. After each run, the truck vehicle hours traveled (VHT) was compared to the base case and the difference was assigned as the value of the location. Higher priority was assigned to locations with larger VHT increases when excluded from the network. In other words, higher priority was assigned to locations that make the truck network more efficient from a VHT perspective.

Condition (Infrastructure Condition Evaluation – ICE)

The ICE tool was developed originally as a tool for evaluating the interstate highway system based on seven criteria: Pavement Condition Index (PCI), International Roughness Index (IRI), structure sufficiency rating, passenger traffic, single unit truck traffic, combination truck traffic, and congestion. A normalization and weighting process is applied to each criterion and used to analyze

(continued on back)

highway segments before ultimately ranking them against each other based upon a final composite rating. The original tool was then expanded to the entire primary highway system in Iowa.

ICE was used to evaluate the current condition of each candidate location. The segments that make up each location were analyzed using the seven criteria and the normalization and weighting processes that had already been established. This resulted in a composite ICE rating for each location. The process was completed for each individual candidate location.

Performance (INRIX Bottleneck Ranking tool)

As mentioned in the "Freight Mobility Issue Survey" section, INRIX has a tool that identifies and ranks bottleneck locations. This tool, with additional analysis using traffic data, was used to develop a draft list of highway locations with freight mobility issues. To determine the performance ranking of each project location, the number of annual bottleneck occurrences for each location was used.

VCAP matrix (final ranking and prioritization)

After each candidate location was assigned a Value, Condition, and Performance rating, each was ranked using those values for each of the three categories. The average of these three rankings was calculated and the candidate locations were assigned an overall priority rank. If two locations had the same average ranking, total truck traffic at the location was used as a tiebreak. See the figures and tables below for VCAP results and Iowa's highway freight priority locations.

Summary of the prioritization process:

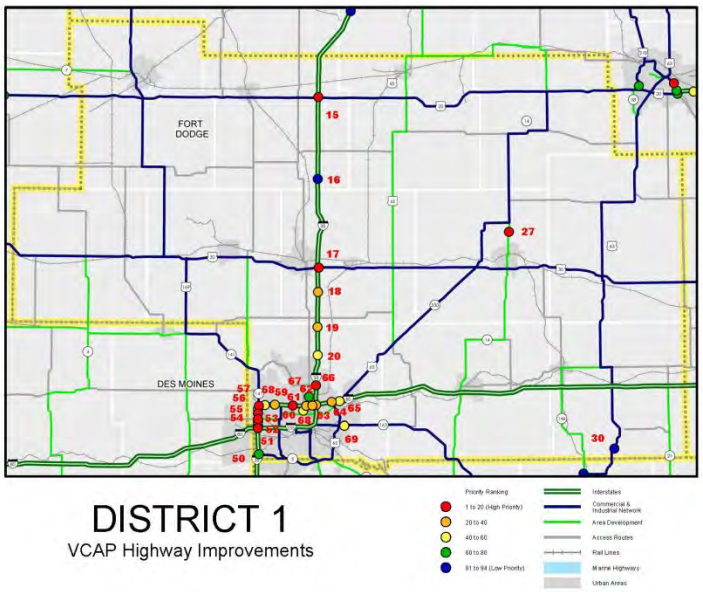
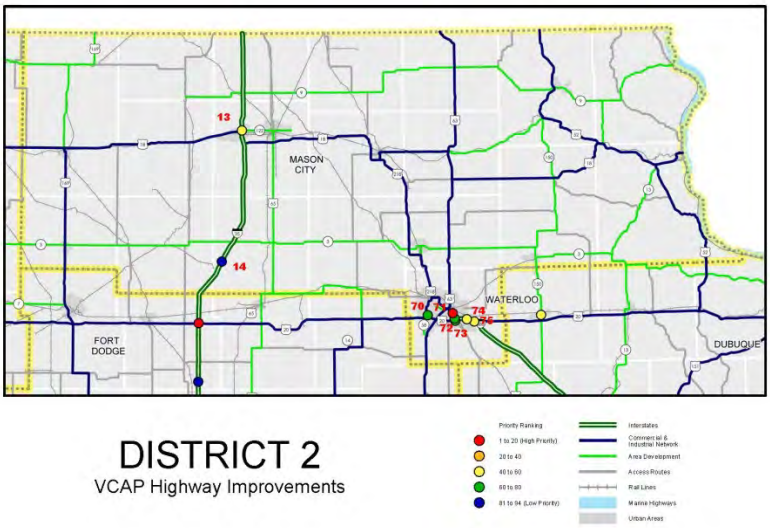
1. *Freight Mobility Issues Survey*
   - *Populate initial improvement list*
2. *Iowa Travel Analysis Model (iTRAM)*
   - *Complete analysis and then rank each location*
3. *Infrastructure Condition Evaluation (ICE) tool*
   - *Complete analysis and then rank each location*
4. *INRIX Bottleneck Ranking tool*
   - *Complete analysis and then rank each location*
5. *Average the three rankings*
6. *Truck traffic counts*
   - *Tiebreaker if necessary*

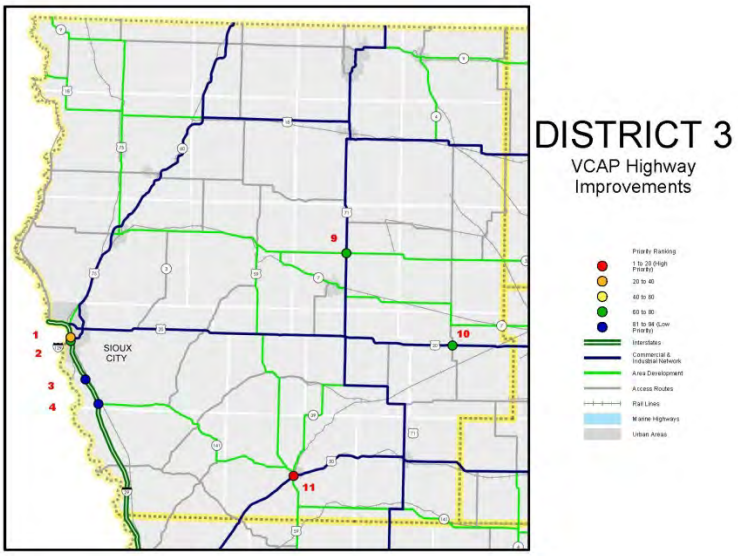
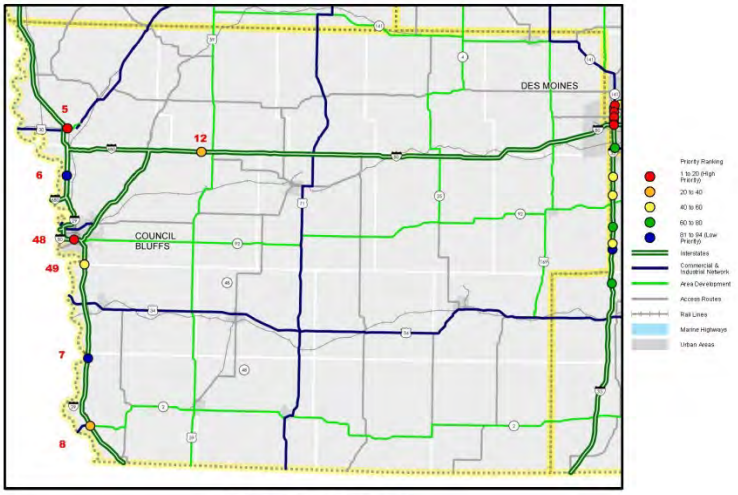
	1	2		3		4		5	6	
		VALUE		CONDITION		PERFORMANCE			TIEBREAK	
MAP ID	LOCATION	ITRAM	"V" RANK	ICE	"C" RANK	INRIX	"P" RANK	AVERAGE RANKING	TRUCK VOLUME	PRIORITY RANK
1										1
2										2
3										3
4										4
5										5

		VALUE		CONDITION		PERFORMANCE			TIEBREAK	
MAP ID	LOCATION	ITRAM	"V" RANK	ICE	"C" RANK	INRIX	"P" RANK	AVERAGE RANKING	TRUCK VOLUME	PRIORITY RANK
1	I-29 N/S @ I-129/US-20/US-75/EXIT 144	36.03	53	78.39	63	756	8	41.33	4653	38
2	I-29 N/S @ OLD IA-75/INDUSTRIAL RD/EXIT 143	4.78	72	82.13	78	815	7	52.33	4030	63
3	I-29 N/S @ EXIT 134	3.17	78	86.04	91	35	57	75.33	3945	92
4	I-29 N/S @ IA-141/EXIT 127	7.80	67	81.89	74	10	72	71.00	3729	85
5	US-30 E/W THROUGH MISSOURI VALLEY	21.80	58	54.31	3	1563	4	21.67	993	6
6	I-29/680 N/S @ ROSEWOOD RD	15.91	60	86.35	92	49	53	68.33	4057	81
7	I-29 N @ CR-L31/EXIT 24	1.60	85	92.00	94	14	71	83.33	3425	94
8	IA-2 W @ CR-L31/195TH AVE & I-29 N/S @ IA-2/EXIT 10	122.64	15	85.98	90	1256	5	36.67	2750	29
9	IA-3 W @ US-71/130TH ST	70.28	28	75.71	57	0	73	52.67	550	65
10	IA-4 S @ US-20/270TH ST	4.30	74	84.42	86	169	28	62.67	682	75
11	US 30 E/W @ US-59/IA-141	60.33	33	70.81	41	387	15	29.67	1377	11
12	I-80 W @ 385TH ST	169.38	5	73.34	46	14	69	40.00	8158	36
13	I-35 N @ US-18/EXIT 194	84.40	25	80.80	70	89	43	46.00	5452	51
14	I-35 N @ CR-C47/EXIT 159	1.61	84	81.41	72	31	62	72.67	4125	90
15	I-35 N/S @ US-20/EXIT 142 & US-20 E/W @ I-35/EXIT 153	114.43	17	73.91	51	420	14	27.33	5559	8
16	I-35 S @ CR-D65/EXIT 128	2.33	81	79.44	67	17	68	72.00	6308	87
17	I-35 N/S @ US-30/EXIT 111 & US-30 E/W @ I-35/EXIT 151	131.58	13	77.55	61	336	19	31.00	7633	17
18	I-35 N/S FROM IA-210 TO US-30	149.62	9	63.76	21	0	73	34.33	7964	23
19	I-35 N/S FROM NE 126TH AVE TO IA-210	142.71	11	64.93	22	0	73	35.33	8277	25
20	I-35 N/S FROM 36TH ST TO NE 126TH AVE	136.96	12	72.42	45	0	73	43.33	7957	44
21	I-35 N/S @ FILLMORE ST (MP 61.5)	99.75	20	75.37	55	0	73	49.33	5517	60
22	I-35 N/S @ HOOVER ST (MP 58.5)	99.86	19	75.37	54	0	73	48.67	5517	57
23	I-35 N/S @ G-50/EXIT 52	6.20	68	84.86	87	68	50	68.33	5079	80
24	I-35 N @ QUAKER ST (MP 49.1)	166.54	6	80.45	68	0	73	49.00	5144	58
25	I-35 N/S @ G-64/EXIT 47	3.10	79	85.49	88	90	42	69.67	5032	83
26	I-35 N/S @ ROBIN ST (MP 40.8)	172.88	4	88.10	93	0	73	56.67	5076	72
27	IA-14 N/S FROM MARSHALLTOWN NCL TO IA-330	11.10	63	62.08	17	576	12	30.67	542	16
28	IA 14 N/S @ DES MOINES RIVER	30.49	55	66.00	26	88	44	41.67	416	39
29	US 34 E/W @ IA-14	0.30	91	83.66	83	167	29	67.67	526	79
30	US 63 N/S FROM IA-146 TO IA-85	5.83	70	81.57	73	0	73	72.00	393	88
31	US 63 N/S @ IA-146	3.38	76	80.55	69	0	73	72.67	499	91
32	US 63 N/S THROUGH OSKALOOSA	3.94	75	56.19	5	143	32	37.33	633	31
33	US-34 E/W FROM QUINCY AVE TO ROUNDABOUT	5.28	71	66.50	28	14	69	56.00	699	71
34	US 34 E/W @ US-63 (ROUNDABOUT)	-0.51	93	76.06	59	580	10	54.00	826	66
35	US-34 E/W FROM ROUNDABOUT TO US-34/US-63	4.61	73	76.82	60	580	10	47.67	1122	55
36	US 63 N/S @ 0.9 MILES S OF US-34	39.28	50	70.60	40	0	73	54.33	595	69
37	US 63 N/S FROM OTTUMWA SCL TO IA-2	43.28	45	73.57	48	103	39	44.00	530	46
38	US-63 N/S @ IA-2	6.00	69	82.00	75	548	13	52.33	447	64
39	US 63 N/S FROM IA-2 TO MISSOURI STATE LINE	40.75	48	79.00	65	331	20	44.33	432	47
40	IA-150 N/S THROUGH INDEPENDENCE	31.86	54	49.54	1	0	73	42.67	696	41
41	US-61 S @ IA-92/GRANDVIEW AVE	23.63	57	70.84	42	114	36	45.00	1862	49
42	IA 78 E/W @ 2.0 MILES W OF W-66	0.60	89	83.00	81	0	73	81.00	122	93
43	US-61 N/S THROUGH BURLINGTON	18.63	59	61.30	15	172	27	33.67	1107	21
44	IA-32 N/S @ CHAVENELLE RD	1.63	83	61.20	14	0	73	56.67	1066	73
45	US-52 N/S @ IA-3	2.27	82	65.53	24	303	22	42.67	731	40
46	US-20 E/2 @ IA-946	55.22	35	58.80	8	79	48	30.33	2212	15
47	US-151 N/S @ MAQUOKETA DR	53.29	38	57.36	6	1040	6	16.67	2115	2
48	I-80/29 N/S THROUGH COUNCIL BLUFFS	60.79	32	52.82	2	374	16	16.67	13579	1
49	I-29 N @ MILLS/POTTAWATTAMIE COUNTY LINE & I-29 N/S @ IA-370	175.72	3	83.93	84	40	56	47.67	4253	54
50	I-35 S @ IA-5/ARMY POST RD/EXIT 68	63.04	31	82.35	79	49	53	54.33	5638	67
51	I-80/I-35/I-235 N/S, E/W @ SW MIX MASTER	92.24	22	73.83	50	365	18	30.00	6870	13
52	I-35/80 N/S, E/W FROM SW MIX MASTER TO UNIVERSITY AVE	29.11	56	71.89	44	18	67	55.67	13548	70
53	I-35/80 N/S, E/W FROM UNIVERSITY AVE TO US-6/HICKMAN RD	10.37	64	61.50	16	97	40	40.00	14092	35
54	I-35/80 N/S @ US 6/HICKMAN	53.37	37	58.96	9	61	51	32.33	12804	19
55	I-35/80 N/S @ DOUGLAS AVE	52.83	41	59.84	11	116	34	28.67	12884	9
56	I-35/80 N/S, E/W FROM DOUGLAS AVE TO IA-141	41.47	47	59.15	10	0	73	43.33	13339	42
57	I-35/80 N/S, E/W @ IA-141	49.26	43	61.17	13	2036	2	19.33	12761	4
58	I-35/80 N/S, E/W FROM IA-141 TO NW 86TH ST	36.33	52	62.59	18	0	73	47.67	13858	53
59	I-35/80 N/S, E/W FROM NW 86TH ST TO MERLE HAY RD	67.38	30	63.59	20	45	55	35.00	14089	24
60	I-35/80 N/S, E/W FROM MERLE HAY RD TO IA-415	75.78	27	57.96	7	30	63	32.33	14124	18
61	I-35/80 N/S, E/W FROM IA-415 TO US-69	53.25	40	63.50	19	33	59	39.33	13917	33
62	I-35/80 N/S, E/W FROM US-69 TO NE MIX MASTER	56.34	34	60.45	12	0	73	39.67	13478	34
63	I-35 N/I-235 W @ I-80/I-235/EXIT 87 & I-80 E/W @ I-235/I-35/EXIT 137	119.00	16	78.31	62	226	25	34.33	11709	22
64	I-80 E/W @ US-65/EXIT 141	38.21	51	66.59	29	147	30	36.67	10379	28
65	US-6 E @ I-80 (EAST) & US-65 N/S @ I-80/US-6/NE HUBBELL AVE/EXIT 142	44.08	44	84.38	85	9375	1	43.33	9601	43
66	IA 160 E/W @ I-35 & I-35 N/S @ IA-160/ EXIT 90	108.67	18	69.29	36	114	35	29.67	8331	10
67	US 69 N/S FROM I-35/80 TO ANKENY SCL	-3.79	94	65.73	25	88	44	54.33	1406	68
68	IA 415 N/S @ 0.6 MILES S OF I-35/80 (RR BRIDGE)	1.59	86	66.73	30	329	21	45.67	1583	50
69	IA 163 E/W THROUGH PLEASANT HILL	41.62	46	73.61	49	72	49	48.00	2109	56
70	IA-58 FROM US-20 TO GREENHILL RD	2.95	80	70.60	39	0	73	64.00	1097	76
71	I-380/US-218 N/S FROM SAN MARNAN DR TO W 9TH ST	12.87	61	66.45	27	1764	3	30.33	2799	14
72	I-380/US-218 N/S FROM US-20 TO SAN MARNAN DR	9.93	66	85.73	89	88	44	66.33	2814	78
73	I-380 S @ US-20/IA-27 & US-20 E @ I-380/US-218/EXIT 71	53.26	39	80.87	71	108	38	49.33	3906	61
74	I-380 N/S @ EVANSDALE DR/EXIT 68	69.32	29	82.10	77	95	41	49.00	4688	59
75	I-380 N/S @ IA-297/EXIT 66	166.51	7	82.53	80	51	52	46.33	5250	52
76	I-380 N/S THROUGH CEDAR RAPIDS	76.37	26	55.34	4	123	33	21.00	7226	5
77	I-380 N/S @ US-30/EXIT 16	39.60	49	70.43	38	110	37	41.33	7015	37
78	I-80 E/W FROM IRELAND AVE NW TO I-380	98.71	21	74.50	53	32	60	44.67	9918	48
79	I-380 N/S @ I-80/EXIT 0 & I-80 E/W @ I-380/EXIT 239	146.63	10	73.35	47	250	24	27.00	11161	7
80	I-80 E/W FROM I-380 TO IA-965	165.25	8	68.91	35	0	73	38.67	12726	32
81	I-80 E/W FROM IA-965 TO 1ST AVE	127.10	14	66.81	31	26	65	36.67	12390	27
82	I-80 E/W FROM 1ST AVE TO DUBUQUE ST	199.88	1	67.18	32	27	64	32.33	12240	20
83	I-80 E/W FROM DUBUQUE ST TO IA-1	196.39	2	68.80	34	0	73	36.33	12389	26
84	US-61 N/S @ I-80/EXIT 123 & I-80 E @ US-61/BRADY ST/EXIT 295	53.65	36	69.57	37	368	17	30.00	11230	12
85	I-80 E/W @ I-74/EXIT 298	84.42	24	75.59	56	144	31	37.00	10162	30
86	I-280 N @ IA-22/ROCKINGHAM RD/EXIT 8	3.35	77	78.85	64	26	65	68.67	5289	82
87	I-74 @ MISSSISSIPPI RIVER	90.95	23	65.53	23	706	9	18.33	2908	3
88	I-80 E/W @ US-67/EXIT 306	49.73	42	74.25	52	34	58	50.67	9519	62
89	RR Bridge E of Sandyville	12.06	62	71.50	43	192	26	43.67	354	45
90	RR Bridge @ Chariton	0.54	90	68.00	33	0	73	65.33	167	77
91	RR Bridge @ Corydon	0.76	88	79.00	66	287	23	59.00	121	74
92	RR Bridge E of Centerville	10.26	65	82.00	76	0	73	71.33	302	86
93	RR Bridge @ Fairfield	-0.31	92	76.00	58	32	60	70.00	150	84
94	RR Bridge @ Washington	1.33	87	83.00	82	84	47	72.00	292	89

Appendix D: Value, Condition, and Performance (VCAP) Highway Improvements Exercise Results by District

Participants walked around the room and review the VCAP maps by districts. Participants identified needs, fatal flaws, or improvements in each district. Scribes and technical experts were at each district map to facilitate the exercise. Major issues in the districts were safety concerns, road expansions, and project prioritization.

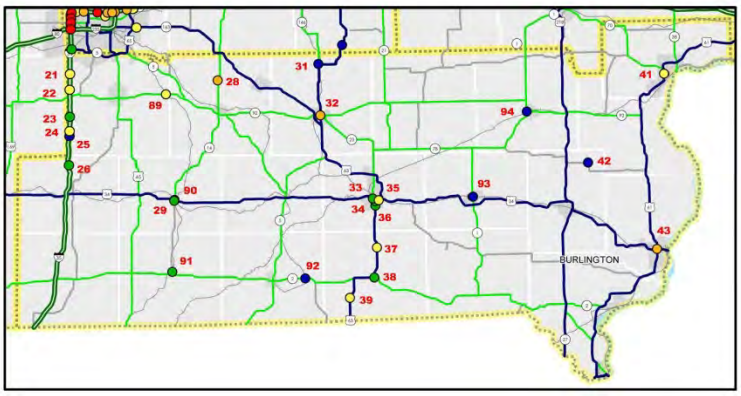
District Results	Map
District 1 Results: • ***Participants indicated that there was recent construction at Highway 27.***	
District 2 Results: • ***Participants indicated that there needs to be improved traffic flow and congestion mitigation at point 13. The possibility of pulling traffic off of 122 to parallel B-35 should be considered.*** • ***US 69 should be indicated on the map.*** • ***Participants felt that bigger signs are needed on 380/218 through Waterloo for the Avenue of the Saints route. This is necessary because motorists may miss their desired exit and find themselves in New Hartford.***	

District Results	Map
District 3 Results: • Participants questioned how seasonality is accounted for in rankings, as it affects truck volume, particularly in rural areas. Fall is typically busier than summer and winter, for example. This question is applicable to all districts. • Participants also asked whether ranking were based on bottlenecks at intersections only, instead of considering bottlenecks of corridors.	
District 4 Results: • A new bridge crossing the river from I-29 in the Council Bluffs area to Eppley Airfield in Omaha has been proposed in this District. • Iowa DOT should look at the corridors in this district.	

District Results	Map

District 5 Results:

- **All comments were in regard to the area around point 41, in Muscatine.**
- **Lots of work is currently underway:**
  - ***Mississippi Drive (Old Hwy 61) has had long-standing issues, while work is currently underway, ongoing progress to address this is important.***
  - ***In the next three years, the City of Muscatine is working to build out Hwy 61 through town***
  - ***Hwy 61 is being expanded to 4 lanes from the City of Burlington north to the Muscatine County Line***
- **Next, the City of Muscatine will work to update Old Hwy 61; CP Railroad has been a key partner (and a great partner) in this effort which includes raising tracks and the roadway in areas**
- **There is non-recurring congestion due to detours/diversion from I-80. The ongoing safety study (diversion) should be coordinated with current and future efforts in order to mitigate these issues:**
  - ***Impacts on West Liberty***
  - ***Safety issues from heavy truck traffic moving through the smaller cities***
- **Participants noted that economic development is happening in Muscatine.**
  - ***Muscatine has a trade connection to China***
  - ***Muscatine is pursuing an intermodal container port for barges***

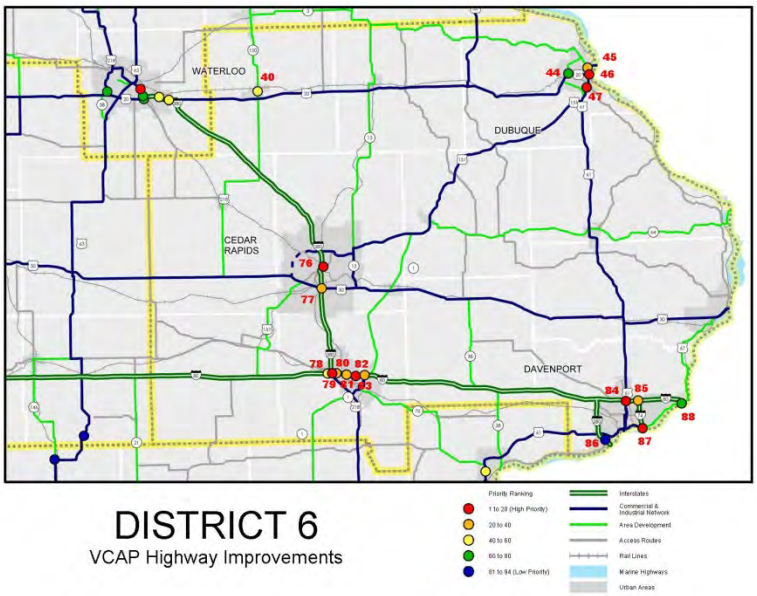


DISTRICT 5
VCAP Highway Improvements

District Results	Map

District 6 Results:

- ***The US 67 bridge in the Quad Cities should be addressed***
- ***US 30/IA 136 Clinton Bridges should be addressed***
- ***Participants would like to see the 174 corridor continue to be a priority project.***
- ***The DOT should look at overall needs in each district and prioritize those projects.***
- ***Participants indicated a need for Iowa to coordinate with Illinois on the replacement of the I-80 bridge***



DISTRICT 6
VCAP Highway Improvements

Appendix E: Full List of Capital Investments and Projects

Category	Capital Investments and Projects	Number of Votes Received				How can Iowa DOT facilitate these projects?
		RED Priority	GREEN Long Term	BLUE Short Term	TOTAL	
Capacity and mitigation of operational chokepoints	New or extended sidings	-	-	-	-	• *Funding for sidings* • *Partner with railroads and the state to keep lines viable*
	Expanded yards/terminals	-	3	-	3	
	Track and bridge upgrades for 286K railcars	1	1	3	5	
	Vertical clearance improvements	-	2	-	2	
	Wayside signal system improvements	-	-	-		
	New track/rail connectors	2	4	1	7	
	Grade separations	1	-	1	2	
	Unit train capacity (industrial trackage)	1	-	-	1	
	Operating capacity for trains at terminals	-	-	-	-	
	Efforts to increase FRA track class	-	-	1	1	
	Innovations for LNG/Green locomotives	-	-	3	3	
	Mitigation of locomotive emissions	-	1	-	1	
	286K upgrades for bridge/track	-	-	-	-	
Safety	Positive train control implementation	-	3	-	3	*None specific to safety*
	Wayside defect detector installations	1	2	1	4	
	Grade crossing improvements	2	3	4	9	
	Public education programs	2	-	3	5	

Category	Capital Investments and Projects	Number of Votes Received				How can Iowa DOT facilitate these projects?
		RED Priority	GREEN Long Term	BLUE Short Term	TOTAL	
	Crossing closures	7	2	7	16	
	Grade separations	5	8	2	15	
	Effort to increase FRA track class	-	-	-	-	
Economic Development	Commuter connectors – passenger	-	-	-	-	• *Funding for sidings* • *Help develop business case for projects*
	Transload/intermodal facility	13	4	4	21	
	New rail	1	2	1	4	
	New and expanded sidings	2	1	5	8	
	New and expanded short lines	1	4	4	9	
	Equipment	-	-	-	-	
	TOD and Station locations	2	-	2	4	
Modal Connectivity	Connectivity and interchange	6	4	4	14	• *Compile several requests to create a strong business case* • *Facilitate projects to next steps – take from feasibility* • *Regional perspective* • *Big picture coordination*
	Network access	-	2	-	-	
	Passenger	7	4	5	16	
	Commuter connector	-	3	3	6	

Appendix F: Full List of Additional Rail Project Categories

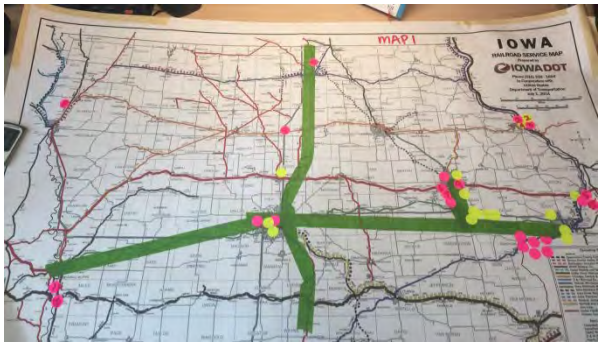
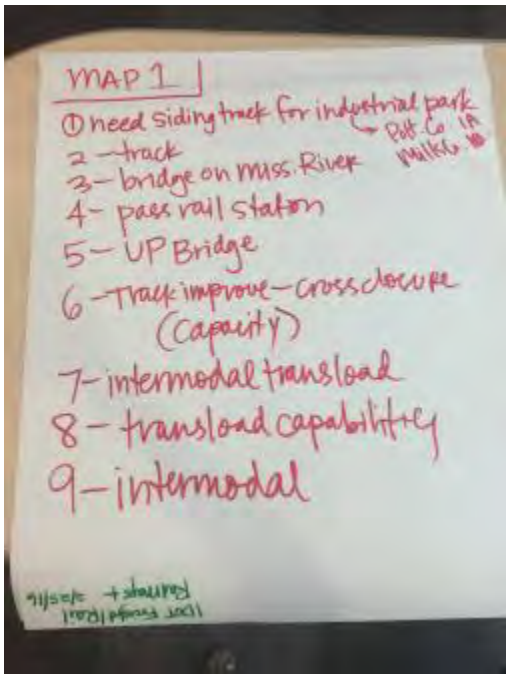
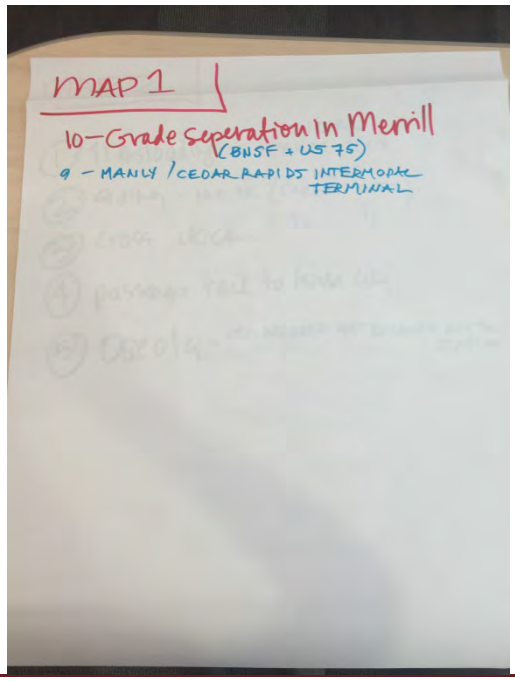
Note: Rail needs and projects below are identified generally, and not specifically by each of the four Iowa rail network maps used during the exercise to register votes by stakeholders. Many of these needs/projects showed on one or more of the maps.

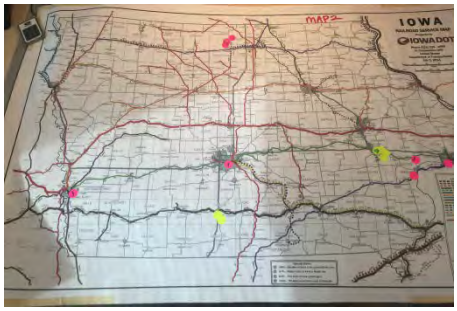
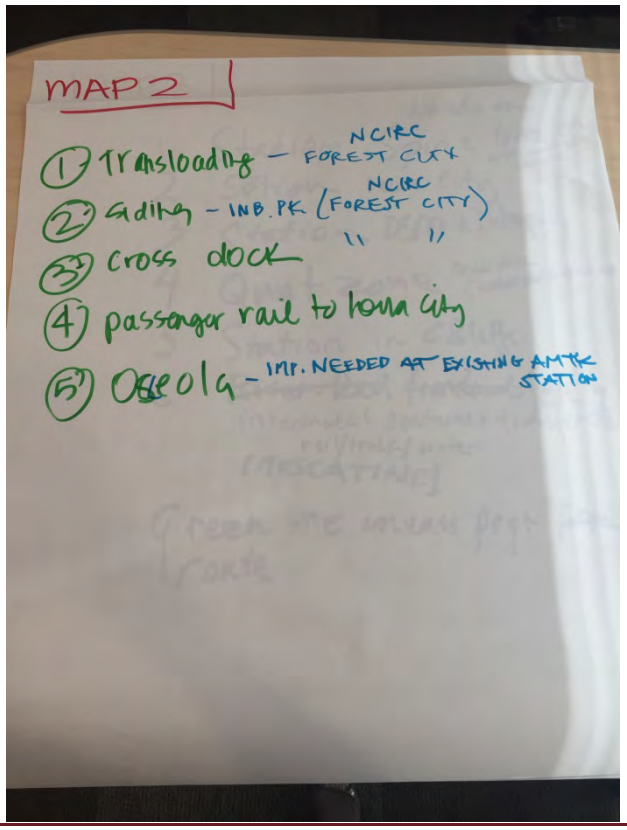
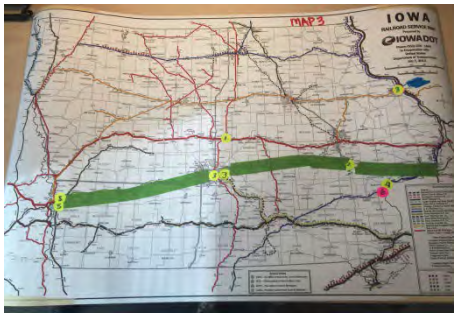
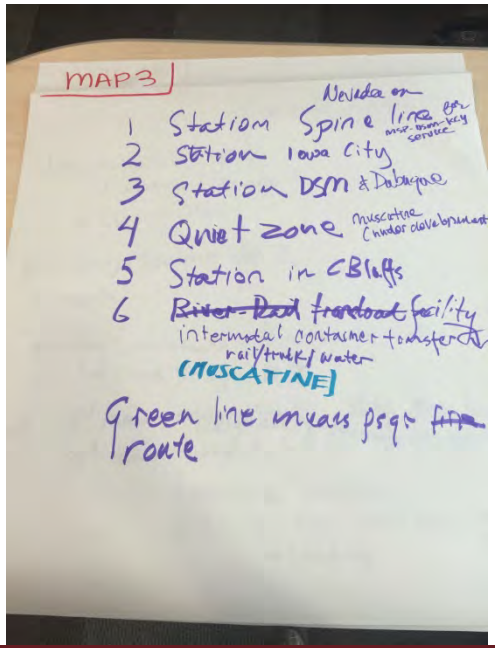
Passenger Rail

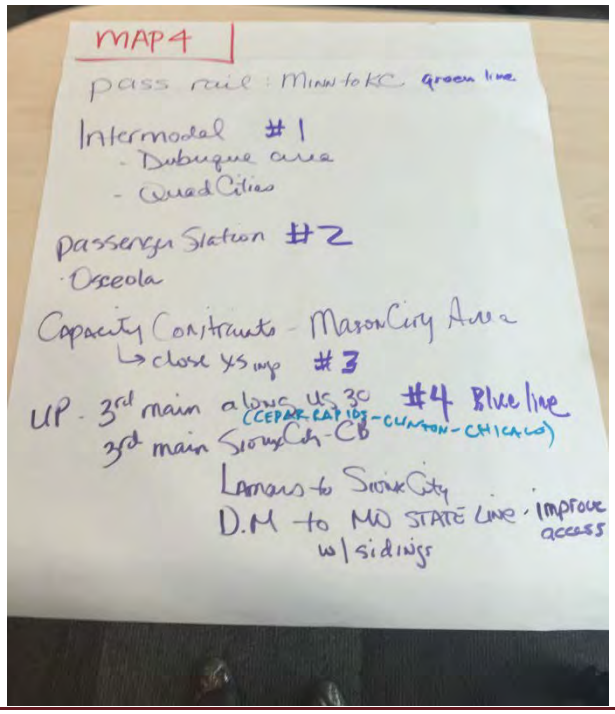
- Implementation of intercity passenger rail service Chicago-Quad Cities-Iowa City-Des Moines-Council Bluffs / Omaha (via the IAIS east-west corridor across Iowa). Specific station locations identified in Iowa: Davenport, Iowa City, Des Moines, and Council Bluffs.
- Implementation of intercity passenger rail service St. Paul-Mason City-Des Moines-Kansas City (via the UP north-south corridor across Iowa). Specific station locations identified in Iowa: Des Moines and Nevada.
- Implementation of intercity passenger rail service Chicago-Dubuque (via the CN in Iowa). Specific station locations identified in Iowa: Dubuque.
- Implementation of commuter rail service between Cedar Rapids and Iowa City (via the CIC corridor).
- Implementation of commuter rail service in the Des Moines Metropolitan Area. Specific lines, services, and station locations were not identified.
- Improvements/enhancements to the existing Amtrak California Zephyr station facilities at Burlington, Osceola, and Creston, Iowa.
- Potential passenger rail stations at Ames, Cedar Rapids, Clinton, and Muscatine, Iowa; however, specific passenger rail routes, corridors, and services to serve these stations were not identified.

Freight Rail

- Grade separation of the at-grade crossing of the BNSF Marshall Subdivision and US Highway 75 at Merrill, Iowa.
- Transload facilities on IAIS at Council Bluffs, Des Moines, and Wilton, Iowa (the latter location could potentially serve nearby Muscatine, Iowa, which is presently served directly by CP only).
- Transload / intermodal / port facility on the CP Ottumwa Subdivision and the Mississippi River at Muscatine, Iowa.
- Construct an intermodal facility on the IANR Manly Subdivision / UP Albert Lea Subdivision at Manly, Iowa.
- Construct an intermodal facility on the CIC at Cedar Rapids, Iowa.
- Construct an intermodal facility in the Dubuque, Iowa, area (specific location or handling carriers not identified; note that Dubuque is presently served by CN and CP).
- Expand transload services at the Alliant Energy coal transloading facility on the CN Waterloo Subdivision at Williams, Iowa.
- Expand transload services at the Alliant Energy coal transloading facility on the BNSF Aurora Subdivision and CN Dubuque Subdivision at East Dubuque, Illinois (opposite Dubuque, Iowa).
- Transload facility in Des Moines, Iowa; however specific locations and serving railroads were not identified (note that BNSF, IAIS, NS, and UP presently serve Des Moines).
- Construction of a transload facility, cross-dock facility, and a siding on the North Central Iowa Rail Corridor (operated by IANR) at an industrial park area in Forest City, Iowa.
- Establish a Quiet Zone on the CP Ottumwa Subdivision through Muscatine, Iowa.
- Construct a replacement bridge over the Mississippi River at Clinton, Iowa, on the UP Geneva Subdivision.
- Rehabilitate the existing Mississippi River Bridge or replace it with a new bridge on the CN Dubuque Subdivision at Dubuque, Iowa.
- Construct a third main track between Clinton and Cedar Rapids, Iowa, on the UP Clinton Subdivision.
- Construct additional sidings and improve access on the UP Trenton Subdivision between Des Moines, Iowa, and the Iowa/Missouri state line at Lineville, Iowa.
- Close three urban grade crossings on the UP Sioux City Subdivision at Sioux City, Iowa, to improve safety, capacity, and efficiency.
- Construct a siding track for transload facilities at Pottawattamie and Mills counties, in the Council Bluffs, Iowa, area.
- Address capacity constraints on the UP Mason City Subdivision in the Mason City, Iowa, area to include closure of grade crossings.
- Make capacity improvements on the single-track UP Sioux City Subdivision between California Junction and Sioux City, Iowa, and on the single-track UP Worthington Subdivision between Le Mars, Iowa, and the Iowa/Minnesota state line near Sibley, Iowa. Improvements could include the construction of additional siding capacity..
- Note: There is a pink dot at Boone, Iowa, on map 4, but the notes do not identify the need / project (UP and BSV presently serve Boone).

Map	Scribe Notes
	 

Map	Scribe Notes
	
	

Map	Scribe Notes
	

HLSC Meeting Invitees

FIRST NAME	LAST NAME	ORGANIZATION
Greg	Lofstedt	
Derrick	James	Amtrak
Todd	Stennis	Amtrak
Ron	White	ARTCO Fleeting Service
Denise	Bulat	Bi-State
Gena	McCullough	Bi-State
Sarod	Dhuru	BNSF
Greg	Reeder	City of Council Bluffs
Dave	Gobin	City of Muscatine
Jeff	Woods	CRANDIC
Chandra	Ravada	Dubuque MPO
Steve	Falck	Environmental Law and Policy Center
Rob	Toncar	FedEx
Teresa	Valenta	FedEx
Stacy	Timperley	Forbs
Beth	Bilyeu	Forest City Economic Development
David	Toyer	Greater Burlington Partnership
Harold	Hommes	Iowa Department of Agriculture and Land Stewardship
Kyle	Barichello	Iowa DOT
Ed	Engle	Iowa DOT
Sam	Hiscocks	Iowa DOT
Laura	Hutzell	Iowa DOT
Amanda	Martin	Iowa DOT
Diane	McCauley	Iowa DOT
Phil	Meraz	Iowa DOT
Phil	Mescher	Iowa DOT
Tammy	Nicholson	Iowa DOT
Garrett	Pedersen	Iowa DOT
Sam	Shea	Iowa DOT
Jeff	Von Brown	Iowa DOT
Joseph	Rude	Iowa Economic Development Authority
Joe	Parsons	Iowa Interstate Railroad
John	Dill	Iowa Motor Truck Association
Don	Egli	Iowa Motor Truck Association
Brenda	Neville	Iowa Motor Truck Association
Steve	Lallier	J. B. Hunt Transport
Michael	Heckart	John Deere
Osama	Shihadeh	Kent Corporation
Michael	Helgerson	Metropolitan Area Planning Agency
Ned	Lewis	Office of Motor Vehicle Enforcement
Richard	Grenville	Port KC, Kansas City, MO
Mike	Coghlan	Sabre Industries Towers and Poles

Kelli	O'Brien	Union Pacific Railroad
Mark	Peterson	UPS
Bill	Neese	West Central Co-Op

F.2 HLSC Meeting #3/Public Meeting Summary and Invitation List

Iowa Department of Transportation
State Freight Plan and State Rail Plan
Public Meeting Summary

Prepared for the Iowa Department of Transportation
by HDR
June 2016

Contents

Meeting Summary

Meeting Overview

The Iowa Department of Transportation (Iowa DOT) hosted a public meeting to present the State Freight Plan and draft State Rail Plan to engaged members of the public and stakeholders in the rail and freight industry. The meeting used an open house format and was held on Wednesday, June 8, 2016, in Des Moines, Iowa.

Outreach

Invitations were distributed to 1,968 recipients via email. Table 1 summarizes the outreach efforts for this meeting. See Appendix A: Meeting Invitation for the invitation content.

Table 1. Meeting Outreach

Outreach	Date	Number of Emails Distributed
Public meeting email invitation	5/19/2016	1,968
Public meeting email invitation for HLSC members	5/19/2016	42
Public meeting email reminder	6/6/2016	1,839 *
Public meeting email reminder for HLSC members	6/6/2016	42
Yammer outreach	5/2016 - 6/2016	n/a
Media advisory	5/2016 - 6/2016	n/a

* This number accounts for opt-outs, bounces, etc.

Attendees

Thirty-three stakeholders and the general public attended the meeting including representatives from the Iowa DOT, industries related to freight and rail transportation and special interest groups. See Appendix B: Public Meeting Sign-in Sheets.

Meeting Roles and Responsibilities

Table 2 summarizes the roles and responsibilities of each team member in attendance.

Table 2. Staff Roles and Responsibilities

Name	Organization	Responsibility
Jara Sturdivant-Wilson	HDR	Registration
Kevin Keller	HDR	Floater
Chris Goepel	HDR	Floater
Amanda Martin	Iowa DOT	IADOT representative
Sam Hiscocks	Iowa DOT	IADOT representative
Garrett Pedersen	Iowa DOT	IADOT representative
Craig Markley	Iowa DOT	IADOT representative

Name	Organization	Responsibility
Kyle Barichello	Iowa DOT	IADOT representative
Diane McCauley	Iowa DOT	IADOT representative
Ed Engle	Iowa DOT	IADOT representative
Phil Meraz	Iowa DOT	IADOT representative

Meeting Details and Agenda

The meeting was held Wednesday, June 8, 2016, at the Greater Des Moines Botanical Garden located at 909 Robert D Ray Dr, Des Moines, Iowa. The doors opened for HLSC members at 3:00 p.m. The general public had access beginning at 3:30 p.m.

3:00 p.m. – 3:30 p.m.: HLSC access
3:30 p.m. – 7:00 p.m.: General public access
7:00 p.m.: Doors close, meeting ends

Meeting Purpose and Format

The purpose of the public meeting was to introduce the details of both plans, answer any questions and receive comments. Because the Iowa DOT made significant progress on both plans, the final HLSC meeting was combined with the public meeting and the Iowa Department of Transportation provided HLSC members early access to the public meeting.

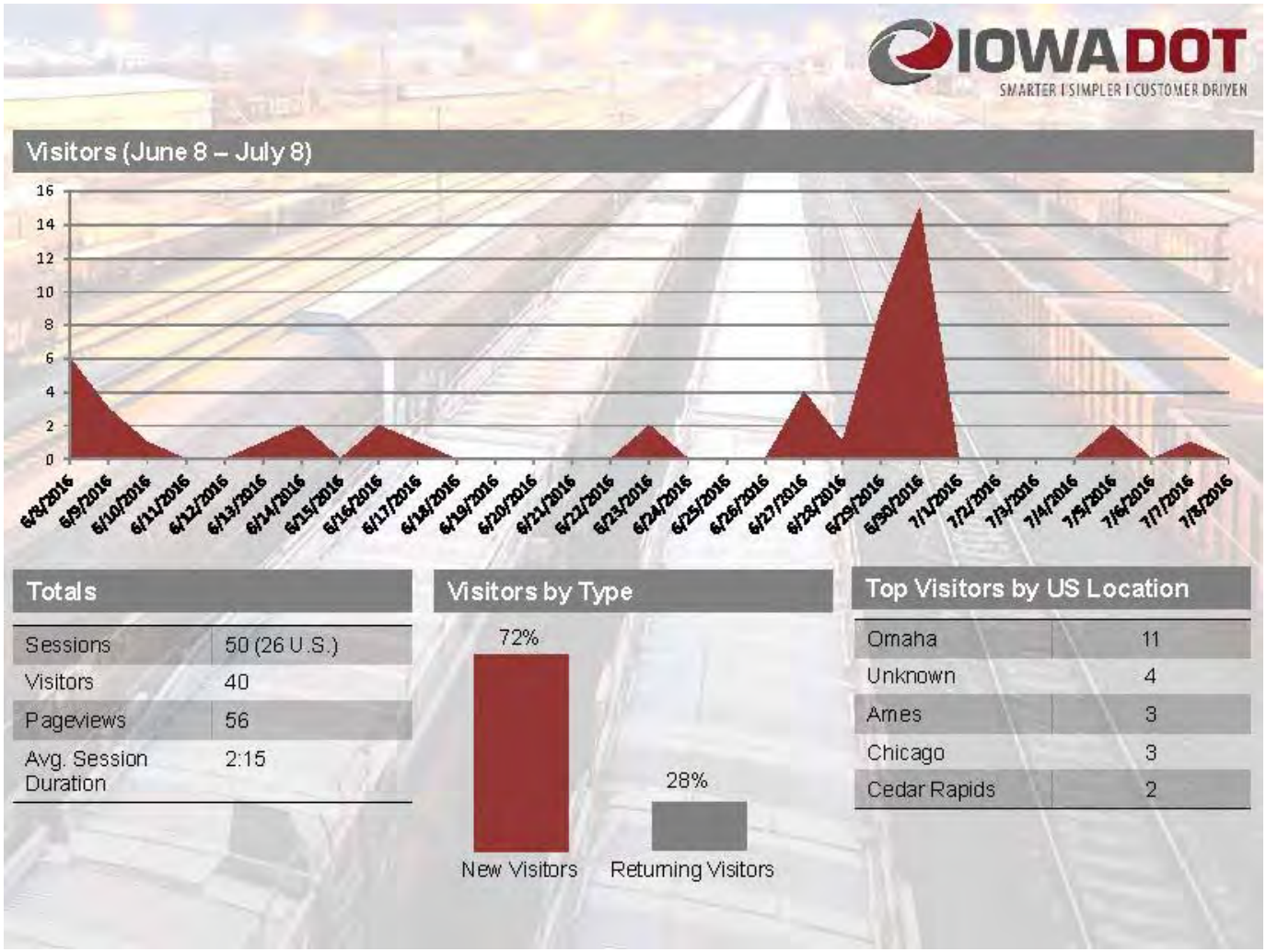
The meeting format was an open house style with no formal presentation. Participants received a handout at the sign-in table and were able to view the meeting boards around the room. Participants were also able to view the State Freight Plan and draft State Rail Plan, provide comments on comment cards and obtain different materials from the Iowa DOT.

For those unable to attend the meeting in-person, stakeholders and the public were able to attend an online meeting between June 8 and July 8, 2016, at http://www.engagefreightrailplans.iowadot.gov/. The online meeting included the same materials presented at the in-person meeting.

See Appendix C for the handout and meeting boards.

Online Meeting Statistics


IOWA DOT
SMARTER I SIMPLER I CUSTOMER DRIVEN
State Rail & Freight Plan Online Meeting
Web Statistics
June 8 – July 8, 2016


IOWADOT
SMARTER I SIMPLER I CUSTOMER DRIVEN
Visitors (June 8 – July 8)
16
14
12
10
8
6
4
2
0
6/8/2016
6/9/2016
6/10/2016
6/11/2016
6/12/2016
6/13/2016
6/14/2016
6/15/2016
6/16/2016
6/17/2016
6/18/2016
6/19/2016
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6/29/2016
6/30/2016
7/1/2016
7/2/2016
7/3/2016
7/4/2016
7/5/2016
7/6/2016
7/7/2016
7/8/2016
Totals
Sessions 50 (26 U.S.)
Visitors 40
Pageviews 56
Avg. Session Duration 2:15
Visitors by Type
72%
28%
New Visitors
Returning Visitors
Top Visitors by US Location
Omaha 11
Unknown 4
Ames 3
Chicago 3
Cedar Rapids 2

IOWA DOT
SMARTER | SIMPLER | CUSTOMER DRIVEN

Video Stats (June 8 – July 8)

Video	# of Visitors	% Play Rate (# Unique Plays)	Hours Watched (total)	Average Engagement
Welcome	43	44.2% (19)	0.2	65.7%
Introduction to Rail Transportation and Freight Systems	45	24.4% (11)	.1	69.7%
Introduction to Stakeholders	44	27.3% (12)	0.1	75.6%
State Rail Plan and State Freight Plan Schedules	31	19.4% (9)	0.1	36.2%
Introduction to the State Rail Plan	44	20.5% (9)	0.1	81.7%
State Rail Plan: Federal Railroad Guidance	44	27.3% (12)	0.1	85.5%
Introduction to the State Freight Plan	45	17.8% (8)	0	98.6%
State Freight Plan: Goals, Purpose, and Federal Guidance	41	24.4% (10)	0.1	71.4%
Stay Involved	25	16.0% (4)	0	43.3%

Comment Summary

Comments received through the website and through the completion of the online meeting on July 8, 2016, were considered in the respective plans. All comments are included in Appendix D.

Next Steps

Upon the close of the comment period for both plans, the Iowa DOT will finalize both plans. The comment period for the State Freight Plan closed June 15, 2016. The comment period for the State Rail Plan closed July 8, 2016.

Appendix A: Meeting Invitations

IOWA DOT
SMARTER I SIMPLER I CUSTOMER DRIVEN
www.iowadot.gov

May 19, 2016

We are excited to announce that the State Rail and Freight Plans are nearing completion! Through your participation and input, we have been able to progress quite a bit on both plans.

First, thank you for your participating as a member in the first two High Leverage Stakeholder Committee (HLSC) meetings.

And second, because of that participation and progress of both the Iowa State Freight and State Rail Plans, a third HLSC meeting will not be conducted. In lieu of holding a third HLSC meeting, the Iowa Department of Transportation invites you to early access to the public open house. The meeting will provide Iowa DOT an opportunity to solicit more general input about rail and freight issues and concerns and opportunities for freight and passenger rail. Representatives from the offices of Systems Planning and Rail Transportation will be available to answer questions and receive comments.

You are invited to attend a public open house meeting!

Meeting Details:

Date: Wednesday, June 8th
Time: 3:00- 3:30 p.m. (HLSC access)
3:30 - 7:00 p.m. (General public)
Location: Greater Des Moines Botanical Garden
909 Robert D. Ray Dr
Des Moines, IA 50309
Parking: Please park on the south side of the building.

Because we are combining these meetings, we hope that you are able to invite your constituents and/or others interested in rail and freight. This might be a great opportunity to show others exactly how you provided input on what the future of rail and freight will look like in Iowa. If you are unable to attend the meeting in-person, you can visit www.engagefreightrailplans.iowadot.gov between June 8 and July 8, 2016, to attend an online meeting.

Note that the comment period for the State Freight Plan has opened and closes June 15, 2016. The comment period for the State Rail Plan will begin June 8 and closes July 8.

We are excited to see you at the public open house meeting!

Stuart Anderson, Director
Planning, Programming and Modal Division

IOWA DOT
SMARTER I SIMPLER I CUSTOMER DRIVEN
www.iowadot.gov

May 19, 2016

Do you know what rail and freight will look like in the future for Iowa? Join the Iowa Department of Transportation as they present the current drafts of both the State Rail Plan and the State Freight Plan. These plans will shape and provide direction on what the future of rail and freight will look like in Iowa. The meeting will also provide the Iowa DOT an opportunity to solicit more general input about rail and freight issues and concerns and opportunities for freight and passenger rail. Representatives from the offices of Systems Planning and Rail Transportation will be available to answer questions and receive comments.

You are invited to attend a public open house meeting!

Meeting Details:

Date: Wednesday, June 8th
Time: 3:30 – 7:00 p.m.
Location: Greater Des Moines Botanical Garden
909 Robert D. Ray Dr
Des Moines, IA 50309
Parking: Please park on the south side of the building.

If you are unable to attend the meeting in-person, you can visit www.engagefreightrailplans.iowadot.gov between June 8 and July 8, 2016, to attend an online meeting.

Stuart Anderson, Director
Planning, Programming and Modal Division

800 Lincoln Way
Ames, IA 50010

http://engagefreightrailplans.iowadot.gov/

Opt Out

IOWA DOT
SMARTER I SIMPLER I CUSTOMER DRIVEN
www.iowadot.gov

June 6, 2016

Don't forget that the public open house meeting is this week! This is the opportunity for you to learn about the future of rail and freight in Iowa. You will be able to meet with representatives from the offices of Systems Planning and Rail Transportation who will be available to answer questions and receive comments.

Meeting Details:

Date: Wednesday, June 8th
Time: 3:30 – 7:00 p.m.
Location: Greater Des Moines Botanical Garden
909 Robert D. Ray Dr
Des Moines, IA 50309
Parking: Please park on the south side of the building.

If you are unable to make the meeting, you can visit www.engagefreightrailplans.iowadot.gov between June 8 and July 8, 2016, to attend an online meeting.

Stuart Anderson, Director
Planning, Programming and Modal Division

800 Lincoln Way
Ames, IA 50010

http://engagefreightrailplans.iowadot.gov/

Opt Out

Appendix B: Public Meeting Sign-in Sheets

2016 IOWA RAIL PLAN

Sign-in Sheet
Public Meeting
June 8, 2016

Contact Information		Notification & Demographic Information (Optional)			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name: Calean Kobyluh Organization (if applicable): Cryotech	Address: 6103 Orthoway City/Zip: Fort Madison, IA 52627 Phone: 319-372-6012 Email: calean.kobyluh@cryotech.com	[X] Email	[ ] Male [X] Female	[X] 25-34	[X] White
Name: Nikita Rainey Organization (if applicable): Iowa DOT	Address: City/Zip: Phone: Email:	[ ] Email	[ ] Male [ ] Female	[ ] 15-24	[ ] White
Name: Greg Dickinson Organization (if applicable): Merchants Dist Serv	Address: 1420 11th Ave NE City/Zip: 50009 Phone: ~~515~~ 515-244-2123 Email: gregd@merchantsdsm.com	[X] Email	[ ] Male [ ] Female	[ ] 15-24	[ ] White
Name: Ryan Davis Organization (if applicable): McClure Engineering	Address: 1360 NW 121st St City/Zip: Clive 50235 Phone: 515.964.1229 Email: rdavis@mccresults.com	[X] Email	[X] Male [ ] Female	[X] 25-34	[X] White

For Office Use Only: #_____ of #_____
Entered into DB on _____ by _____

2016 IOWA RAIL PLAN

Sign-in Sheet
Public Meeting
June 8, 2016

Contact Information		Notification & Demographic Information (Optional)			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name: Melinda Dunsmore Organization (if applicable): Benchmark Worldwide Logistics Inc	Address: 201 Grand Ave, Suite 204 City/Zip: West Des Moines, IA 50265 Phone: 515-457-7778 Email: mdunsmore@benchmarkshipping.com	[X] Other: Person who Received email Notice	[ ] Male [X] Female	[ ] 45-54	[ ] White
Name: Craig O'Riley Organization (if applicable):	Address: 2414 Yorkshire Cir City/Zip: Ames 50010 Phone: Email:	[X] Other: DOT Staff	[ ] Male [ ] Female	[ ] 15-24	[ ] White
Name: Brian Guillaume Organization (if applicable): House Democrats	Address: Iowa Capitol City/Zip: Phone: Email: brian.guillaume@legis.iowa.gov	[X] Website	[ ] Male [ ] Female	[ ] 15-24	[ ] White
Name: Brian Selinger Organization (if applicable): IEDA	Address: 200 E. Grand City/Zip: Des Moines Phone: Email: Brian.Selinger@iowa.gov	[X] Email [X] Newspaper Ad	[X] Male [ ] Female	[X] 35-44	[X] White

For Office Use Only: #_____ of #_____
Entered into DB on _____ by _____

2016 IOWA RAIL PLAN

Sign-in Sheet
Public Meeting
June 8, 2016

Contact Information		Notification & Demographic Information (Optional)			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name Clifford A Lochner Organization (if applicable)	Address 1421 W Washington Ave City/Zip Polk City IA 50226-7906 Phone 515 979-6408 Email	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Steve Falck Organization (if applicable) ELPC	Address 686 Foster Dr City/Zip DSM 50312 Phone 515 2407942 Email sfalck@elpc.org	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Sean Litteral Organization (if applicable) FHWA	Address 3266 Southbury St City/Zip Ames 50010 Phone Email	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☒ Male ☐ Female	☐ 15-24 ☐ 25-34 ☒ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Jim Tiernan Organization (if applicable) ALLIANCE SHIPPER	Address City/Zip Cranston IA Phone 515 720 9192 Email jtiernan@alliancecoop.com	☒ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

For Office Use Only: #_____ of #_____
Entered into DB on _____ by _____

2016 IOWA RAIL PLAN

Sign-in Sheet
Public Meeting
June 8, 2016

Contact Information		Notification & Demographic Information (Optional)			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name Jeff Schug Organization (if applicable)	Address 8410 Long Meadow Ln City/Zip Johnston IA 50131 Phone 515-577-1782 Email JSchug@MCPaints.com	☑ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☑ Male ☐ Female	☐ 15-24 ☐ 25-34 ☒ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☑ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Kim Bessert Organization (if applicable) Bessert Lumber	Address City/Zip Phone Email	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Jeff Jorgenson Organization (if applicable) Bassett LBR	Address City/Zip Phone Email	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Paul Kirpes Organization (if applicable) TPF	Address 621 S. 26th City/Zip WDM Phone Email pkirpes@whatmatters most.com	☐ Email ☐ Newspaper Ad ☒ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☒ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☒ 45-54 ☐ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

For Office Use Only: #_____ of #_____
Entered into DB on _____ by _____

2016 IOWA RAIL PLAN — IOWA IN MOTION planning ahead 2040

Sign-in Sheet
Public Meeting
June 8, 2016

Contact Information		Notification & Demographic Information *(Optional)*: How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name Laura Lutz-Zimmerman Organization *(if applicable)* IEDA	Address 200 E. grand Ave City/Zip Des Moines 50036 Phone 515-725-3004 Email	☒ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☒ Female	☐ 15-24 ☐ 25-34 ☒ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Randy Kaster Organization *(if applicable)* Alfred Benesch & Co.	Address 14748 W. Center Rd. Suite 200 City/Zip Omaha, NE 68144 Phone 402-333-5792 Email rkaster@benesch.com	☒ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☒ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☒ 45-54 ☐ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Andrew Collings Organization *(if applicable)* Des Moines Area MPO	Address City/Zip Phone Email	☒ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☒ Male ☐ Female	☐ 15-24 ☒ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Rick Voelker Organization *(if applicable)* Snyder & Associates Inc.	Address 2727 SW Snyder Blvd City/Zip Ankeny Iowa 50023 Phone 515 964 2020 Email rvoelker@snyder-associates.com	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

For Office Use Only: #________ of #________
Entered into DB on ____________ by ____________

2016 IOWA RAIL PLAN — IOWA IN MOTION planning ahead 2040

Sign-in Sheet
Public Meeting
June 8, 2016

Contact Information		Notification & Demographic Information *(Optional)*: How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name MICHAEL KEEFER Organization *(if applicable)* UNITED STATES HOUSE OF REPRESENTATIVES	Address 310 3rd ST. SE City/Zip CEDAR RAPIDS, IA 52401 Phone 319-823-0484 Email michael.keefer@mail.house.gov	☒ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☒ Male ☐ Female	☐ 15-24 ☒ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Organization *(if applicable)*	Address City/Zip Phone Email	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Organization *(if applicable)*	Address City/Zip Phone Email	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Organization *(if applicable)*	Address City/Zip Phone Email	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

Handwritten beside first row: Send board Alerts

For Office Use Only: #________ of #________
Entered into DB on ____________ by ____________

2016 IOWA RAIL PLAN

Sign-in Sheet
Public Meeting
June 8, 2016

Contact Information		Notification & Demographic Information (Optional)			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name: Kyle Nodgaard Organization (if applicable): Union Pacific	Address: 1400 Douglas St City/Zip: Omaha, NE Phone: 402-544-2029 Email: knodgaa@up.com	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name: Mike Kulik Organization (if applicable): Davis Brown Law Firm	Address: City/Zip: Phone: Email:	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name: Todd Ashby Organization (if applicable): DMAMPO	Address: 420 Watson Powell Hwy City/Zip: DSM 50309 Phone: 515-334-6039 Email: tashby@dmampo.org	☒ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name: Michael Dolch Organization (if applicable): Senator Ernst	Address: 310 SW 9th Street City/Zip: DSM 50309 Phone: 712-770-1181 Email: michael_dolch@ernst.senate.gov	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

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Entered into DB on _____ by _____

2016 IOWA RAIL PLAN

Sign-in Sheet
Public Meeting
June 8, 2016

Contact Information		Notification & Demographic Information (Optional)			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name: Adam Schweers Organization (if applicable): Hwy 30 Coalition	Address: 1642 Oakwood Dr City/Zip: Carroll 51401 Phone: 712-790-2283 Email: adam@computerconceptsia.com	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☒ Website ☐ Other	☒ Male ☐ Female	☐ 15-24 ☐ 25-34 ☒ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name: Ted Brackett Organization (if applicable): Neumann Brothers, Inc.	Address: 1435 Ohio Street City/Zip: Des Moines 50314 Phone: 515-243-0156 Email: brackettw@neumannbros.com	☐ Email ☒ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name: Tim Ly Organization (if applicable): CKI	Address: 1201 Grand Ave City/Zip: WDM IA 50265 Phone: Email: CKINTLMARKETING@GMAIL.com	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☒ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name: Don McDowell Organization (if applicable): Farm Bureau	Address: 5400 University Ave City/Zip: WDM 50266 Phone: 515 225-5547 Email: dmcdowell@ifbf.org	☒ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☒ Other Freight Advisory Council	☒ Male ☐ Female	☐ 15-24 ☒ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

For Office Use Only: #_____ of #_____
Entered into DB on _____ by _____

2016 IOWA RAIL PLAN

Sign-in Sheet
Public Meeting
June 8, 2016

Contact Information		Notification & Demographic Information *(Optional)*			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name: Darla Hugaboom Organization *(if applicable)*: FHWA	Address City/Zip Phone Email	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☑ ~~Other~~	☐ Male ☑ ~~Female~~	☐ 15-24 ☐ 25-34 ☑ ~~35-44~~ ☐ 45-54 ☐ 55-64 ☐ 65+	☑ ~~White~~ ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name: Thomas Tai Organization *(if applicable)*: FHWA	Address City/Zip Phone Email	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name: Stacy Timperley Organization *(if applicable)*: Forbs Exports	Address City/Zip Phone Email	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name: David Purdy Organization *(if applicable)*: ProRail Nebraska	Address City/Zip Phone Email: dandepurdy@cox.net	☐ Email ☐ Newspaper Ad ☐ Social Media ☐ Radio ☐ TV ☐ Poster/Flier ☐ Website ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

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Appendix C: Handout and Meeting Boards

2016 IOWA RAIL PLAN

PUBLIC MEETING

June 2016

WELCOME!

The purpose of today's meeting is to introduce you to the draft Iowa State Rail and Freight Plans, answer questions and receive comments.

Today we will:

- Provide a summary of what is presented in both plans;
- Gather comments on both plans; and
- Provide ways to stay connected with the Iowa Department of Transportation.

Background

In September 2013, the Federal Railroad Administration (FRA) published its Final State Rail Plan Guidance, which provided direction for State Rail Plan stakeholder and public involvement. We are actively engaging private sector rail and freight infrastructure owners, freight, public planning agencies, transit operators, rail authorities, railroad and freight organizations, and passenger rail stakeholders. The State Rail Plan will identify proposed improvements in urban and rural areas for those who travel through it. The State Freight Plan outlines freight planning activities that will achieve the objective for the state to provide a safe, efficient and convenient freight transportation system to Iowans. The State Freight Plan is a way to connect all planning initiatives and allow each to move forward towards a common goal of optimal freight transportation throughout the state. In addition, the freight plan will guide our investment decisions to maintain and improve the freight transportation system, and ultimately strengthen Iowa's economy and raise the quality of life for our citizens.

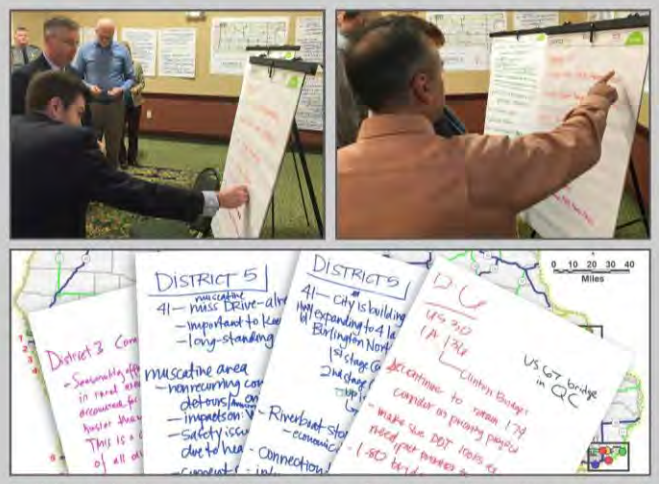
The development of a comprehensive State Rail Plan in collaboration with the implementation of the State Freight Plan offers an opportunity for us to accurately define what the rail and freight system in the state looks like today and what it needs to look like in the future.

State Rail and Freight Plan Overlap

The State Rail and Freight Plans are closely related and have several overlapping activities. The Iowa DOT combined public engagement efforts of for both plans allowing for the integration of feedback appropriately. Due to the subject matter, there is natural overlap of information, data and analysis for both rail and freight.

2015-2016 Meeting Highlights

Participants in the Issues-Based Workshop in Des Moines, Iowa, voted on the strengths, weaknesses, opportunities and threats of the rail and freight systems in Iowa.



Participants in the second High Leverage Stakeholder Committee meeting in Des Moines, Iowa. (Top) Participants voted on rail capital investments and projects in Iowa. (Bottom) Example of comments participants provided on the Value, Condition, and Performance (VCAP) process by district.

State Rail Plan

Draft Goals of the State Rail Plan

- Enhance the safety and security of the rail system
- Maintain the rail infrastructure
- Provide access and connectivity
- Improve efficiency
- Ensure economic competitiveness and development
- Sustain the environment

The primary purpose of the State Rail Plan is to serve as a statewide, long-range rail planning document, fully integrated with other state planning initiatives.

The State Rail Plan will integrate current and future freight and passenger rail projects into a multimodal framework, identify economic benefits, align initiatives with Iowa priorities, and unify common rail interests.

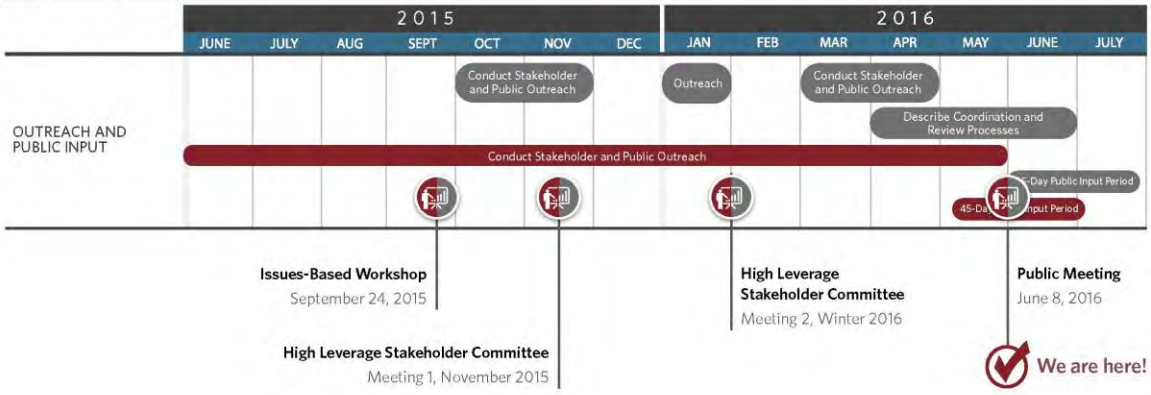
What We Have Heard:

Stakeholder coordination and public outreach recognized the needs and opportunities for:

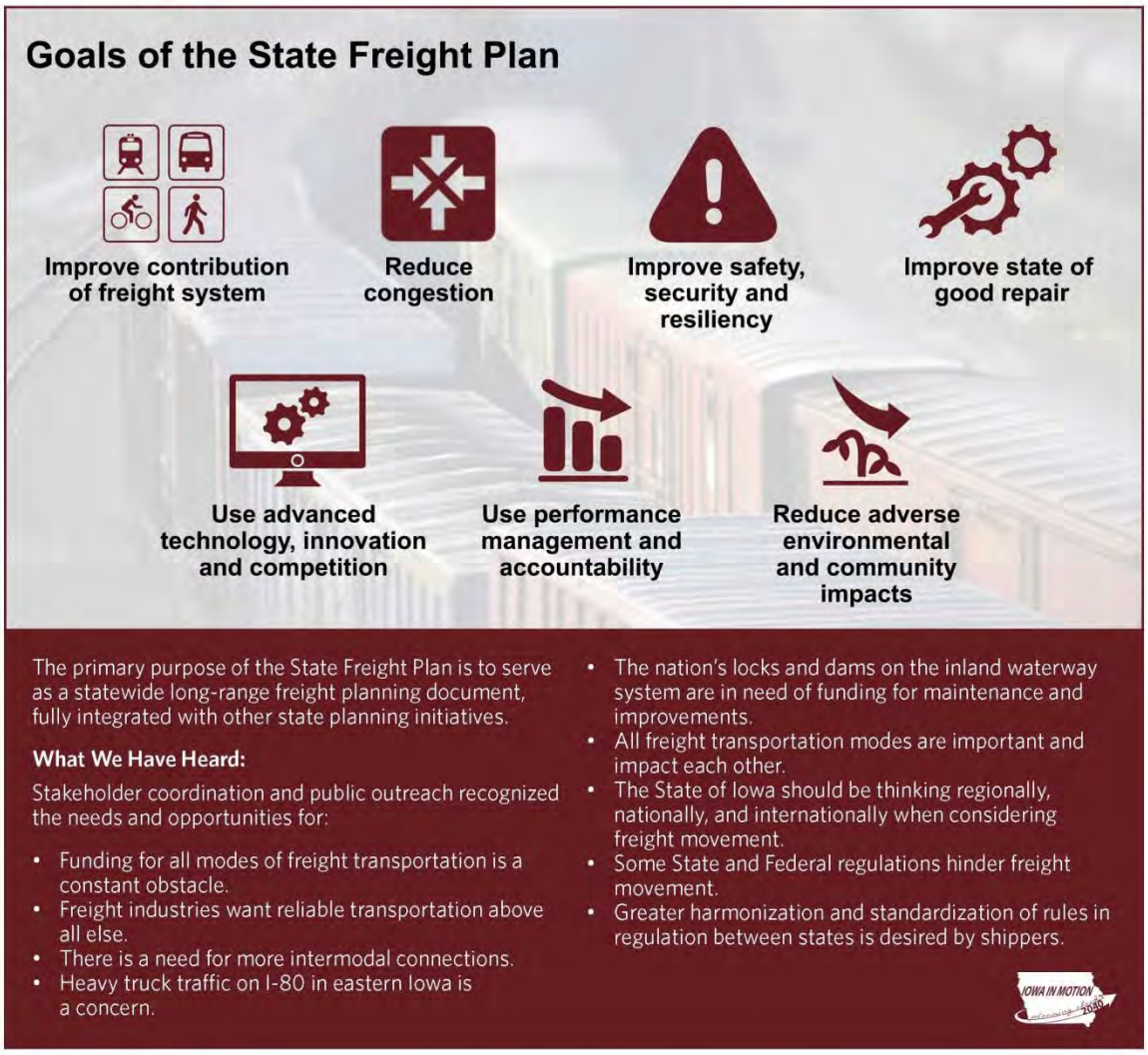
- Enhanced access to the state's rail network for freight shippers / receivers.
- Improvements to infrastructure and the capacity, safety, and efficiency of the state's rail network.
- Economic development.
- Environmental sustainability.
- Enhancement of existing passenger rail services and development of new passenger rail services in the state.

2016 IOWA RAIL PLAN

Progress to Date



State Freight Plan



The primary purpose of the State Freight Plan is to serve as a statewide long-range freight planning document, fully integrated with other state planning initiatives.

What We Have Heard:

Stakeholder coordination and public outreach recognized the needs and opportunities for:

- 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.

Federal Guidelines

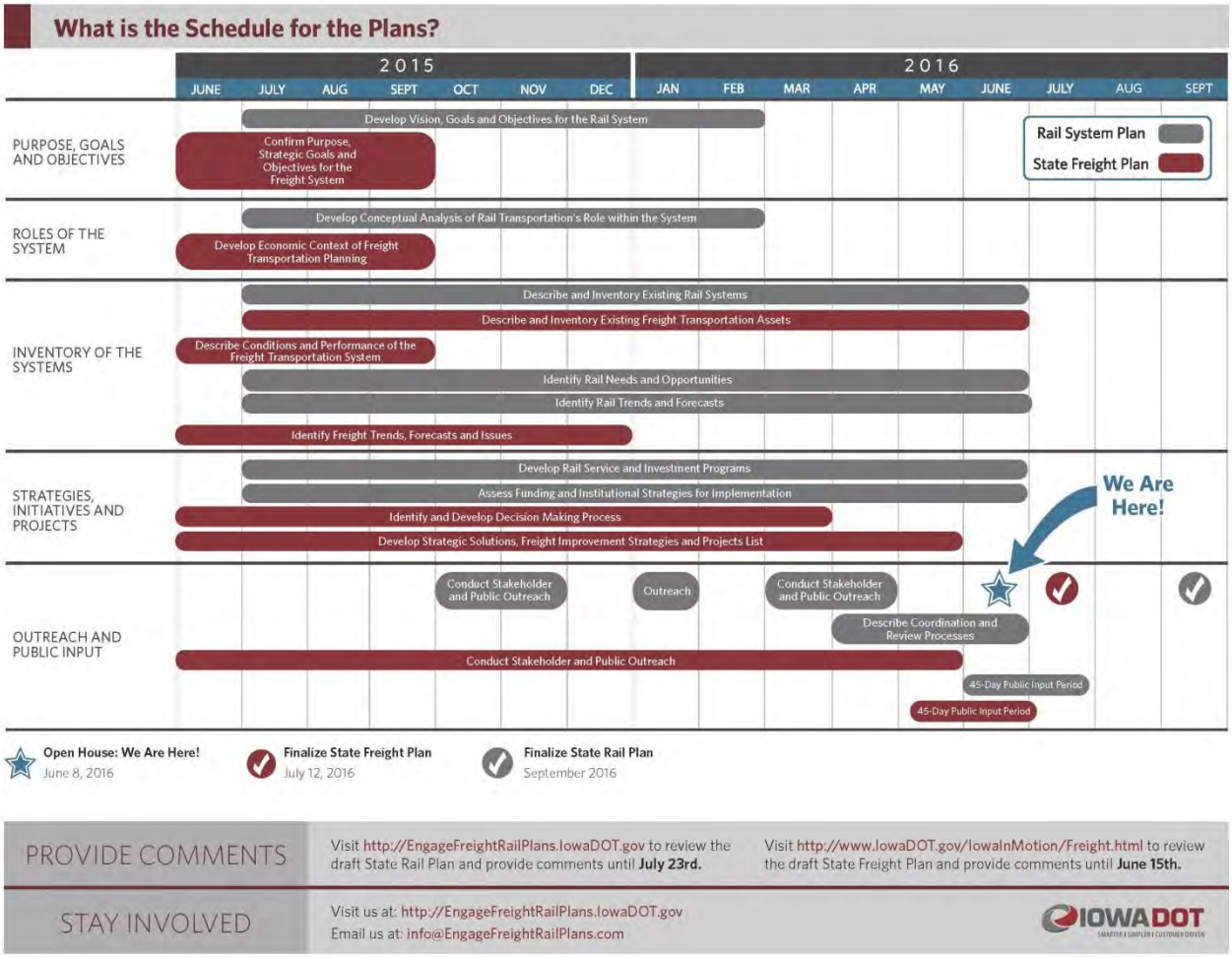
The federal government requires each state to develop plans for freight and rail transportation. Iowa's State Rail Plan was first published in 2009. The 2016 State Rail Plan will meet federal guidelines and will be available in late summer, along with the State Freight Plan.

The State Freight Plan will support the National Freight Goals, as defined by the associated federal guidelines.

Each state is encouraged to establish a freight advisory committee composed of a representative cross-section of public and private-sector freight stakeholders. Each state is also encouraged to develop a comprehensive plan for its immediate and long-range freight-related planning and investments.

The Iowa DOT has met these two federal requirements.

Iowa Department of Transportation
State Rail Plan and State Freight Plan
Public Meeting Summary



PROVIDE COMMENTS	Visit http://EngageFreightRailPlans.IowaDOT.gov to review the draft State Rail Plan and provide comments until **July 23rd.**	Visit http://www.IowaDOT.gov/IowaInMotion/Freight.html to review the draft State Freight Plan and provide comments until **June 15th.**
STAY INVOLVED	Visit us at: http://EngageFreightRailPlans.IowaDOT.gov Email us at: info@EngageFreightRailPlans.com	IOWA DOT

Welcome

THE PURPOSE OF THIS MEETING IS TO:

- Introduce you to the details of the Iowa State Rail and State Freight Plans.
- Answer your questions and receive comments.

Rail Transportation and Freight Systems

RAIL TRANSPORTATION INCLUDES:

- Freight Rail
- Passenger Rail

FREIGHT SYSTEMS INCLUDES:

- Air
- Highway
- Pipeline
- Railroad
- Waterway

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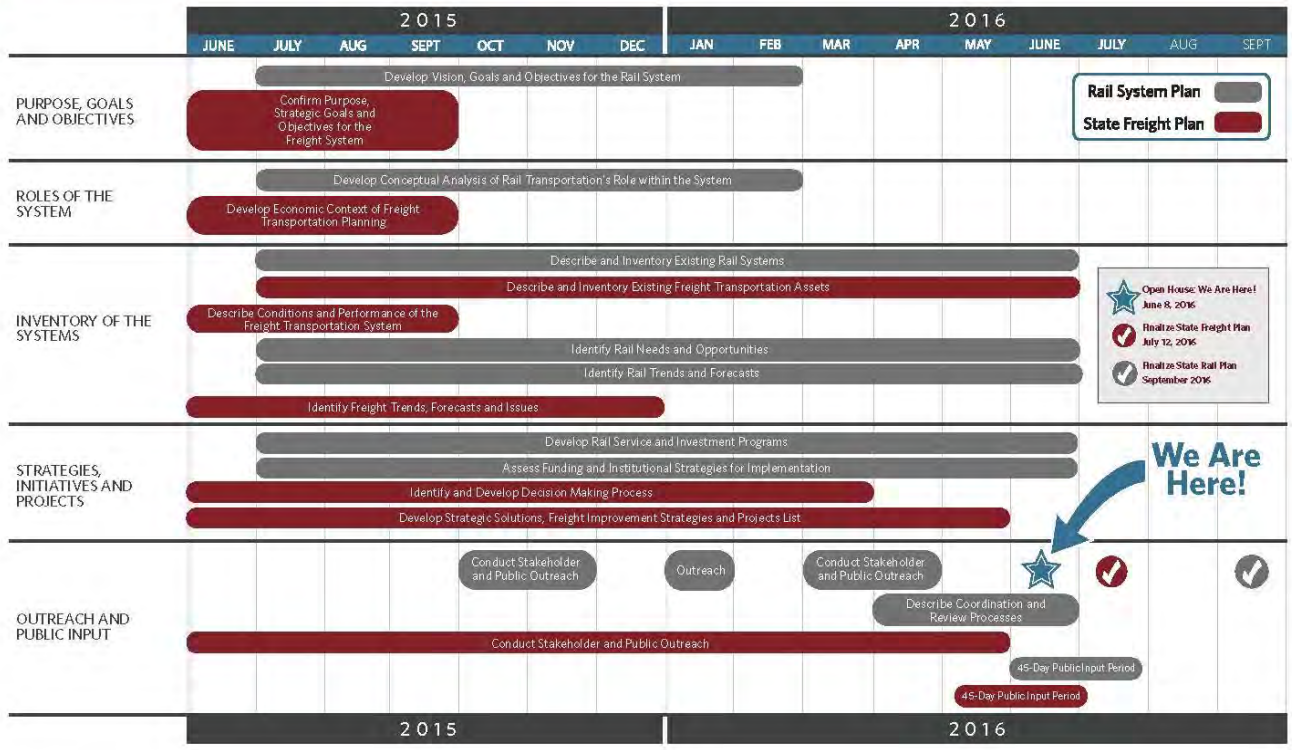
State Rail Plan and State Freight Plan Development Schedule



2016 IOWA RAIL PLAN

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Introduction to Stakeholders

WHO ARE THE STAKEHOLDERS?

- Freight railroads
- Passenger railroads (Amtrak)
- Public agencies
- Advocacy organizations
- Neighboring states
- Local, state, and regional officials
- General public
- Freight industry representatives

Stakeholders represent audiences that are integral to achieving the project objectives and goals.

State Rail Plan: Draft Goals

Enhance the safety and security of the rail system

Maintain the rail infrastructure

Provide access and connectivity

Improve efficiency

Ensure economic competitiveness and development

Sustain the environment

Introduction to the Iowa State Rail Plan

THE STATE RAIL PLAN:

- Will actively engage railroads and freight and passenger rail stakeholders.
- Will identify the needs and opportunities of the state's passenger and freight rail network.
- Will identify and prioritize potential capital investments in projects and studies to address these needs and concerns.

STATE RAIL PLAN PURPOSE:

To serve as a statewide, long-range planning document, fully integrated with other state planning initiatives.

STATE RAIL PLAN VISION STATEMENT:

A safe, secure, and efficient Iowa rail system that ensures Iowa's economic competitiveness and development by maintaining the rail infrastructure and providing rail access and connectivity for people and goods in an environmentally sustainable manner.

2016 IOWA RAIL PLAN

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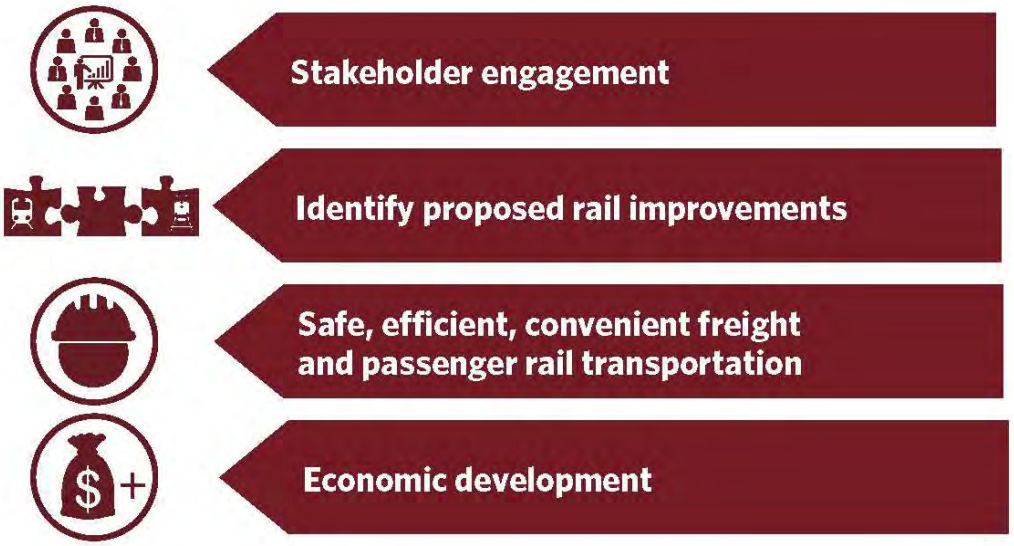
State Rail Plan: What We Have Heard

Stakeholder coordination and public outreach recognized the needs and opportunities for:

- Enhanced access to the state's rail network for freight shippers/receivers.
- Improvements to infrastructure and the capacity, safety, and efficiency of the state's rail network.
- Economic development.
- Environmental sustainability.
- Enhancement of existing passenger rail services and development of new passenger rail services in the state.

State Rail Plan: Federal Railroad Administration (FRA) Guidance



SECTION 303 OF PRIIA ✓

SUPPORTS NATIONAL FREIGHT GOALS ✓

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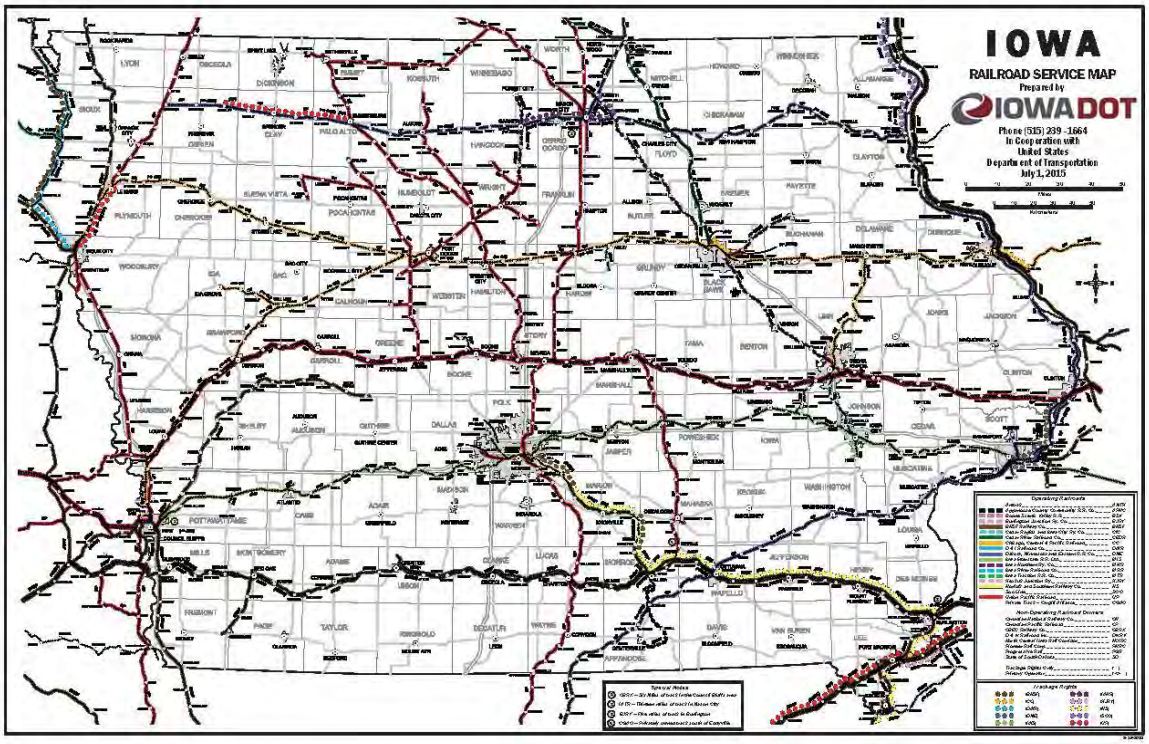
Railroad Service Map



State Rail Plan: Capital Investments and Projects

Potential future capital projects and studies have been identified and prioritized for ***short-range*** (1-4 years) or ***long-range*** (5-21 years) implementation in the Rail Service and Investment Plan developed for the State Rail Plan.

The proposed projects generally focus on:

- Increased rail capacity, efficiency, and safety through infrastructure investments.
- Enhanced and new rail access for Iowa's shippers/receivers.
- Reduction or elimination of major freight bottlenecks.
- Passenger rail improvements that increase passenger safety, preserve and enhance existing services and facilities, and potentially expand service to new intercity corridors.

State Rail Plan: Proposed Short-Range Projects and Studies

PASSENGER RAIL PROJECTS AND STUDIES

Iowa DOT's proposed short-range passenger rail projects and studies (Year 1 through Year 4) are aimed at:

- Improving existing intercity passenger rail services.
- Identifying the potential for implementation of additional passenger rail and connecting bus services on new intercity corridors.
- Further study of the potential for commuter rail implementation.

FREIGHT RAIL PROJECTS AND STUDIES

During the four-year short-range program period, the proposed freight rail projects mostly entail making improvements to the capacity and rail access on the state rail network. These include enhancement of:

- Existing rail access or development of new rail access for shippers/receivers (transload, intermodal facilities, industrial spurs).
- Enhancements to the capacity and safety of the state's rail network.
- Improvements to track infrastructure.

State Rail Plan: Proposed Long-Range Projects and Studies

PASSENGER RAIL PROJECTS AND STUDIES

For the long-range program (Year 5 through Year 21), projects previously identified in the short-range program will be further advanced toward implementation pending confirmation of construction and economic feasibility. Proposed projects include:

- Improvements to stations and facilities at existing Amtrak stations in Iowa.
- Implementation of intercity passenger rail services on new corridors.
- Implementation of commuter rail service.

Proposed studies include additional studies for passenger and commuter rail services in the state.

FREIGHT RAIL PROJECTS AND STUDIES

Projects proposed for public funding beyond the four-year short-range program period will be subject to funding availability as well as further analysis as to their viability and relative benefits to costs. The objective of most of the long-range projects will be to:

- Improve the capacity, efficiency, and safety of the state 's railroads (particularly in yards and congested terminal areas).
- Enhance rail access by expanding or constructing transload and intermodal facilities.
- Upgrade or replace major river bridges.
- Improve flood mitigation measures.

State Freight Plan: Goals

Improve contribution of freight system

Reduce congestion

Improve safety, security and resiliency

Improve state of good repair

Use advanced technology, innovation and competition

Use performance management and accountability

Reduce adverse environmental and community impacts

Introduction to the Iowa State Freight Plan

THE STATE FREIGHT PLAN:

- Will outline freight planning activities that will achieve the objective for Iowa to provide a safe, efficient, and convenient freight transportation system to Iowans and those traveling through Iowa.
- Will guide Iowa DOT's investment decisions to maintain and improve the freight transportation system, and ultimately strengthen the state's economy and raise the quality of life for its citizens.

IOWA FREIGHT PLAN PURPOSE

The primary purpose of the State Freight Plan is to serve as a statewide long-range freight planning document, fully integrated with other state planning initiatives.

State Freight Plan: Federal Guidance

The State Freight Plan will support the National Freight Goals as defined by federal guidelines.

EACH STATE IS ENCOURAGED TO:

- Establish a freight advisory committee composed of a representative cross-section of public- and private-sector freight stakeholders.
- Develop a comprehensive plan for its immediate and long-range freight-related planning and investments.

The Iowa DOT has met these two federal requirements.

State Freight Plan: Iowa's Freight Improvement Strategies

	Iowa's Freight Improvement Strategies	National Freight Goals						
		Improve economic efficiency, productivity, and competitiveness	Reduce congestion	Improve safety, security, and resiliency	Improve state of good repair	Use advanced technology, innovation, and competition	Use performance management and accountability	Reduce adverse environmental and community impacts
1	Maximize the advantages inherent to Iowa's geographic proximity	✓	✓			✓	✓	✓
2	Explore/create other funding sources to increase investment in the freight transportation system	✓	✓	✓	✓	✓	✓	✓
3	Target investment to address mobility issues that impact freight facilities	✓	✓	✓	✓	✓	✓	
4	Utilize designs that are compatible with oversize/overweight freight movements	✓	✓	✓		✓		✓
5	Target investment on the interstate system at a level that reflects the importance of this system for moving freight	✓	✓	✓	✓	✓	✓	✓
6	Right-size the highway system and apply cost-effective solutions to locations with existing and anticipated issues	✓	✓	✓	✓	✓	✓	✓
7	Advance a 21st century Farm to Market system that moves products seamlessly across road, rail, and water to global marketplaces	✓	✓		✓	✓	✓	
8	Implement asset management tools and practices and promote their use at the local level	✓	✓	✓	✓	✓	✓	✓
9	Optimize the freight transportation network to minimize cost and travel time and improve supply chain efficiency	✓	✓	✓	✓	✓	✓	✓
10	Optimize the availability and use of freight shipping containers	✓	✓			✓	✓	✓
11	Explore opportunities for increasing value-added production within the state	✓				✓	✓	
12	Continue to advance efforts on the M-35 Marine Highway Corridor	✓	✓	✓	✓	✓	✓	✓
13	Promote freight movement on the M-29 Marine Highway Connector	✓	✓	✓	✓	✓	✓	✓
14	Provide real-time information on system conditions to support the movement of freight	✓	✓	✓		✓	✓	✓
15	Leverage real-time information from users of the system to support advanced decision-making and incident avoidance	✓	✓	✓		✓	✓	✓
16	Provide measured, clear, non-technical performance results for the freight system	✓	✓	✓	✓	✓	✓	✓
17	Streamline and align freight-related regulations and minimize unintended consequences	✓				✓	✓	
18	Act as a point of contact and educator on freight transportation options	✓	✓			✓	✓	
19	Explore new truck cross-docking operations to enable greater opportunities to consolidate truck freight for Iowa shippers	✓	✓			✓		
20	Explore a new rail intermodal facility to enable access to lower cost rail services for Iowa businesses	✓	✓			✓		
21	Explore additional transload facilities to provide Iowa businesses with more access to lower cost railroad freight services	✓	✓			✓		
22	Explore opportunities to leverage a barge and rail multimodal solution to provide a cost-effective freight transportation alternative	✓	✓		✓	✓		✓
23	Explore opportunities to build a logistics park to colocate cross-docking, intermodal, transloading, and warehousing facilities	✓	✓			✓		
24	Collaborate with the railroads to provide Iowa companies with more access and capacity to accommodate additional Iowa freight shipments	✓	✓					✓
25	Explore opportunities to reposition empty containers by barge and reduce repositioning costs	✓	✓			✓	✓	✓
26	Explore and implement strategies to reduce deadhead truck miles	✓	✓	✓		✓	✓	✓
27	Explore opportunities for railroads to provide additional lower cost freight rail transportation for high volume traffic lanes within Iowa	✓	✓	✓	✓			

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State Freight Plan: What We Have Heard

Stakeholder coordination and public outreach recognized:

- 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.

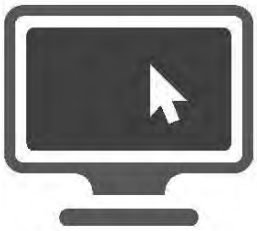
Multimodal Freight Network Map

Next Steps


2016
MAY
JUNE
JULY
AUG
SEPT
Draft State Freight Plan stakeholder review and public comment period
Draft State Rail Plan stakeholder review, public input, and FRA review
Open House: We Are Here!
Finalize State Freight Plan
Finalize State Rail Plan
We Are Here!

Stay Involved

- **Visit the website:** www.EngageFreightRailPlans.IowaDOT.gov
- **Have a comment about the State Rail Plan?**
  Visit **www.EngageFreightRailPlans.IowaDOT.gov** to review the draft State Rail Plan and provide comments until July 23.
- **Have a comment about the State Freight Plan?**
  Visit **www.IowaDOT.gov/IowaInMotion/Freight.html** to review the draft State Freight Plan and provide comments until June 15.
- **Send us an email:** info@EngageFreightRailPlans.com



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Appendix D: Comments

State Rail & Freight Plan Online Meeting

Web Statistics

June 8 – July 8, 2016

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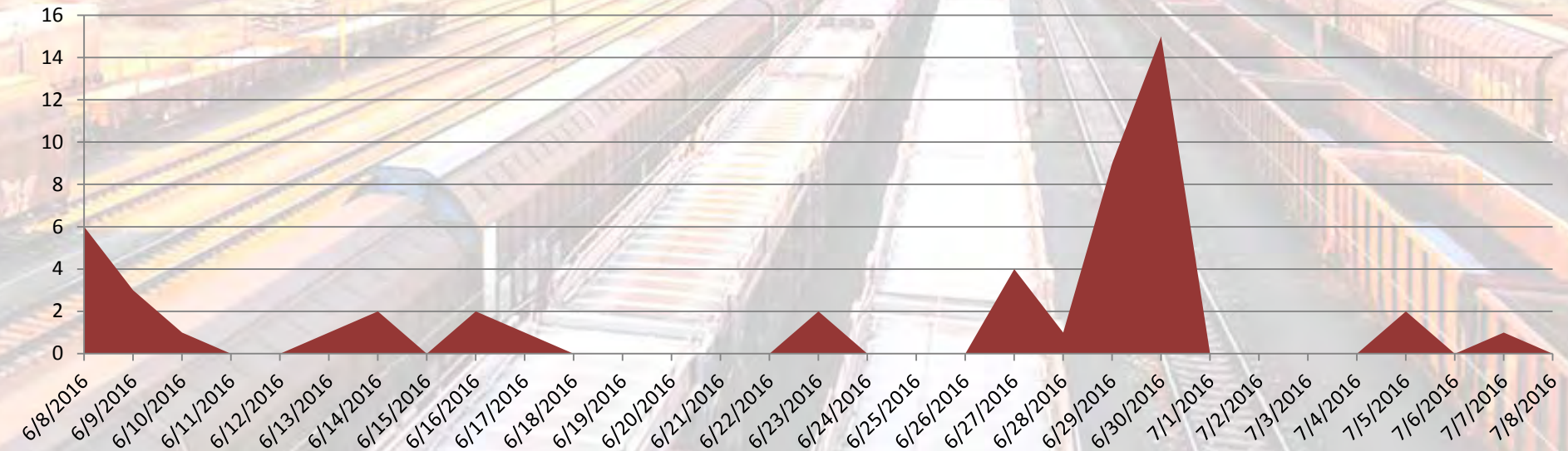
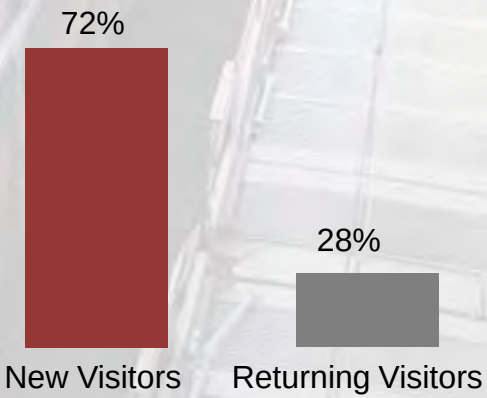
Visitors (June 8 – July 8)



Totals

Sessions	50 (26 U.S.)
Visitors	40
Pageviews	56
Avg. Session Duration	2:15

Visitors by Type



Top Visitors by US Location

Omaha	11
Unknown	4
Ames	3
Chicago	3
Cedar Rapids	2

Video Stats (June 8 – July 8)

Video	# of Visitors	% Play Rate (# Unique Plays)	Hours Watched (total)	Average Engagement
Welcome	43	44.2% (19)	0.2	65.7%
Introduction to Rail Transportation and Freight Systems	45	24.4% (11)	.1	69.7%
Introduction to Stakeholders	44	27.3% (12)	0.1	75.6%
State Rail Plan and State Freight Plan Schedules	31	19.4% (9)	0.1	36.2%
Introduction to the State Rail Plan	44	20.5% (9)	0.1	81.7%
State Rail Plan: Federal Railroad Guidance	44	27.3% (12)	0.1	85.5%
Introduction to the State Freight Plan	45	17.8% (8)	0	98.6%
State Freight Plan: Goals, Purpose, and Federal Guidance	41	24.4% (10)	0.1	71.4%
Stay Involved	25	16.0% (4)	0	43.3%

F.3 Issues-Based Workshop Meeting Summary and Invitation List

2016 IOWA RAIL PLAN

IOWA IN MOTION Interactive 2040

Iowa Rail and Freight Plan Issues-Based Workshop:

Summary

Prepared for the Iowa Department of Transportation

HDR

October 2015

Iowa Rail and Freight Plan Issues-Based Workshop Summary

as of 10/15/2015

Contents

Workshop Summary

Workshop Overview

The Iowa Department of Transportation (DOT) hosted a one-day workshop to engage a range of stakeholders in the development of the State Freight and Rail Plans. The workshop was held on Thursday, September 24, 2015, in Des Moines, Iowa, and consisted of three interactive exercises that focused on consolidating the stakeholder issues, concerns and goals tied to freight and rail planning for the Iowa DOT.

Outreach

Multiple email notifications were sent to a database of 188. An email invitation letter was distributed on August 31 and September 2; a reminder invitation email was distributed on September 11; an extension invitation email was sent on September 18; and a follow-up email invitation was sent on September 23 (Appendix B, Example Workshop Invitations).

Table 1: Outreach Dates

Outreach	Date
Save the Date Email	8/31
Save the Date Email	9/2
Invitation Email	9/11
RSVP Deadline Email	9/18
Agenda Email	9/23

Workshop Agenda and Outcomes

Attendees

Thirty-eight people attended the workshop including representatives from the DOT, an elected official representative, industries related to freight and rail transportation and special interest groups.(Appendix A, Invitation Mailing and Attendee List)

Agenda and Outcomes

The workshop was held on Thursday, September 24, 2015 at the Holiday Inn Mercy Area Hotel, Top of the Tower Room, located at 1050 6th Avenue, Des Moines, Iowa. Registration began at 8:00 a.m. with the workshop commencing at 8:30 a.m. continuing until 2:45 p.m. The workshop included an introduction from Iowa DOT Director of Office of Rail Transportation Tammy Nicholson and two presentations including sessions for visioning, issues identification and issues categorization. Participants received a registration packet with a handout and six maps. (Appendix C, Attendee Handout Packet)

Introduction

Iowa DOT Director of Office of Rail Transportation Tammy Nicholson welcomed attendees and emphasized that the workshop marked the beginning of the public engagement outreach for both the Iowa State Rail and Freight Plans. The goal of the workshop was to validate the State Freight Plan goals and begin developing the State Rail Plan goals. Director Nicholson outlined the Iowa DOT's interest and commitment to both freight and rail transportation in Iowa. Nicholson closed her portion of the presentation by reviewing the schedule and next steps in the development of both plans.

Presentation 1: 2016 Iowa Freight Plan, Background and Input Session

Garrett Pedersen with Iowa DOT's Office of Systems Planning presented on the background of the State Freight Plan. He described the State Freight Plan objectives and provided context on what freight means in terms of the intermodal connection. The presentation detailed current stakeholder input gathering and the plan strategies. Pedersen introduced the Federal Highway Administration guidance they are using as they develop the freight improvement strategies. He also explained the different freight improvement projects that are being worked on for each mode: aviation, highway, railroad, waterway and pipeline. Lastly, he explained the statewide freight network optimization strategy development.

Visioning Process

The visioning session was intended to validate the current State Freight Plan goals and identify what additional goals should be considered as part of the plan.

Participants remained at their tables and used the voting technology devices each received at registration. Theresa McClure of HDR facilitated the voting session. Participants voted on the level of impact each goal would have on optimizing freight operations in the State of Iowa. After each voting slide, participants offered their input on their responses. The voting results validated and helped identify next steps in refining the goals for the State Freight Plan. (Appendix D, Goal Input Process).

Presentation 2: 2016 Iowa Rail Plan Overview

Iowa DOT's Freight and Passenger Policy Coordinator Amanda Martin provided an overview of the development of the State Rail Plan. She introduced the Federal Railroad Administration (FRA) guidance that informs the development of the State Rail Plan. Martin discussed the goals and objectives the Iowa DOT has for the plan. Tammy Nicholson provided context for participants to learn about where Iowa rail and freight are today. Nicholson ended the presentation with an overview of Iowa's rail programs and funding level.

SWOT Analysis Activity

Theresa McClure facilitated a Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis activity with the full group to develop a unified vision for the action plan.

Participants were broken into five groups, of approximately the same size, and asked to identify strengths, weaknesses, opportunities and threats of the rail system.

Each group assigned a speaker and a scribe. The table self-facilitated a discussion on the strengths, weaknesses, opportunities and threats of the rail system in Iowa. After each group worked through each category, McClure facilitated a round-robin reporting discussion on each SWOT category. CyBiz scribes documented each category. SWOT results were placed on the wall in the room. A master list of SWOT items was compiled. Participants received three sticker dots for each SWOT category and were asked to vote for the items in each category they felt were most important; participants could use their dots in any way they saw fit, including placing all three dots by one item. (Appendix E, Rail Plan SWOT List)

Table 2: Top Five Items from Each Category of the SWOT Analysis

Strengths	Weaknesses
1. *Private ownership and funding* 2. *Efficiency driven* 3. *The need to move large quantities of bulk freight* 4. *Class 2 and 3 railroad connection to community* 5. *Connection of modes*	1. *Bottlenecks associated with yard capacity* 2. *No major intermodal hub* 3. *Too many grade crossings* 4. *High volume of pass through traffic* 5. *Availability of railcars – for lease or purchase*
Opportunities	**Threats**
1. *Expand transload and intermodal load facilities* 2. *Additional state funding for railroads* 3. *Economic development* 4. *Railroad capacity expansion* 5. *Congestion reduction on highway system*	1. *Aging infrastructure* 2. *Truck size and weight – 33' trailers specifically* 3. *Uncertainty* 4. *Uncertainty renewal of 45G rail tax credit* 5. *Regulatory issues – Positive Train Control (PTC)*

Issues Identification and Categorization

The visioning session was intended to help understand the full breadth of issues faced by Iowa stakeholders with rail and freight industry interests in Iowa. Workshop participants were separated into groups by the project team, based on the organizations they represented, to discuss issues from the following points of view: advocacy, policy, research/planning, business, rail and government.

One project team member with Iowa DOT team members facilitated the following focus groups to discuss the issues that most critically impact rail operations in Iowa.

1. *Passenger Rail*
2. *Safety and Security of Freight Operations*
3. *Economic and Workforce Development*
4. *Multimodal Freight Networks*
5. *Multimodal Freight Link and Connectors*

One CyBIZ scribe assisted each set of facilitators.

Participants then came back into a large group and reported on their small-group findings. (Appendix F, Focus Group Reports) General themes were taken from these reports to inform the State Rail Plan.

Table 3: Themes from Issues Identification and Categorization

Passenger Rail	Safety and Security of Freight Operations
• *Lack of dedicated line* • *Competing modes and costs of modes* • *Lack of demand* • *Need appeal, incentive* • *Creates jobs, develops economy*	• *Very good compared to other states* • *Cities lack enough information, resources on hazmat derailments* • *Need additional training, education* • *Additional funding*
Economic and Workforce Development	**Multimodal Freight Networks**
• *Transportation is key* • *Efficiency* • *Workforce development* • *Additional funding* • *Aging infrastructure* • *Connections to rural communities* • *Worker availability*	• *Globalization* • *Aging infrastructure* • *Need greater connectivity* • *Selective rail investments* • *New industry trends driven by Panama Canal expansion* • *Not enough vehicle/container capacity to move freight* • *Intermodal/multimodal transportation facilities (to transfer goods mode to mode)* • *Lack of enough access points* • *Transit time of railroads*
Multimodal Freight Link and Connectors	
• *Underutilized transloads* • *Improved rail car availability and capacity* • *Global access* • *Improved efficiency and standardization* • *Service issue with capacity* • *Corridor development* • *Economic development opportunities*	

Next Steps

Amanda Martin closed the meeting with an overview of the next opportunities for public involvement and invited participants to consider participating in the High Leverage Stakeholder Committee.

Appendices

Appendix A: Invitation Mailing and Attendee List

Iowa Rail and Freight Plan Issues-Based Workshop Summary

as of 10/15/2015

2016 IOWA RAIL PLAN

First Name	Last Name	Organization	Attended?
Fjay	Allison	10-15 Regional Transit Agency	
Jim	Dougherty	ADM	✓
Brett	Madison	ADM	
Joel	Brinkmeyer	Agribusiness Association of Iowa	
John	Riches	Alcoa	
Kevin	Burke	Alliant Energy Transportation/ CR & IA City Railroad	
Derrick	James	Amtrak	
Adam	Krom	Amtrak	
Craig	Kroeger	Appanoose County Community Railroad (APNC)	
Melody	McHugh	Army Corps of Engineers	
Ron	White	ARTCO Fleeting Service	
Becky	Nardy	ATURA Transportation Planning Affiliation	✓
		Barr Nunn Transportation Inc.	
		Beisser Lumber Co.	
Denise	Bulat	Bi-State Regional Commission	
Gena	McCullough	Bi-State Regional Commission	✓
Becky	Passman	Bi-State Regional Commission	
Sarod	Dhuru	BNSF Railway	✓
Paul	Nowicki	BNSF Railway Company	
Fenner	Stevenson	Boone & Scenic Valley Railroad & Museum	
Brian	Keierleber	Buchanan County Engineers Office	
Steve	Hoth	Burlington Junction Railway	
Andrew	Hoth	Burlington Junction Railway (BJRY)	✓
Jonathon	Wingate	Burlington Junction Railway (BJRY)	
Robert	Wingate	Burlington Junction Railway (BJRY)	
Steve	Hoambrecker	Burlington Urban Service	
Brian	McClatchey	Cambus	
Herb	Jones	Canadian Pacific Railroad	
Brad	Hildebrand	Cargill	
Larry	Rooney	Cartersville Elevator Inc.	
Justin	Fox	CDM Smith	✓
Jeff	Woods	Cedar Rapids and Iowa City Railway Co. (CRANDIC) Railroad	
Mark	Buschkamp	Cherokee Area Economic Development Corporation	
Kurt	Scheible	Citibus	
Greg	Reeder	City of Council Bluffs	
Mayor Roy	Buol	City of Dubuque	
Mayor Gordon	Canfield	City of Grinnell	
Geoff	Fruin	City of Iowa City	
Tom	Determann	Clinton Regional Development Corpoartion	
Jim	Kvedaras	CN Railroad	✓
Vicky	Robrock	Coralville Transit	
Chad	Lambi	CRANDIC	

Iowa Rail and Freight Plan Issues-Based Workshop Summary

as of 10/15/2015

2016 IOWA RAIL PLAN

First Name	Last Name	Organization	Attended?
Jack	Parliament	D & I Railroad Co. (DAIR)	✓
Elizabeth	Presutti	DART	
Troy	Russell	Decker Truck Line, Inc.	
Susan	Dixon	Department of Homeland Security	
Dave	Johnston	Department of Homeland Security & Emergency Management	✓
Todd	Ashby	Des Moines Area Metropolitan Planning Organization	
Zach	Young	Des Moines Area Metropolitan Planning Organization	✓
Jack	Sawyer	Des Moines Transportation Company	
William	Boal	Drake University	
Steve	Falck	Environmental Law and Policy Center	✓
Shirley	McGuire	Federal Motor Carrier Safety Administration	✓
Kyle	Gradinger	Federal Railroad Administration	
Rob	Toncar	FedEx	
Teresa	Valenta	FedEx	
Caitlin	Hughes Rayman	FHWA	
Nicole	Katsikides	FHWA	
Sean	Litteral	FHWA	
Mike	LaPietra	FHWA	✓
John	Wahlert	Firestone	
Murry	Fitzer	Florilli Transportation	
Stacy	Timperley	Forbs	✓
Beth	Bilyeu	Forest City Economic Development	
Wynne	Davis	FRA	
Peter	Schwartz	FRA	
Dave	Wilcox	Global Processing Inc.	
Jay	Byers	Greater Des Moines Partnership	
Greg	Jenkins	Greater Muscatine Chamber of Commerce & Industry	
Dave	Coppess	Heartland Co-Op	
Tom	Hauschel	Heartland Co-Op	
Todd	Phillips	Heartland Co-Op	
Steve	Engemann	Hermann Sand & Gravel	
		HNI	
		Hormel Foods Corp.	
Karl	Kruse	Hy-Vee, Inc.	✓
Peter	Rickershauser	Independent Board Member Iowa Interstate Railroad	
Ron	Lang	Independent Trucker	
Tim	Woods	International Traders of Iowa	✓
Basak	Aldemir-Bektas	InTrans	
Jing	Dong	InTrans	✓
Delia	Moon-Meier	Iowa 80 Group	
Rebecca	Neades	Iowa City Chamber	
Chris	O'Brien	Iowa City Transit	

Iowa Rail and Freight Plan Issues-Based Workshop Summary

as of 10/15/2015

2016 IOWA RAIL PLAN

IOWA IN MOTION Interactive 2040

First Name	Last Name	Organization	Attended?
		Iowa Corn Processors Glidden	
Harold	Hommes	Iowa Department of Agriculture and Land Stewardship	
Jennifer	Wright	Iowa Department of Natural Resources	
Brett	Tjepkes	Iowa Department of Public Safety	
John	Adam	Iowa Department of Transportation	
Stu	Anderson	Iowa Department of Transportation	
Phou	Baccam	Iowa Department of Transportation	✓
Kyle	Barichello	Iowa Department of Transportation	✓
Bonnie	Castillo	Iowa Department of Transportation	
Mike	Clayton	Iowa Department of Transportation	
Mitchell	Dillavou	Iowa Department of Transportation	
Ed	Engle	Iowa Department of Transportation	✓
Major Lance	Evans	Iowa Department of Transportation	✓
Sam	Hiscocks	Iowa Department of Transportation	✓
Laura	Hutzell	Iowa Department of Transportation	
Sandra	Larson	Iowa Department of Transportation	
David	Lorenzen	Iowa Department of Transportation	
Mark	Lowe	Iowa Department of Transportation	
Craig	Markley	Iowa Department of Transportation	✓
Amanda	Martin	Iowa Department of Transportation	✓
Diane	McCauley	Iowa Department of Transportation	✓
Phil	Meraz	Iowa Department of Transportation	✓
Phil	Mescher	Iowa Department of Transportation	✓
Tamara	Nicholson	Iowa Department of Transportation	
Garrett	Pedersen	Iowa Department of Transportation	✓
John	Selmer	Iowa Department of Transportation	
Sam	Shea	Iowa Department of Transportation	✓
Cindy	Shearer	Iowa Department of Transportation	
Paul	Trombino III	Iowa Department of Transportation	
Jeff	Von Brown	Iowa Department of Transportation	✓
John	Wilson	Iowa Department of Transportation	
Adam	Broughton	Iowa DNR	
Joseph	Rude	Iowa Economic Development Authority	
Cindy	Litwiller	Iowa Falls Area Development Corporation	✓
Don	McDowell	Iowa Farm Bureau	✓
Joanne	Tinker	Iowa Governor's Traffic Safety Bureau	
Carrie	Evans	Iowa Interstate Railroad	
Jerry	Lipka	Iowa Interstate Railroad	
Joe	Parsons	Iowa Interstate Railroad	✓
Cheryl	Rangel	Iowa Interstate Railroad	
Kathy	Evert	Iowa Lakes Corridor Development	

Iowa Rail and Freight Plan Issues-Based Workshop Summary

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2016 IOWA RAIL PLAN

IOWA IN MOTION Interactive 2040

First Name	Last Name	Organization	Attended?
Robert	Palmer	Iowa League of Cities	
Brenda	Neville	Iowa Motor Truck Association	
Amy	Homan	Iowa Northern Railway Company	✓
Dan	Sabin	Iowa Northern Railway Company	
Dan	Sabin	Iowa Northern Railway Company	
Stephanie	Carlson	Iowa Pork Producers Association	✓
Renee	Schachterle	Iowa River Railroad Inc. (IARR)	
Tim	Borich	Iowa State University	
Judi	Eyles	Iowa State University	
Scott	Grawe	Iowa State University	
Bobby	Martens	Iowa State University	
David	Fellon	Iowa Traction Railway Co. (IATR)	
Michael	Johns	Iowa Traction Railway Co. (IATR)	
Cecil	Wright	Iowa Utilities Board	
Steve	Lallier	J. B. Hunt Transport	✓
Gary	Whicker	J. B. Hunt Transport	
		Jacobson Companies Jacobson Transportation Company	
Kent	Jordan	Jacobson Companies, Jacobson Transportation Company	
		John Deere	
Walt	Valiant	Kent	
Osama	Shihadeh	Kent Corporation	✓
Scott	Cirksena	Kenworth Truck Company	
Mike	Hadley	Keokuk County Board of Supervisors	
Nathan	Johns	Keokuk Junction Railway Co. (KJRY)	
Scott	Stabbe	Key Cooperative	
Ernie	Steffensmeier	Lee County Engineers Office	
Carla	Eysink	Marion County Development Commission	
Michael	Helgerson	Metropolitan Area Planning Agency	✓
Greg	Youell	Metropolitan Area Planning Agency	
Brad	Neuman	Metropolitan Planning Organization of Johnson County	✓
Kent	Ralston	Metropolitan Planning Organization of Johnson County	
		MidAmerican Energy Company	
Melanie	Gray	Monsanto	
Brad	Neuman	MPO of Johnson County	
Brad	Spratt	Muscatine Power and Water	
Bill	Winkelman	National Pork Board	
Michael	Dolch	Office of United States Senator Joni Ernst	✓
Francis	Edeker	Operation Life Saver	
Dave	Silverio	Ottumwa Transit	
		Owen Industries Carter Lake	
Kip	Wills	PHMSA	
Richard	Grenville	PortKC, Kansas City, MO	

Iowa Rail and Freight Plan Issues-Based Workshop Summary

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2016 IOWA RAIL PLAN

First Name	Last Name	Organization	Attended?
Terry	Bailey	Pottawattamie County Growth Alliance	
Jason	Hutcheson	Professional Developers of Iowa	
Libby	Ogard	Prime Focus LLC	✓
Rick	Hunsaker	Region XII Council of Governements	
Ben	McLean	Ruan	
Kevin	Ekstrand	Scarbrough International, LTD	
Corey	Nikkel	Schillinger Genetics, Inc.	
Mike	Norris	Southeast Iowa Regional Planning Commission	
Leesa	Lester	Southern Iowa Trolley	
Mike	Steenhoek	Soy Transportation Coalition	
Jantina	Wennerstrom	Soy Transportation Coalition	✓
Liz	McDonald	SSAB, Inc.	✓
John	Tobin	SSAB, Inc.	
Dave	Purdy	State of Nebraska Passenger Rail Advocate	
David	Ewing	States for Passenger Rail	
Steve	Ford	Stonebridge Ltd.	
Brent	Vanderleest	Sully Transportation	
Randy	Draper	Target	
		TMC	
		Trinity Towers Newton	
Col. Craig	Baumbartner	U.S. Army Corps of Engineers	
Christine	Schrage	UNI-College of Business	
Wayne	Borg	Union Pacific Railroad	
Kyle	Nodgaard	Union Pacific Railroad	✓
Kelli	O'Brien	Union Pacific Railroad	✓
Rabah	Amir	Uoflowa - Economics	
Ann	Campbell	Uoflowa - Logistics	
Paul	Hanley	Uoflowa - Transportation Policy	
Mark	Peterson	UPS	
		Van Wyk Freight Lines Inc.	
Matt	Decker	Vermeer	
Bill	Neeses	West Central Co-Op	✓
Bill	Horan	Western Iowa Energy, LLC	
Thomas	Kopp	World Food Processing, LLC- St. Paul	
Tina	Draur	XPO Logistics	
Tyler	Vande Vorde	XPO Logistics	
Heather	Clark		
Jackie	Corletto		
Shane	Cullen		
Natalie	Hammer		
Onna	Houck		
Jeff	Kurtz		

First Name	Last Name	Organization	Attended?
Daniel	LaKemper		
Raymond	Lang		
Dennis	Miller		
Charles	Monte Verde		
Calvin	Nutt		
Jim	Obradovich		
Henry	Posner III		
Joshua	Sabin		
Mark	Sabin		
Daniel	Sanchez		
Alan	Schroeder		
Lon	Van Gemert		

Appendix B: Example Workshop Invitations

Iowa Rail and Freight Plan Issues-Based Workshop Summary

as of 10/15/2015

Email distributed 8/31/2015

IOWADOT
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www.iowadot.gov

August 31, 2015

We invite you to attend an issues-based workshop for the statewide rail and freight planning efforts. Your expertise and participation in the workshop will provide us with important insight and guidance in the development of the Iowa State Rail Plan and State Freight Plan, which is a multimodal freight plan. As we develop these plans, we know it is important to rely on those who work with both rail and freight every day. **We need your input and voice.**

The purpose of this workshop is to introduce you to the details of those plans and your role in the development process. We are committed to actively engaging private sector rail and freight infrastructure owners, freight industry stakeholders, shippers, public planning agencies, transit operators, railroad and freight organizations and passenger rail stakeholders in the planning process.

This workshop marks the beginning of our upcoming public and stakeholder engagement efforts for the planning process. Because we have aligned the development of both plans, we recognize there are overlaps. Similar issues and concerns will come up as both of these plans are developed. By combining the stakeholder engagement process, we are able to facilitate more efficient outreach efforts, such as this workshop. Your input, expertise and perspective will help shape and strengthen each of these plans. **By attending this workshop, you will have the opportunity to thoroughly share your concerns, needs and benefits while networking with experts from across the state.**

This workshop will:

- develop a baseline understanding of stakeholders' thoughts on multimodal freight development, transportation safety, economic development, passenger rail, targeted state investment and hazardous materials transportation; and
- integrate and coordinate stakeholder and public involvement with technical planning activities that have already occurred by the Iowa Department of Transportation

Meeting Details:
Date: September 24, 2015
Time: 8:00 am – 3:45 pm
Location: Holiday Inn Downtown – Mercy Area
1050 6th Ave
Des Moines, IA 50314

State Rail Plan Goals

- *Create a state rail vision and a supporting program of proposed public rail investments and improvements that will result in quantifiable economic benefits to Iowa.*
- *Enable Iowa to implement an efficient and effective approach for merging passenger and freight rail elements into the larger multimodal and intermodal transportation framework.*
- *Incorporate initiatives from the federal and state level, aligning the priorities of Iowa rail stakeholders.*
- *Provide a vision for integrated freight and passenger rail planning in the state, unifying the common interests of the various stakeholders within Iowa.*
- *Coordinate with the development of the Iowa Freight Plan and the Iowa State Transportation Plan.*
- *Ensure an open and inclusive process.*
- *Provide an outline to educate the public on Iowa's rail system.*

State Freight Plan Goals

- *Improve the contribution of the freight transportation system to economic efficiency, productivity, and competitiveness*
- *Reduce congestion on the freight transportation system*
- *Improve the safety, security, and resilience of the freight transportation system*
- *Improve the state of good repair of the freight transportation system*
- *Use advanced technology, performance management, innovation, competition, and accountability in operating and maintaining the freight transportation system*
- *Reduce adverse environmental and community impacts of the freight system*
- *Gather stakeholder input around key areas: multimodal freight development, transportation safety, economic development, passenger rail, targeted state investment and hazardous materials transportation.*

Join us!

We encourage you or a representative of your organization to participate. Please RSVP by emailing info@engagerailfreightplans.com or calling Wendy at (712) 326-3735 by September 15th.

We look forward to seeing you.

Sincerely,

Stuart Anderson, Director
Planning, Programming and Modal Division

Iowa Rail and Freight Plan Issues-Based Workshop Summary

as of 10/15/2015

Email distributed 9/11/2015

IOWA DOT
SMARTER I SIMPLER I CUSTOMER DRIVEN
www.iowadot.gov

September 11, 2015

We invite you to participate in an Issues-Based Workshop for the statewide rail and freight planning efforts. The workshop takes place:

Date: Thursday, September 24
Time: 8:00 am - 3:45 pm
Location: Holiday Inn Downtown - Mercy Area
1050 6th Ave, Des Moines, IA 50314
***Attendance is free and lunch will be provided.**

Your expertise and participation in the workshop will provide us with important insight and guidance in the development of the Iowa State Rail Plan and Freight Plan. The State Freight Plan is is a multimodal freight plan. As we develop these plans, we know it is important to rely on those who work with rail and freight every day. **Your input is important!**

At the workshop we will to introduce you to the details of the plans and your role in the planning process. We are committed to actively engaging private sector rail and freight infrastructure owners, freight industry stakeholders, shippers, public planning agencies, transit operators, railroad and freight organizations, and passenger rail stakeholders in the planning process.

By attending this workshop, you will have the opportunity to share your concerns, needs and benefits while networking with experts in the freight and rail industry from across the state.

Join us! We encourage you or a representative of your organization to participate. Please RSVP by emailing info@engagefreightrailplans.com or calling Wendy at (712) 326-3735 by September 15th.

We look forward to seeing you.

Stuart Anderson, Director
Planning, Programming and Modal Division

800 Lincoln Way
Ames, IA 50010

Iowa Rail and Freight Plan Issues-Based Workshop Summary

as of 10/15/2015

Email distributed 9/18/2015

IOWA DOT
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September 18, 2015

There is still time to RSVP to attend the Issues-Based Workshop. Don't delay, you have until Monday, September 21st to respond!

By attending this workshop, you will have the opportunity to share your concerns, needs and benefits about Iowa's rail and freight transportation systems and provide input into what they need to look like in the future. Plus, have the chance to network with other freight and rail industry experts from across the state.

The workshop takes place:

Date: Thursday, September 24
Time: 8:00 am - 3:45 pm
Location: Holiday Inn Downtown - Mercy Area
1050 6th Ave, Des Moines, IA 50314
***Attendance is free and lunch will be provided.**

Join us! We encourage you or a representative of your organization to participate. Please RSVP by emailing info@engagefreightrailplans.com or calling Wendy at (712) 326-3735 by September 21st.

We look forward to seeing you.

Stuart Anderson, Director
Planning, Programming and Modal Division

800 Lincoln Way
Ames, IA 50010

Opt Out

Connect with us! Our website is live! If you have any questions, visit http://engagefreightrailplans.iowadot.gov/.

Iowa Rail and Freight Plan Issues-Based Workshop Summary

as of 10/15/2015

Email distributed 9/23/2015

IOWA DOT
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September 23, 2015

The Issues-Based Workshop is tomorrow, September 24th!

We will be seeking your input on the rail and freight system in the state today and what it needs to look like in the future as the department prepares a rail and multimodal freight plan. For your convenience, we are sending tomorrow's agenda. **Please note that registration begins at 8:00 a.m. and the meeting welcome begins at 8:30 a.m.**

Thursday, September 24

Holiday Inn Downtown – Mercy Area
Top of the Tower Room
1050 6th Avenue
Des Moines, IA 50314

WiFi Login: guest
Password: rewardsclub

8:00 – 8:30 am

- Registration

8:30 – 8:45 am

- Welcome and Safety Briefing

8:45 – 10:00 am

- Freight Context Setting and Visioning

10:00 – 10:15 am

- Break

10:15 – 11:30 am

- Rail Context Setting and Visioning

11:30 – 12:00 pm

- Lunch

12:00 – 2:00 pm

- Focus Group Break Outs

  Table assignments correspond with the sticker on your nametag.

  1. Table One (red)
  2. Table Two (blue)
  3. Table Three (green)
  4. Table Four (yellow)
  5. Table Five (orange)

- Issues Categorization

2:00 – 2:15 pm

- Break

2:15 – 3:45 pm

- Focus Group Reports and Wrap-up

Stuart Anderson, Director
Planning, Programming and Modal Division

800 Lincoln Way
Ames, IA 50010

Opt Out

Connect with us! Our website is live! If you have any questions, visit http://engagefreightrailplans.iowadot.gov/.

Appendix C: Attendee Handout Packet

Issues-Based Workshop Agenda

Thursday, September 24

Holiday Inn Downtown – Mercy Area
Top of the Tower Room
1050 6th Avenue
Des Moines, IA 50314
WiFi Login: guest
Password: rewardsclub

8:00 – 8:30 am

- ***Registration***

8:30 – 8:45 am

- ***Welcome and Safety Briefing***

8:45 – 10:00 am

- ***Freight Context Setting and Visioning***

10:00 – 10:15 am

- ***Break***

10:15 – 11:30 am

- ***Rail Context Setting and Visioning***

11:30 – 12:00 pm

- ***Lunch***

12:00 – 2:00 pm

- ***Focus Group Break Outs***
  Table assignments correspond with the sticker on your nametag.
  1. ***Table One (red)***
  2. ***Table Two (blue)***
  3. ***Table Three (green)***
  4. ***Table Four (yellow)***
  5. ***Table Five (orange)***
- ***Issues Categorization***

2:00 – 2:15 pm

- ***Break***

2:15 – 3:45 pm

- ***Focus Group Reports and Wrap-up***

2016 IOWA RAIL PLAN

ISSUES-BASED WORKSHOP HANDOUT

September 2015

WELCOME!

The purpose of today's workshop is to introduce you to details of the Iowa State Rail and Freight Plans, explain your role in the development process, answer questions and receive your comments.

Today we will:

- Develop a baseline understanding of your thoughts on multimodal freight development, transportation safety, economic development, passenger rail, targeted state investment and hazardous materials transportation; and
- Integrate and coordinate stakeholder and public involvement with technical planning activities that have already occurred.

Background

In September 2013, the Federal Railroad Administration (FRA) published its Final State Rail Plan Guidance, which provided direction for State Rail Plan stakeholder and public involvement. We are actively engaging private sector rail and freight infrastructure owners, public planning agencies, transit operators, rail authorities, railroad and freight organizations, and passenger rail stakeholders. The Iowa State Rail Plan will identify proposed improvements in urban and rural areas for those who travel through it.

The State Freight Plan outlines freight planning activities that will achieve the objective for the state to provide a safe, efficient and convenient freight transportation system to Iowans. The Freight Plan is a way to connect all of these initiatives and allow them to move forward towards a common goal of optimal freight transportation throughout the state. In addition, the Freight Plan will guide our investment decisions to maintain and improve the freight transportation system, and ultimately strengthen Iowa's economy and raise the quality of life for our citizens.

The development of a comprehensive Iowa State Rail Plan in collaboration with the implementation of the Freight Plan offers an opportunity for us to accurately define what the rail and freight system in the state looks like today and what it needs to look like in the future.

State Rail and Freight Plan Overlap

The State Rail and Freight Plans are closely related and have several overlapping activities. Combining public engagement efforts of both the Rail and Freight Plan allows us to integrate feedback appropriately. Due to the subject matter, there is natural overlap of information, data and analysis for both rail and freight.

Draft State Rail Plan Goals

- Create a state rail vision and a supporting program of proposed public rail investments and improvements that will result in quantifiable economic benefits to Iowa.
- Enable Iowa to implement an efficient and effective approach for merging passenger and freight rail elements into the larger multimodal and intermodal transportation framework.
- Incorporate initiatives from the federal and state level, aligning the priorities of Iowa rail stakeholders.
- Provide a vision for integrated freight and passenger rail planning in the state, unifying the common interests of the various stakeholders within Iowa.
- Coordinate with the development of the Iowa Freight Plan and the Iowa State Transportation Plan.
- Ensure an open and inclusive process.
- Provide an outline to educate the public on Iowa's rail system.

State Freight Plan Goals

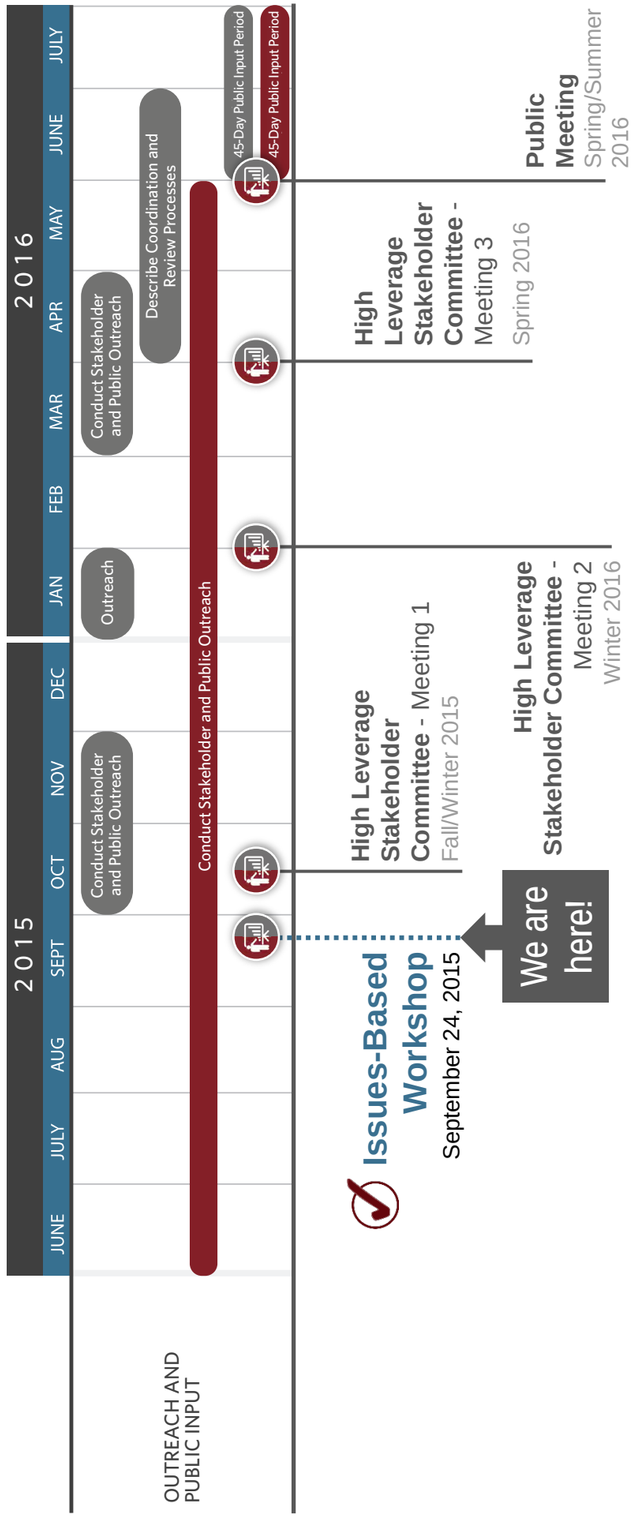
- Improve the contribution of the freight transportation system to economic efficiency, productivity, and competitiveness
- Reduce congestion on the freight transportation system
- Improve the safety, security, and resilience of the freight transportation system
- Improve the state of good repair of the freight transportation system
- Use advanced technology, performance management, innovation, competition, and accountability in operating and maintaining the freight transportation system
- Reduce adverse environmental and community impacts of the freight system
- Gather stakeholder input around key areas: multimodal freight development, transportation safety, economic development, passenger rail, targeted state investment and hazardous materials transportation.

IOWA DOT
SMARTER | SIMPLER | CUSTOMER DRIVEN

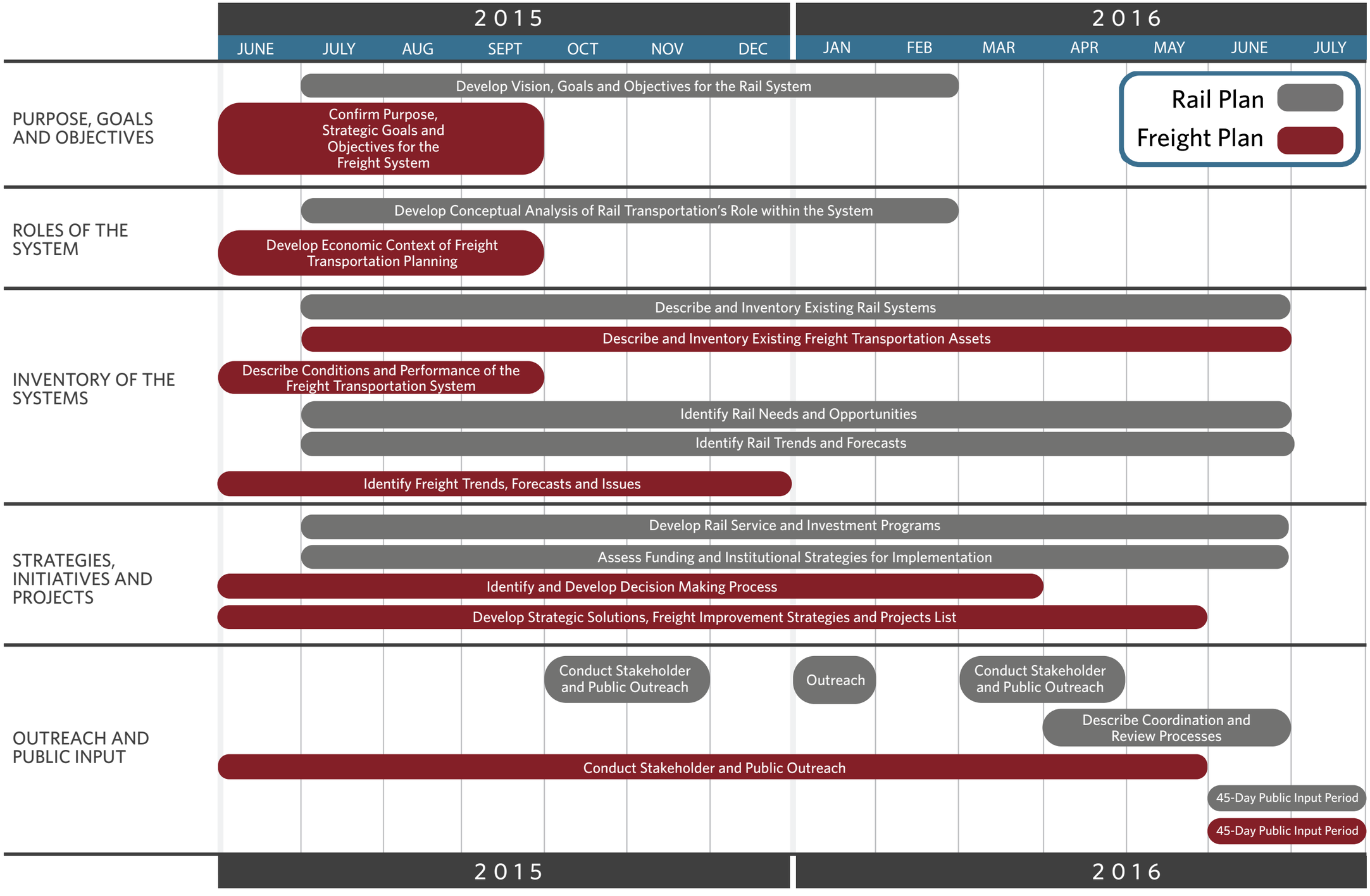
STAY INVOLVED

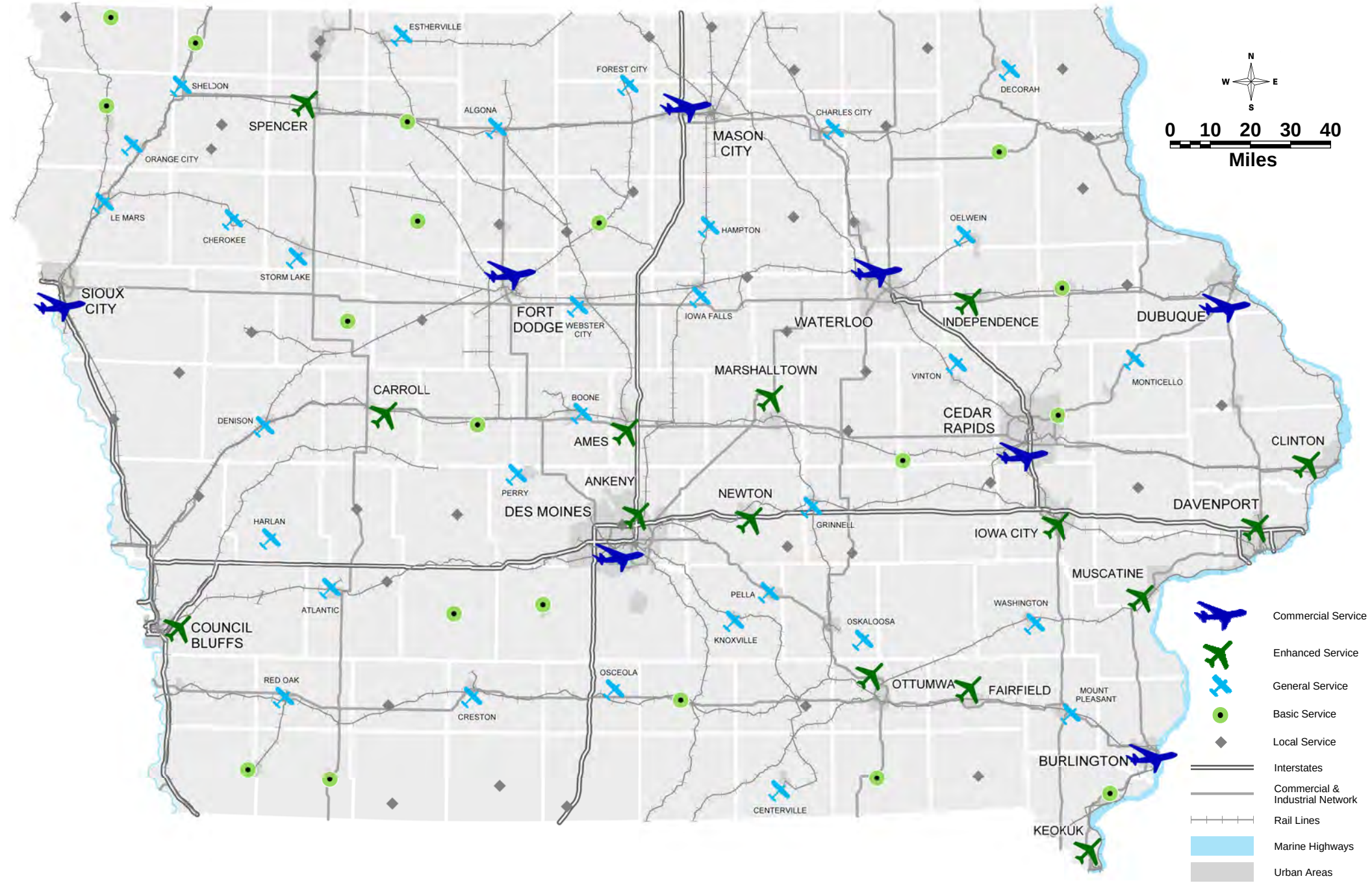
- Participate in the workshop's online survey: http://engagefreightrailplans.iowadot.gov/resources/surveys
- Visit us at http://engagefreightrailplans.iowadot.gov
- Email us: at info@EngageRailFreightPlans.com

What's Next?



What is the Schedule for the Plans?




ESTHERVILLE
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SPENCER
FOREST CITY
ALGONA
MASON CITY
CHARLES CITY
DECORAH
ORANGE CITY
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STORM LAKE
HAMPTON
OELWEIN
SIOUX CITY
FORT DODGE
WEBSTER CITY
IOWA FALLS
WATERLOO
INDEPENDENCE
DUBUQUE
MARSHALLTOWN
VINTON
MONTICELLO
CARROLL
BOONE
DENISON
AMES
CEDAR RAPIDS
CLINTON
PERRY
ANKENY
NEWTON
DES MOINES
GRINNELL
DAVENPORT
HARLAN
IOWA CITY
MUSCATINE
ATLANTIC
PELLA
WASHINGTON
COUNCIL BLUFFS
KNOXVILLE
OSKALOOSA
RED OAK
OSCEOLA
OTTUMWA
FAIRFIELD
MOUNT PLEASANT
CRESTON
BURLINGTON
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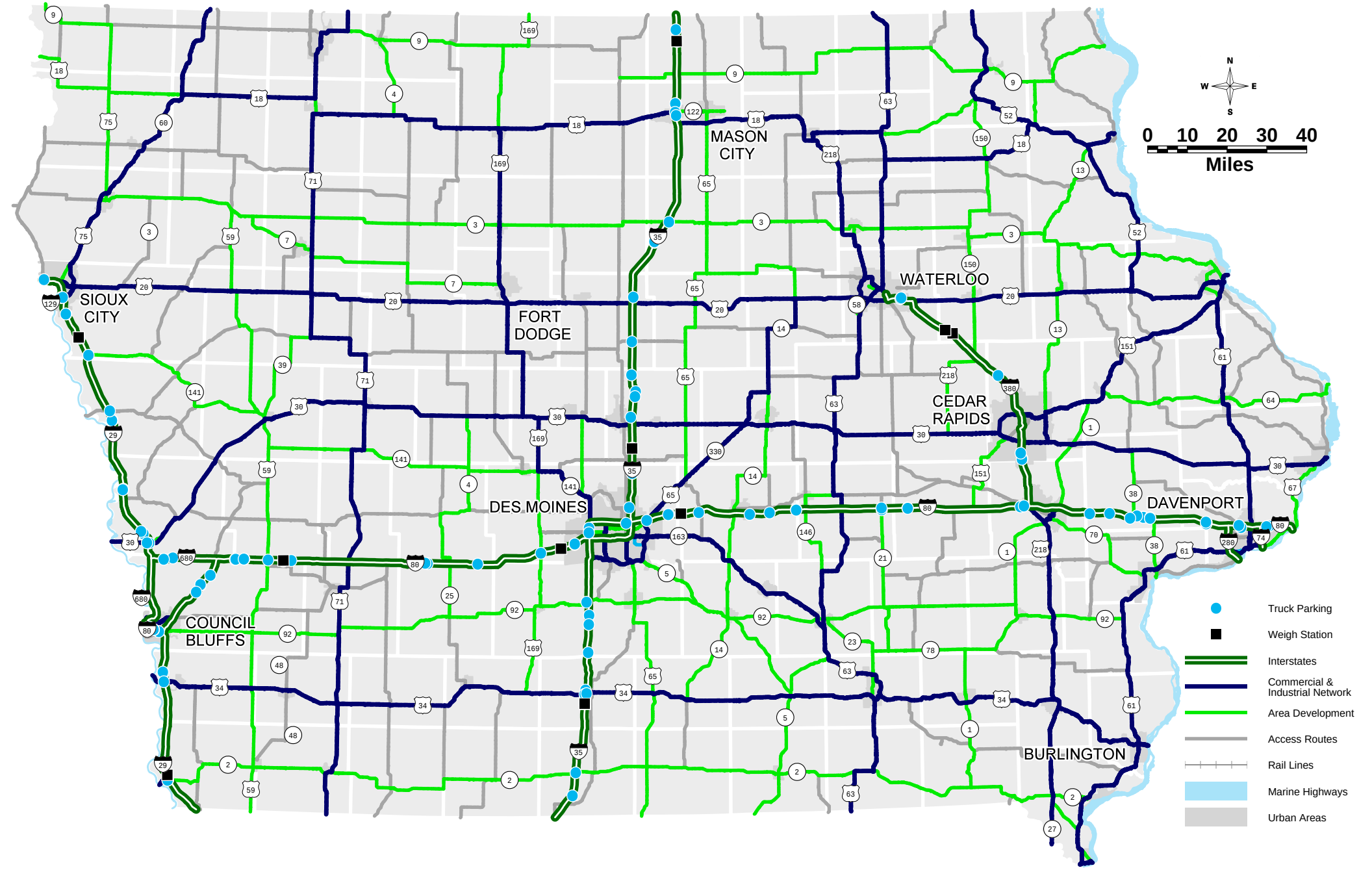
Enhanced Service
General Service
Basic Service
Local Service
Interstates
Commercial & Industrial Network
Rail Lines
Marine Highways
Urban Areas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CEDAR RAPIDS
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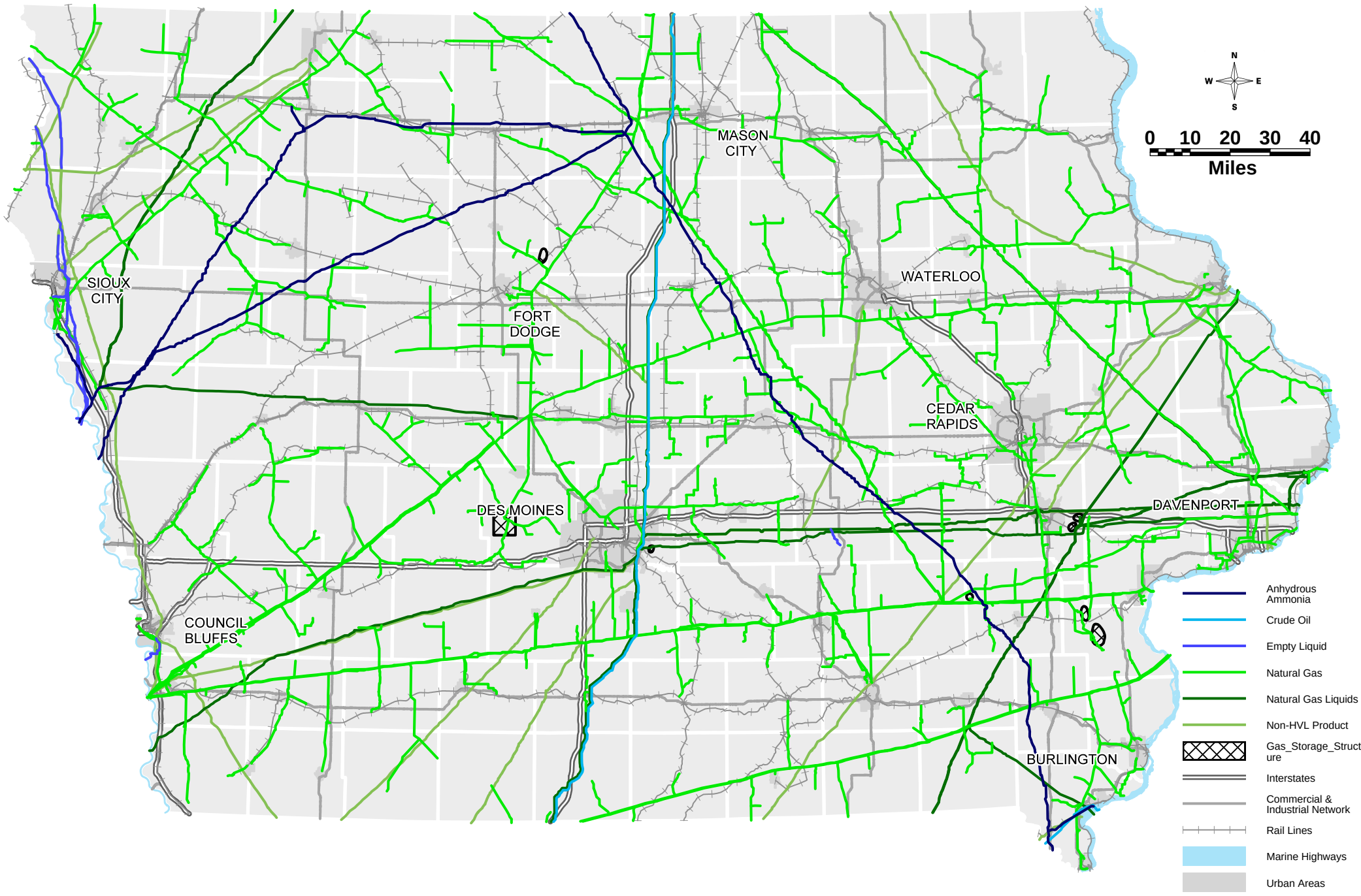
DAVENPORT
COUNCIL BLUFFS
BURLINGTON
Truck Parking
Weigh Station
Interstates
Commercial & Industrial Network
Area Development
Access Routes
Rail Lines
Marine Highways
Urban Areas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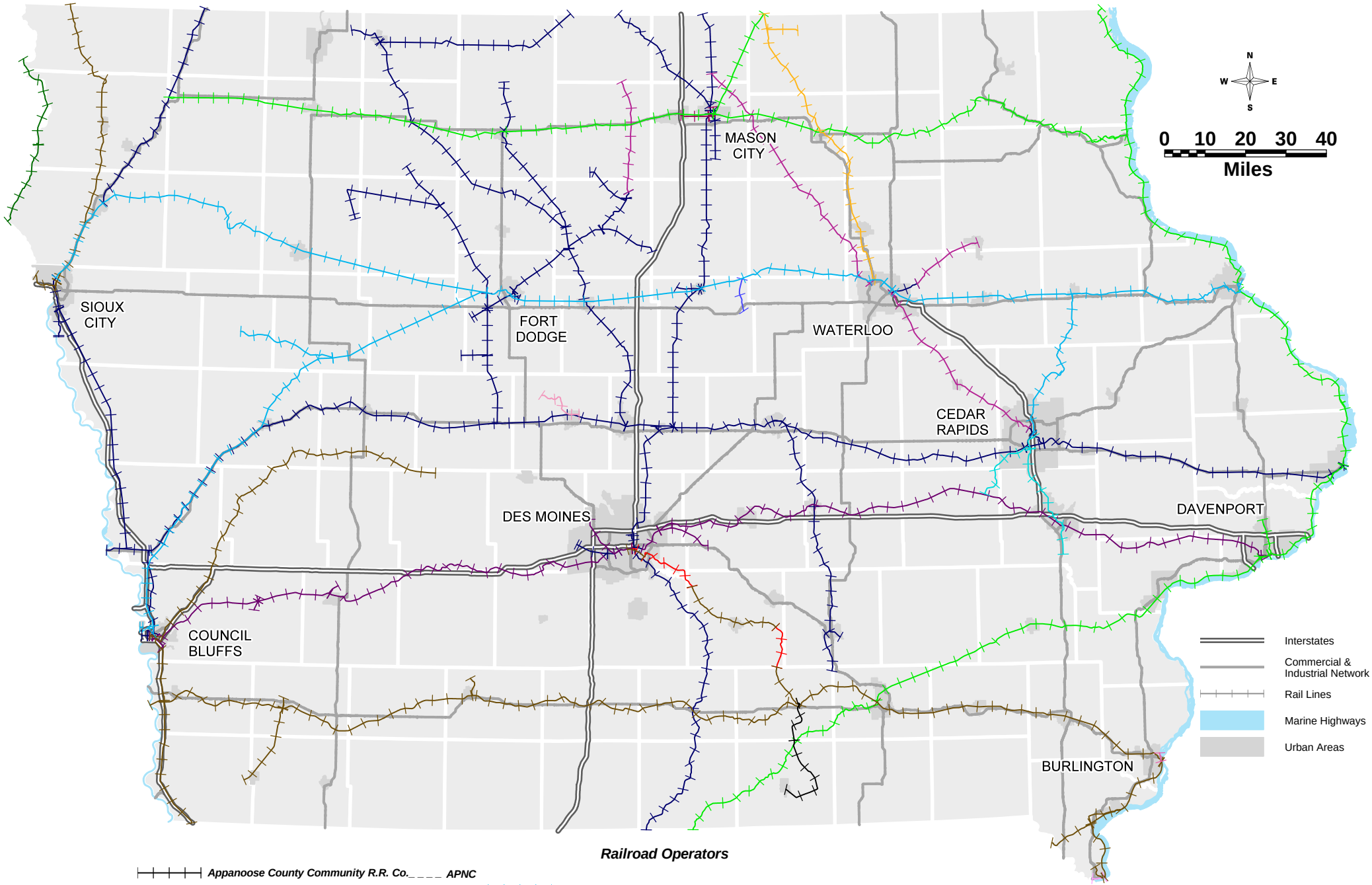
DAVENPORT
COUNCIL BLUFFS
BURLINGTON
Anhydrous Ammonia
Crude Oil
Empty Liquid
Natural Gas
Natural Gas Liquids
Non-HVL Product
Gas_Storage_Structure
Interstates
Commercial & Industrial Network
Rail Lines
Marine Highways
Urban Areas



Railroad Operators

Appanoose County Community R.R. Co. — *APNC*	*Chicago, Central & Pacific Railroad* — *CC*	*Iowa River Railroad Co.* — *IARR*
Boone Scenic Valley R.R. — *BSV*	*D & I Railroad Co.* — *DAIR*	*Iowa Traction R.R. Co.* — *IATR*
Burlington Junction Ry. Co. — *BJRY*	*Dakota, Minnesota and Eastern R.R. Co.* — *DME*	*Keokuk Junction Ry.* — *KJRY*
BNSF Railway Co. — *BNSF*	*Iowa Interstate R.R. Ltd.* — *IAIS*	*Norfolk and Southern Railway Co.* — *NS*
Cedar Rapids and Iowa City Ry. Co. — *CIC*	*Iowa Northern Ry. Co.* — *IANR*	*Union Pacific Railroad* — *UP*
Cedar River Railroad Co. — *CEDR*		

IOWA

RAILROAD SERVICE MAP

Prepared by

IOWA DOT

Phone (515) 239 - 1664
In Cooperation with
United States
Department of Transportation

July 1, 2014

0 10 20 30 40 50
Miles

0 10 20 30 40 50
Kilometers

Operating Railroads

Amtrak	AMTK
Appanoose County Community R.R. Co.	APNC
Boone Scenic Valley R.R.	BSV
Burlington Junction Ry. Co.	BJRY
BNSF Railway Co.	BNSF
Cedar Rapids and Iowa City Ry. Co.	CIC
Cedar River Railroad Co.	CEDR
Chicago, Central & Pacific Railroad	CC
D & I Railroad Co.	DAIR
Dakota, Minnesota and Eastern R.R. Co.	DME
Iowa Interstate R.R. Ltd.	IAIS
Iowa Northern Ry. Co.	IANR
Iowa River Railroad Co.	IARR
Iowa Traction R.R. Co.	IATR
Keokuk Junction Ry.	KJRY
Norfolk and Southern Railway Co.	NS
Soo Line	SOO
Union Pacific Railroad	UP
Private Track – Cargill Alliance	CGAQ

Non-Operating Railroad Owners

Canadian National Railway Co.	CN
Canadian Pacific Railroad	CP
CBEC Railway Co.	CBRX
D & W Railroad Inc.	DWRV
North Central Iowa Rail Corridor	NCIRC
Pioneer Rail Corp.	PNRC
Progressive Rail	PGR
State of South Dakota	SD
Trackage Rights Only	( )
Primary Operator	(<>)

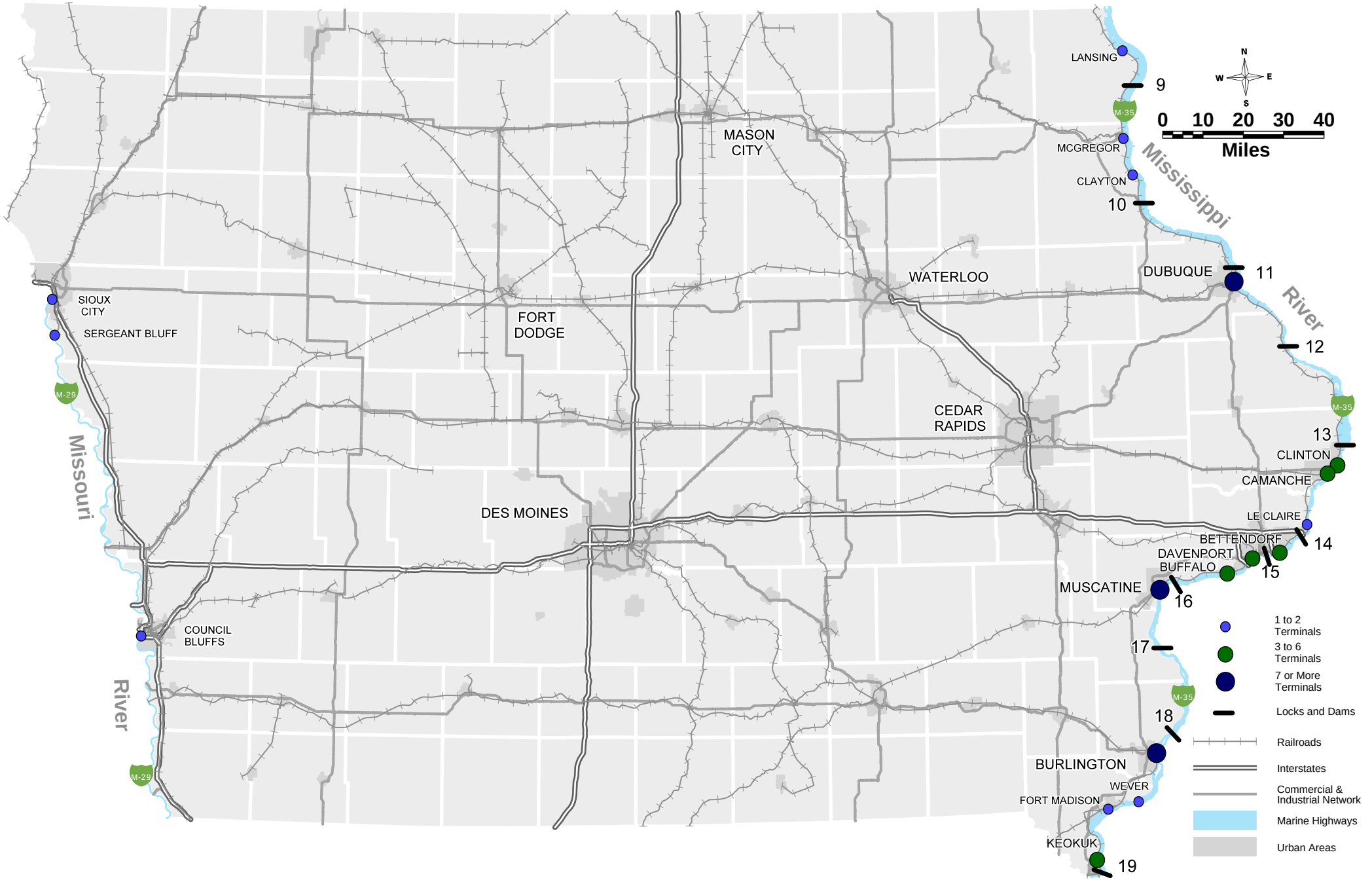
Trackage Rights

(BNSF)		(IANR)	
(CC)		(KJRY)	
(DAIR)		(NS)	
(DME)		(SOO)	
(IAIS)		(UP)	

Special Notes

1. CBRX -- Six Miles of track in the Council Bluffs area
2. IATR -- Thirteen miles of track in Mason City
3. BJRY -- Five miles of track in Burlington
4. CGAQ -- Privately owned track south of Eddyville

4 - 10 -2015


LANSING
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MCGREGOR
CLAYTON
10
Mississippi
River
DUBUQUE
11
12
WATERLOO
MASON CITY
FORT DODGE
SIOUX CITY
SERGEANT BLUFF
M-29
Missouri
River
CEDAR RAPIDS
M-35
13
CLINTON
CAMANCHE
LE CLAIRE
14
BETTENDORF
DAVENPORT
BUFFALO
15
MUSCATINE
16
DES MOINES
COUNCIL BLUFFS
17
18
BURLINGTON
WEVER
FORT MADISON
KEOKUK
19
N
W
E
S
0 10 20 30 40
Miles
1 to 2 Terminals
3 to 6 Terminals
7 or More Terminals
Locks and Dams
Railroads
Interstates
Commercial & Industrial Network
Marine Highways
Urban Areas

Appendix D: Goal Input Process

The themes and issues captured during the goal input process follow the voting results from the workshop.

Session Name
New Session 9-24-2015 9-44 AM

Date Created	Active Participants	Total Participants
9/24/2015 7:41:37 AM	42	42

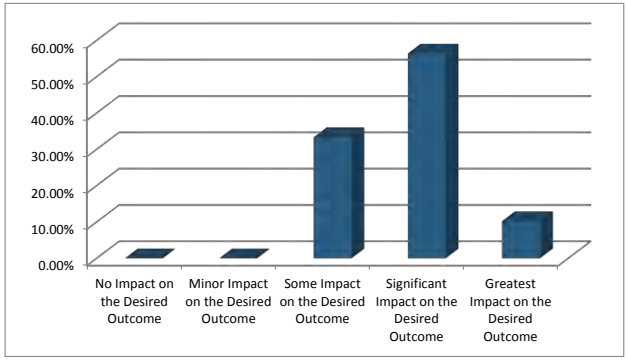
Average Score	Questions
0.00%	7

Results by Question

1. Baseline question (Omitted)

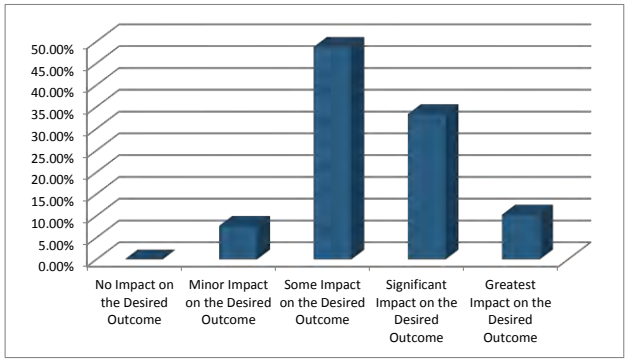
2. Improve the contribution of the freight transportation system to economic efficiency, productivity, and competitiveness (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	0.00%	0
Some Impact on the Desired Outcome	33.33%	13
Significant Impact on the Desired Outcome	56.41%	22
Greatest Impact on the Desired Outcome	10.26%	4
Totals	**100%**	**39**



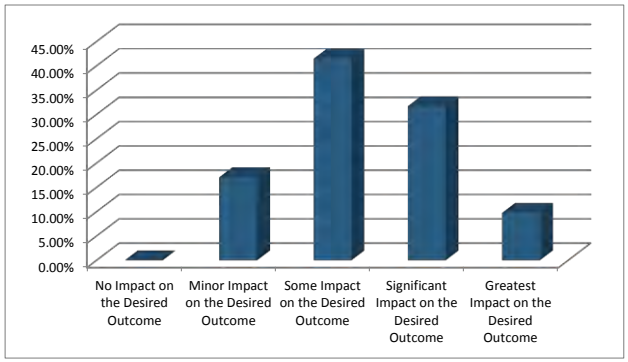
3. Reduce congestion on the freight transportation system (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	7.69%	3
Some Impact on the Desired Outcome	48.72%	19
Significant Impact on the Desired Outcome	33.33%	13
Greatest Impact on the Desired Outcome	10.26%	4
Totals	**100%**	**39**



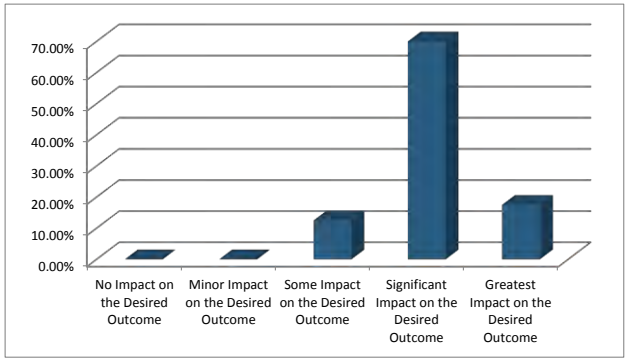
4. Improve the safety, security, and resilience of the freight transportation system (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	17.07%	7
Some Impact on the Desired Outcome	41.46%	17
Significant Impact on the Desired Outcome	31.71%	13
Greatest Impact on the Desired Outcome	9.76%	4
Totals	**100%**	**41**



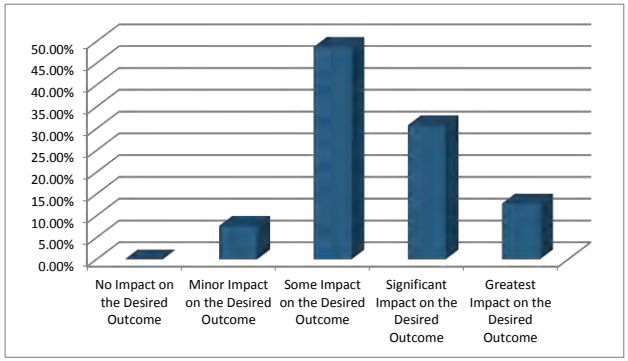
5. Improve the state of good repair of the freight transportation system (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	0.00%	0
Some Impact on the Desired Outcome	12.50%	5
Significant Impact on the Desired Outcome	70.00%	28
Greatest Impact on the Desired Outcome	17.50%	7
Totals	**100%**	**40**



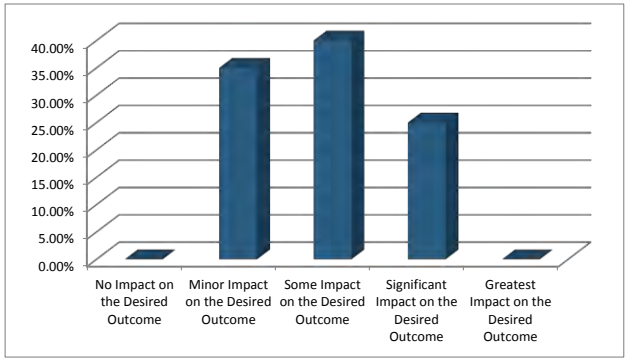
6. Use advanced technology, performance management, innovation, competition, and accountability in operating and maintaining the freight transportation system (Multiple Choice)

	Responses	
	Percent	Count
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	7.69%	3
Some Impact on the Desired Outcome	48.72%	19
Significant Impact on the Desired Outcome	30.77%	12
Greatest Impact on the Desired Outcome	12.82%	5
Totals	**100%**	**39**



7. Reduce adverse environmental and community impacts of the freight system (Multiple Choice)

	Responses	
	Percent	**Count**
No Impact on the Desired Outcome	0.00%	0
Minor Impact on the Desired Outcome	35.00%	14
Some Impact on the Desired Outcome	40.00%	16
Significant Impact on the Desired Outcome	25.00%	10
Greatest Impact on the Desired Outcome	0.00%	0
Totals	**100%**	**40**



- ***Goal #1: Economic efficiency, productivity and competitiveness***
  - *Max efficiency is good/best*
  - *Captive shippers*
    - *Only served by 1 railroad: How will this affect my business?*
- ***Goal #2: Reduce congestion***
  - *Congestions is a problem (specifically on the highway)*
    - *Roads not growing at rate of transportation needs*
    - *Congestion = slower freight mobility*
  - *Rail congestion is in large metropolitan areas*
    - *Leave cars for long time/embargo issues*
  - *Need to look at surrounding states and Iowa effects*
  - *Waterway*
    - *Port coming in Muscatine*
    - *Barge to reduce rail congestion*
  - *Do you think we can build our way out of congestion?*
    - *With financial constraints… no*
    - *No – land constraints*
    - *Invest money where it will be the greatest impact*
  - *Can't build our way out… how to solve problem?*
  - *Iowa is a low population state*
    - *Congestion = highly used highways*
    - *Weight constraints*
  - *Improve roads*
    - *Get freight off highway on to the railroad*
  - *Smart growth based on economic areas*
  - *Need better access*
- ***Goal #3: Safety, security, resilience***
  - *Safety should be a high priority*
    - *1 event could cause major disruption*
  - *If we don't maintain safety/security of "Nation's Cross Roads", Iowa loses economic benefit*
  - *Protect integrity of Iowa's products*
- ***Goal #4: Improve the state of good repair***
  - *State of good repair = quality roads not there*
    - *Not safe or efficient*
  - *Rail also has season for repair (lots invested)*
  - *Private sectors also investing – full system*
  - *Problem = obsolete facilities*
    - *Maintain and replace old structures*
- ***Goal #5: Technology & Innovation***
  - *Too broad of a statement/goal*
    - *Break into "accountability" and separate categories*
    - *Can measure results better*
  - *Technology is involved in every action for some companies (HyVee)*
- ***Goal #6: Reduce environmental and community impact***
  - *Important to consider in state plan*
    - *Rail already considers & does well*
    - *Modal shift could facilitate more improvement*
  - *Railroads = common carrier responsibility*
  - *Trains backed up effects traffic*
  - *All modes important and affect each other*

- ***Adding goals***
  - *Regulatory environment*
  - *Separation of broad goals*
  - *Regional differentiation*

Appendix E: Rail Plan SWOT List

Iowa Rail and Freight Plan Issues-Based Workshop Summary

as of 10/15/2015

Below are the lists created by the individual small groups and with group voting results. Items in green represent the top themes of each section.

- ***Strengths***
  - *Private ownership and funding (+15)*
  - *Efficiency driven (+15)*
  - *Large volume (+14)*
  - *Class 2 and 3 railroad connection to community (+12)*
  - *Connection of modes (+9)*
  - *Proximity to waterways (+9)*
  - *Few incidents – safety (+6)*
  - *Rail cheaper than road (+5)*
  - *Safety and efficiency of freight movements (+4)*
  - *Shipment of agriculture (+4)*
  - *Class 2 railroad efficiency and innovation (+3)*
  - *Large network – Iowa well covered (+3)*
  - *Move over dimensional products – flexibility (+3)*
  - *24/7 (+3)*
  - *Service flexibility (+2)*
  - *Connection of modes (+1)*
  - *Current environmental protections (+1)*
  - *Passenger rail – more attractive to aging population (+1)*
  - *Movement of hazmat via rail*
  - *Common carrier requirements*
  - *Good velocity on East – West Union Pacific line*
  - *Technology = rail safety – especially weather*
  - *Presence Class 1 railroads in Iowa = more opportunity and bigger projects*
  - *Significant Railroad investment*
  - *High qualify transportation jobs*
  - *Double track = rapid transit*
  - *Passenger rail service exists*

- ***Weaknesses***
  - *Bottlenecks associated with yard capacity (+17)*
  - *No major intermodal hub (+16)*
  - *Too many grade crossings (+13)*
  - *Geographically challenged (+12)*
  - *Availability of railcars – for lease or purchase (+7)*
  - *Captive shippers (+7)*
  - *Transit times – trucks more competitive short range (+7)*
  - *Cost of projects and rail access (+5)*
  - *Activity of other states affect Iowa, but authority only over Iowa (+3)*
  - *State/local regulations on rail is not uniform (+3)*
  - *Supply of containers (+2)*
  - *Limited reach (+2)*
  - *Seasonality export/import imbalances (+2)*
  - *Lack of use and shippers – abandonment (+1)*
  - *Lack of community involvement by some railroads (+1)*
  - *High shipping requirements for rail (+1)*
  - *Lack of uniform rail weights across state (+1)*
  - *Passenger rail gaps in city coverage (+1)*
  - *Revenue inconsistency among modes (+1)*

  - *Inconvenience for public transit (+1)*
  - *High speed passenger rail = increase investment (+1)*
  - *No room for switching (+1)*
  - *Movement of goods in other modes*
  - *Load constraints*
  - *Relying on other intermodal transportation*
  - *Lack of storage facilities*

- ***Opportunities***
  - *Expand transload and intermodal load facilities (+19)*
  - *Additional state funding for railroads (+15)*
  - *Economic development (+13)*
  - *Expanding capacity within existing railways (+10)*
  - *Lessening of congestion on primary and secondary roads (+8)*
  - *Improve efficiency (+8)*
  - *Decrease length of truck haul (+6)*
  - *Improving regional rail connectivity (+4)*
  - *Better balance of regulation and deregulation (+4)*
  - *Improvements to passenger rail = improvement to freight (+3)*
  - *More port authorities (+3)*
  - *More outreach for rail shipping (+2)*
  - *Land use planning improvements – connections (+2)*
  - *Advancement in technology (+2)*
  - *Commuting potential for students – rail (+2)*
  - *CREATE = optimization and efficiency (+1)*
  - *Freight stoppages due to passenger rail (+1)*
  - *State logistics specialists (+1)*
  - *Improve efficiency to mitigate driver shortage (+1)*
  - *Reduce overall transportation emissions (+1)*
  - *Private investment*
  - *Relationships with railroads*
  - *Containerized freight accommodation*
  - *Rail bank inventory of prior lines*
  - *Partnerships with local development authorities*
  - *Commuting to universities and hospitals*
  - *Expansion of Panama Canal – and other global improvements*
  - *Freight forwarder education*
  - *Technology as in PTC*
  - *Raising rail shipping option awareness*
  - *Planned major study in Quad Cities*

- ***Threats***
  - *Aging infrastructure (+19)*
  - *Truck size and weight – 33' trailers specifically (+16)*
  - *Uncertainty (+8)*
  - *Uncertainty renewal 45G (+7)*
  - *Regulatory issues – PTC (+7)*
  - *Passenger rail – lower performance of freight rail (+7)*
  - *Reduced funding (+6)*
  - *Passenger rail discussion clouds freight rail discussion (+5)*
  - *Reregulation/open access (+5)*

- *Iowa surrounded by other production states – limited capacity = limited growth (+4)*
- *Better infrastructure needs (+4)*
- *Limited capacity = limited growth (+3)*
- *Perception of passenger rail (+3)*
- *Crude oil transportation through small communities (+3)*
- *Communities not supportive of rail (+2)*
- *PTC timeline compliance (+1)*
- *Labor issues and strikes (+1)*
- *Environmental effect on expansion (+1)*
- *Weather (+1)*
- *Lobby between different modes (+1)*
- *Reinvestment in rail bank inventory (+1)*
- *Competition (+1)*
- *Proximity to existing sites (+1)*
- *Low gas prices (+1)*
- *Pressures from urban development – rail yards (+1)*
- *Risk of terrorism*
- *Regional competitiveness*
- *Abandonment*
- *Decrease in current priority commodities*
- *Disruptions – loss in customers*
- *Too many intermodal facilities = inefficiency*

Appendix F: Focus Group Reports

Iowa Rail and Freight Plan Issues-Based Workshop Summary

as of 10/15/2015

Below are the lists created by each focus group.

FOCUS GROUP: PASSENGER RAIL #1

- *Level of investment*
- *Right projects*
- *How many people ride*
- *Opinion: should invest (biased) – Kelli*
- *Regional railroad: Chicago – Iowa City*
- *Passenger rail is good. Needs dedicated lines*
- *Constraint of freight and passenger system*
    - *Potential to decrease highway volume*
        - *Safety on highway system*
- *Competing modes & cost of modes*
- *Serves elderly populations*
- *Student population connection to Chicago*
- *Require major subsidies*
- *Balance transportation needs*
- *How to build demand?*
- *Passenger rail provides options*
- *Dubuque & Iowa City connections make most sense*
- *Need to travel to Iowa City is substantial*
- *Local municipal partnerships are strong*
- *Constraints are too large*
- *Need dedicated track*
- *Good if neutral impacts to freight*
- *Removes congestion off interstate*
- *Need to ensure competitive of driving*
- *Public sees the benefit*
- *Incentives, low cost option*
- *Good business sense*
- *Not enough awareness*
- *No competition for service*
- *Not as convenient/cost effective in comparison*
- *Doesn't stop at the station*
- *Mulitmodal station planning needed*
- *Education about subsidies*
- *Promoted CREATE*
- *Support congestion solutions in Chicago*
- *Education on what it is & benefits*
- *Public – private partnerships funding*
- *Primary audience to be the public*
- *What you can do better*
- *Hard to mix passenger with freight service*
- *High cost of maintenance after established*
- *Rails will always be highly subsidized, hard to cover cost of operation*
- *Many demographics, need to look at other modes*
- *True cost of passenger rail do not equal true cost of other transportation*
- *Passenger takes priority over state when combined*
- *Other countries trying to get cars off road*
    - *Higher taxes, etc.*

- *Congestion may force cars off road*
- *Need to invest to keep Iowa competitive*
- *Prioritize investment in future technology*
    - *At the expense of what we're doing now*
- *Autonomous vehicles are safer & more efficient*
    - *Eliminate crashes, eliminate congestion*
- *Leader in the creativity market*
- *No demand because of low population, need appeal*
- *Today's cost, not enough incentive to use train*
- *Invest in improvements to make more reliable*
- *Could provide economic development for station communities*
- *Need to convince it is sustainable & cost effective*
- *Ridership/dollar of different modes of transportation*
- *Not enough room for additional infrastructure*
- *Good out of state, doesn't work in state*
    - *Doesn't go where you need to go*
    - *Cities not big enough*
    - *No frequency*
- *Will lose competitive advantage without intercity support*
- *Not a priority now*
- *Solving a problem with a problem*
- *No need because scattered cities, not a long a line*
- *Will Iowa interstate give up right of way?*
- *Voters and politicians should decide what level of investment*
- *Confusion with freight rail, passenger rail, etc.*
    - *All are connected, find distinctions*
- *Invest in freight first, passenger second or third because of political climate*
- *Would you pay full price ticket if not subsidized?*
- *Need high speed rail to and from big cities*
- *Would have economic impact in Iowa*
    - *Show what Iowa has to offer*
- *Useful for entertainment and day trips*
- *Creates jobs and develops economy*
- *How do we balance freight & rail and keep both systems competitive?*
- *How do we pay for this in the midst of our other transportation needs?*
- *Do we have the population to support this?*
- *We need to offer transportation alternatives*

FOCUS GROUP: SAFETY AND SECURITY OF HIGHWAY/RAIL OPERATIONS #2

- *Current state of freight in Iowa*
    - *Very good compared to other states*
    - *More crossings*
    - *Truck lanes?*
    - *Tax credits 45G continue*
        - *Tax increase is good*
    - *Technology to notify is good (light boards)*

- *Hazmat response on training and awareness*
    - *Rarely happen (incidents)*
    - *Community concern*

- *Railcars safer from 90's to today*
- *Build around risk*
- *Preparedness – Yankton, SD ethanol derailment, risk is always there*
- *Don't think cities have enough info or resources on hazmat derailments*
  - *Most first responders are volunteers*
- *Training (Union Pacific sends trainers)*
  - *Local FD always looking for training*
  - *Main issues for first responders was not having enough wather*
    - *Know resources needed*
  - *Union Pacific has 3 hazmat specialists across state*
  - *Want whole rail system to be safe*
  - *Rail has advantage, drivers for trucks have to have qualifications*
- *Locals aren't trained, not enough manpower*
- *Quad Cities have enough training and manpower, large impact, evacuation plan is high level*
  - *Security, has terrorism task force*
- *Railcars have lower incidents*
  - *Amount of oil has increased over last 10 years*

- *Grade crossings*
  - *Multitude*
  - *Which should be closed?*
  - *Who pays?*
  - *Pay to close crossings (increase money for intercity)*
  - *Identify priorities*
    - *Signal system = increased priority*
    - *Public complaints call IA DOT*
  - *Contact city engineers*
  - *List all crossings and talk about highest traffic congestion or concern*
  - *DOT can't say there is a specific crossing that is unsafe enough to deal with*
  - *Small amount of crossings*
  - *Maintenance issue*
  - *Way too many crossings*
  - *Offered $1 million to closed crossings, local governments turned it down*
    - *They say people use it*
  - *Quad Cities (Iowa side) industry working adjacent to river, trains stopped more than 10 minutes*
    - *People can't get to work*

TS&W

- *Not a huge issue other than cost of maintenance*
- *Twin 33 trailers (sometimes 3)*
  - *Issue for drivers*
  - *Against increasing TS&W = FedEx, UPS*
- *Crossings ripped out because of heavy loads*
- *Larger trucks do more damage to pavement – especially if overweight*
- *Railroad pays for own infrastructure*
  - *Taxing rail for roads communities don't use*
- *Intimidating for small vehicles*
- *Newer driver have increased chance of texting and driving*
- *Larger is better on non-interstate, west central able to eliminate a truck*
- *Truckers are taking advantage of public roads, not paying fees, taking away from railroads*
- *Some movements would not be on rail, truck only*
- *Good for efficiency*

        - *Economy*
    - *Highway is safer with lower TS&W*
    - *Change in agriculture, more industrialized (can't handle trucks) roads & bridges*
    - *If infrastructure can't handle it, do we need to transform into smaller?*
    - *DOT only looks at damage on semi's, not cars*
    - *Heavy trucks, last mile is in local areas*
    - *One 80,000 pound truck does same damage as 5,000 Toyota Corollas*
    - *Truckers like heavier loads, loading and unloading is more difficult*
    - *Can't force one method or another, but can subsidize to encourage*
    - *Safety compared to railroad*
    - *Truckers accept larger weight loads*
    - *Raising truck load size will take from rail road*
    - *Hard on bridges and interstate – roads in general*
    - *Cost*
- *Safety hazards*
    - *Education and awareness*
    - *Security*
        - *Feel safe (isn't on radar for project)*
        - *Iowa falls isn't an issue*
    - *Not a lot of problems with big trucks*
    - *Too big of weight jump (80 – 91)*
    - *Truck improvements, bigger tires and axles*
    - *91 cost benefit advantages for highways, not truckers*
        - *20,000 on one axle*
    - *Damage on pavement, need more funds for infrastructure (who's going to pay for it?)*
    - *Operation LifeSaver keeps people from being killed in rail accidents*
    - *Trespassing (senior pictures on railroads)*
    - *Driving around gates*
    - *Educate!*
    - *The larger well trained areas are hours away*
- *Rail investment*
    - *Accessed funding from Iowa DOT = beneficial*
    - *Want more funding*
- *Local crossings*
    - *Rivers?*
    - *Terrorists*
- *Truck parking*
    - *Not feasible to park all trucks*
    - *Truck driver hours*
        - *Lowest level acceptable, is that the best level?*
    - *Self-driving vehicles? What kind of infrastructure would be needed?*
    - *Dedicated freight liner that would be automated, California can't afford Convert to rail, less trucks*
    - *Driver hour caps*
    - *Trucks want facilities*
- *Number one rail problems*
    - *Unmanaged crossings*
    - *Obstructions to buildings/industries*
    - *Signage*
    - *Participation to close crossings (too many)*
- *Railroad inspections*

  - *Number of inspectors*
  - *No collapse in 34 years*
  - *Annual inspections, spot inspections, etc.*
  - *No want to hire more*
  - *Number not an issue*
- *Awareness and training*
  - *Not good for locals (DMT)*
  - *Money needs to be increased (invest)*
  - *Local Police and Fire Departments need the training*
    - *Secure scene*
    - *Get water*
    - *Stay upwind*
  - *ADM knows they're in a citizen's task force, doesn't know what they do*

FOCUS GROUP: ECONOMIC AND WORKFORCE DEVELOPMENT #3

- *Transportation is critical for economic development*
- *Efficiency*
  - *Reducing time*
  - *Improving infrastructure*
  - *Access to transload facilities*
  - *Goods need to efficiently move from point a – b*
  - *Cost*
  - *Time reduction to reduce cost*
  - *Reliability*
  - *Reducing stopping points*
  - *Full loads with back hauls most efficient*
  - *Availability of rail cars*
- *Workforce development*
  - *Lack of drivers and warehouse workers*
- *What needs funding?*
  - *Locks & dams*
  - *Rural roads and bridges*
  - *Short line can drive economic development*
  - *Grade separation – Road conditions*
  - *Overpass/underpass*
  - *Improve interconnectivity of rail*
  - *Bridges; invest in technology for condition monitoring; swing bridges outdated*
  - *Education of economies of intermodal facilities*
  - *Highway improvement*
  - *Water way expansion*
  - *House transload facilities*
- *Class 1 view*
  - *Combination of Class 2 and 3*
- *What's needed?*
  - *Money*
  - *Focusing on priorities*
  - *North/South transport not as efficient as East/West on all modes of transportation*
  - *Need sufficient volumes*
  - *Carload transits; warehouses*
  - *Waterway barge associations*
  - *Focus on rail*

- *Role of transportation*
  - *Can't work without it*
  - *Can't have industry*
  - *Existing infrastructure builds opportunity*
- *How competitive is Iowa's system?*
  - *Plan to expand current shipping*
- *Hurdles*
  - *Old system/worn out; Hasn't been updated*
  - *Difficult to move goods to the Southeastern United States from Iowa*
  - *What rail connections you have available*
  - *Shipper education – lack of awareness; Rail is an after thought*
  - *Short lines can be an engine for economic development*
  - *Rural bridge condition*
  - *Worker availability*
  - *Qualified drivers*
  - *Location*
  - *No major hub*
  - *Training*
- *Funding allocation*
  - *Partnering with economic development*
  - *Education toward students about rail jobs*
- *Iowa transport system*
  - *Better rail network system*
  - *No major issues*
  - *Possibly introduce barges down Missouri River*
- *Opportunities*
  - *Transload centers*
  - *Intermodal facility*
- *Industry trends*
  - *Wasting money on intermodal facilities*
  - *No incentive to favor Iowa*
  - *Innovation in driverless cars*
  - *Energy trends; negative impact on coal*
  - *Product diversification*
- *Panama Canal*
  - *Allow goods to move easier*
- *Issues of transportation*
  - *International competition*
  - *Rail car availability*
  - *Bridge infrastructure deficiency*
- *Improvements*
  - *Greater efficiency*
  - *Strategic road improvements in supply chain*
  - *Paving gravel roads; allow semi's to travel*
  - *Accessibility; speed up flow*
  - *Consolidation of facilities, more facilitates*
  - *Infrastructure development*
- *Transportation modes*
  - *Competition*
  - *Need for volume makes it less competitive*

  - *Time vs. cost*
- *Misc.*
  - *Consider agricultural producers*
  - *Railcar is favored*
  - *Larger dimensions*

FOCUS GROUP: MULTIMODAL FREIGHT NETWORKS #4

- *Strengths*
  - *Globalization*
  - *IA is doing a great job anticipating truck traffic*
    - *Creates fluid highway conditions*
  - *Moline airport*
  - *Network for trucks*
- *Weakness*
  - *Road system conditions*
  - *Coverage of major roads (I80/I35 are the only main)*
  - *Railroad coverage in smaller cities/towns*
  - *Focus on all commercial airports for freight rather than in just metro areas*
  - *Low grade and rural roads*
  - *Lock and dam structure and speed*
  - *River shuts down 3 months of the year*
- *Efficiency*
  - *Cheaper to transport than other countries*
    - *Lack of equipment/shipping containers along rivers*
      - *Intermodal facilities in Des Moines would help*
  - *Bottleneck analysis*
  - *River crossing capacity – highway and railroad*
  - *Winter road conditions*
- *Competitive improvements*
  - *Iowa needs greater connectivity*
    - *Between modes and between locations*
    - *Connections to marine ports (intermodal ports)*
  - *Technology advancements to make intermodal transportation more efficient*
  - *Consolidation of facilities to increase efficiency*
  - *6 lane highway*
  - *Double tracking*
  - *Create more by-passes for metro areas*
    - *By-pass for transcontinental traffic*

Challenges

  - *Railroad*
  - *Public policy which is friendlier to railroads*
  - *What justifies the investment of infrastructure?*
- *Industry trends*
  - *Panama Canal*
  - *Renewable energies*
  - *Crude by rail*
  - *Use of CNG*
  - *Uniformity of containers on truck and rail… but not on air*
    - *Standardization of containers*
  - *Public/private relationships/partnerships*
- *Pivotal transportation issue for Iowa freight*

  - *Truck size and weight*
  - *Driver shortage*
  - *Public and private monetary support of infrastructure*
  - *Facilities to connect with markets*
    - *How can IA create larger capacity to ship goods?*
  - *Positive train control (PTC)*
  - *Phase out TIH (chemical) fertilizer*
  - *Re-authorization*
  - *Regulation*
  - *Political uncertainty*
  - *Equipment supply*
  - *Infrastructure*
  - *Facilities*
- *Suggestions*
  - *Corridor focused groups to discuss needs*
    - *What companies exist to address these needs?*
    - *What funds exist to help with intermodal needs/functions?*
      - *It's hard to find facilities to move goods from mode to mode*
    - *Corridor ways to address and focus geographical needs*
- *Issues*
  - *Maintaining roads and bridges, locks and dams*
  - *Infrastructure*
  - *Equipment supply issue*
    - *Not enough vehicle/container capacity to move freight*
  - *Intermodal transportation facilities (to transfer goods mode to mode)*
  - *Not enough access points*
  - *Transit time of railroads*
- *Education on benefits of different modes*
  - *Shippers may not know about all the modes*
  - *Should have dedicated "State" people to educate shippers*
  - *Not enough communication channels to information*
  - *Shippers unaware of how modes work together*
- *DOT's role in education of shippers*
  - *Educate and assist funding when there's public benefit*
  - *Help relocate companies to Iowa based on infrastructure*
  - *Present plan for funding to legislature for private sector*
    - *DOT representing businesses to legislature*
    - *Inform legislature of issues*
  - *Prioritize needs of all business issues*
  - *Tool kits*
  - *Funding for infrastructure*
  - *LIFTS program*
  - *Connector for solutions*
    - *Site development*
  - *Providing info and connections for business*
- *Custom's process*
  - *Good*
  - *No issues*
- *Air cargo access*
  - *Insufficient*

  - *No access*
- *Pipeline sufficiency*
  - *Not yet*
  - *Ok as is*
- *Hurdles to address*
  - *Lack of focus on Class 2 and class 3 railroads*
  - *Commodity mix on network*
  - *Funding*
- *Incentives*
  - *28G*
- *Connectivity between modes*
  - *Drive efficiency*
  - *Access to markets*
- *Transloads have 4 minimum requirements and if any one of the 4 is lacking, it is noticed and can be a huge barrier. The 4 we have identified are:*
  - *Infrastructure*
  - *Marketing*
  - *Throughput service*
  - *Critical mass*
- *LIFTS program is spot-on, addresses risk sharing*
- *Collaboration: need for shippers to collaborate to efficiently use resources & to create freight densities*
- *Strategic approach to locate transloads*
- *Data to help identify freight locations*
- *Four locations for new transloads*

FOCUS GROUP: MULTIMODAL FREIGHT LINK AND CONNECTORS #5

- *LIFTS $2.6 million October 23*
  - *Grant allows building ahead and allows responsiveness to customers needs*
  - *Encompasses more than rail*
  - *Infrastructure = flexibility*
  - *Public funding and public benefit*
  - *Supplement private funding to share risks*
  - *Helps spark development*
- *Source loading and transloading at port*
- *Overall more efficient with co-op to ship via rail to port with ocean liners that have containers*
- *Intermodal containers*
  - *Limited locations for class 1 and steam ships*
- *Virtual container yard*
  - *Placing empty containers somewhere in internal Iowa*
  - *Requires commercial interest*
- *What can IA DOT do to help?*
  - *Rail tool kit*
  - *Awareness*
- *Question 5: Transloads competitive advantage?*
  - *Hyvee struggle of cost and timing to use railroad for vendors outside of Iowa, but between coasts*
  - *Underutilized transloads CB, Omaha area*
  - *LIFTS = 2.6 million Oct 23 (test run)*
  - *How can we improve? Anyone who is shipping? Connectivity between modes*
  - *Having shippers pay attention to counties in need of rail opportunity for shippers*
  - *Target high volume lanes*
- *Consider transit times*

- *Just in time (currently)*
- *Export 30% pork to need rail to operate efficiently*
    - *Includes Mexico*
- *U.P. will be more fluid and will look to be more efficient*
    - *UP crossing closures helped with efficiency*
- *Rochelle underutilized and very cheap location, competes with Chicago*
- *Oversized ag equipment opportunity for intermodal*
- *Hyvee wants intermodal in Des Moines*
- *JB Hunt largely rail*
- *ADM a lot of internal intermodal transport*
- *Barriers to operational efficiency*
- *Rail car availability = capacity*
    - *Ag seasonal demands*
    - *Railroads don't always have enough for specific products*
    - *State funding for specific products*
        - *Like Washington – ideally cars are not sitting in storage but are in use outside of season*
- *Trouble from local to global access*
- *State role is getting products global*
- *State providing data in areas that need a lot of computing power (commodities for example)*
- *Efficiency is standardization*
- *Multi use rail cars*
- *Service issue with capacity*
    - *Passenger rail competing*
- *Wage to find drivers also issue with 21 age requirement?*
    - *Although 18 is still too young*
- *Short haul distances*
- *Larger work force*
- *Need more transloads*
- *Part of problem is capacity and part of it is operational equipment, service, knowledge*
- *A consolidator to help reach critical mass*
- *Justifying initial investment on faith is hard, starting small but allowing for room to go*
- *Memphis CN success*
- *DSM transload model*
    - *Ownership*
    - *Competitiveness*
    - *Open access*
- *LIFT doesn't need to fund operator as long as business is there*
- *Transload facilities for county engineers could save money transporting gravel (for example) via rail*
- *Creston? Pella? Grundy? Indianola? Waterloo?*
- *Vermeer greater access*
- *Ottumwa is good example of transload success*
- *Using state to advocate especially for new industry*
- *LIFT – DOT listened and continued to get attention from state*
- *Corridor development, industry in that area, strategic approach, avoid competition with each other*
- *Intermodal needs more volume*
- *DSM too close to Chicago?*
- *More business creates more need*
- *Shipper cooperative*

Appendix G: Focus Group Questions

Focus Group Break Out #1: Passenger Rail

Facilitator: Theresa McClure

The need to travel throughout the region is growing, as many business and pleasure travelers see opportunities in Iowa and surrounding states. The opportunities presented by a Midwest intercity passenger rail system have been part of Iowa's transportation plans since 1996.

To date, Iowa DOT has completed in-depth studies of the entire corridor from Chicago to Council Bluffs-Omaha. The study determined that intercity passenger rail from Chicago across Iowa is a good idea for a number of reasons.

Extending the Chicago to Quad Cities route to Iowa City is the first critical step toward expanding intercity passenger rail in Iowa. Although Iowa lacks sufficient state/local match for full implementation at this time, preliminary engineering and detailed environmental studies (Tier II NEPA) are under way to prepare for future construction and position the project for future funding opportunities.

Issue Questions

- *To what level of investment should Iowa DOT focus on improving passenger rail in the state of Iowa?*
- *Are the corridors currently under analysis still the right areas of investment today? Should other corridors be prioritized?*
- *If Iowa DOT continues to focus on improving passenger rail in the state of Iowa, who would be the primary audience to educate on the need for improved service?*
- *Should public-private partnerships be identified to support funding needs?*
- *How should passenger rail service be coordinated with other multi-modal transportation options in the state?*
- *To what level should Iowa DOT focus on improving coordination with passenger and freight rail operators to ensure both freight and rail operations are both optimized?*
- *Where are the biggest opportunities to capitalize on investments in the freight and rail system that will maximize benefits to the entire system?*
- *What focus should Iowa DOT put on improving and maintaining the existing passenger rail service through the state of Iowa?*
- *Are there enough incentives to encourage passenger rail as a source of transportation?*
- *What are the biggest strengths of the current long-distance passenger rail routes? (The long-distance routes currently include stops in Fort Madison on the Southwest Chief and stops in Burlington, Mount Pleasant, Ottumwa, Osceola, Creston, and Omaha on the California Zephyr.)*
- *What are the biggest weaknesses of current long-distance passenger rail routes? (The long-distance routes currently include stops in Fort Madison on the Southwest Chief and stops in Burlington, Mount Pleasant, Ottumwa, Osceola, Creston, and Omaha on the California Zephyr.)*
- *Is there enough education about passenger rail, its access points, and the viability of it as a transportation mode?*
- *Have promotions and advertisements regarding passenger rail use been effectively deployed in today's digital age?*

Focus Group Break Out #2: Safety and Security of Highway/Rail Operations

Facilitator: Kevin Keller

Highway Safety

Truck safety has improved measurably over the past decade. Since 2001, the number of truck crashes, and truck crash-related fatalities and injuries have dropped sharply. From 2001 to 2011, the number of truck crashes dropped 33 percent, outpacing the safety improvements of other vehicles. In this same period, the number of truck-involved fatalities fell 28 percent and the number of truck-involved injuries fell 39 percent. The primary causes in crashes where the truck driver is at fault are driver fatigue, excessive speed, unfamiliarity with the areas traveled, equipment failure, and weather conditions. However, according to recent FHWA data, a passenger car driver is three times as likely to contribute to a fatal crash as was the truck driver's behavior. Trucks can weigh up to 30 times more than passenger vehicles and require more stopping distance, especially when loaded. They also cannot be steered as easily as cars. When involved in a collision with a passenger vehicle, the size and weight of large trucks increases the severity of the damage. Although fatal crash rates for large trucks have fallen (by 77 percent from 1975 to 2009, compared to 64 percent for cars over the same period), truck crashes are more likely to result in severe injuries or fatalities than those involving only cars.

Driver Shortages

The Federal Highway Administration (FHWA) has predicted a 92.5 percent growth in freight demand from 2002-2035. Because of this anticipated growth, demand for all commercial freight modes (truck, ship, air, and rail) will increase, with the expectation that trucking will continue to have the dominant share of the activity. In the US, the average age of a commercial truck driver is 55. Currently, it is estimated that there are 30,000 unfilled truck driving jobs, and these numbers are continuing to climb. As the economy improves, the driver shortage is likely to be more acute and safety is likely to become a larger issue until new drivers develop the necessary experience and skills. Also, according to a January 2013 Journal of Commerce article, the annualized driver turnover rate for large carriers has been above 90 percent. That means a carrier with 200 drivers would hire 180 drivers over the course of the year, sometimes filling the same seat several times.

Truck Parking

It has long been acknowledged that a shortage exists of adequate and safe parking for commercial motor vehicle operators at the state and national levels. The demand for commercial vehicle parking far exceeds capacity. As originally conceived, public rest areas were to serve as temporary rest areas and short-term safety breaks for the traveling public. As the trucking industry expanded, these rest areas began to serve as long-term, overnight parking for long-haul commercial vehicle operators, thereby contributing to overcrowding at rest areas. As reported in the National Transportation Research Board National Cooperative Highway Research Program (NCHRP), Synthesis 317: Dealing with Truck Parking Demands (2003), "most parking supply is located in commercial truck parking lots and plazas, and the overcrowding problem (is) concentrated in public rest areas." Factors contributing to the commercial vehicle parking issue include poor geometric design of facilities and access; lack of information at the location on space availability, including amenities; and lack of security. Limits on stays in public facilities and parking space shortages leave truckers with few alternatives. MAP-21 does not include a formal truck parking program; however, it does make truck parking projects eligible for funding under the National Highway Performance Program, the Surface Transportation Program and the Highway Safety Improvement Program.

Increased Truck Size and Weight

Iowa follows federal law by placing weight limits on trucks in order to protect pavement and bridges from damage and excessive wear and tear. Truck weight is also a major factor in the severity of truck-passenger vehicle incidents. Simply put, the heavier the vehicle, the worse the damage. Heavier trucks, and trucks carrying loads in excess of maximum weight limits can be more difficult for the driver to control because they require increased stopping distance; have an increased potential to roll due to a higher center of gravity; and attain higher speeds when traveling downhill, decreasing steering capability. Iowa DOT often receives requests to increase truck (or axle) weight limits or to implement programs that would collect additional fees for compensation of overweight loads. There are several reasons for these requests. Hauling larger loads with fewer trucks can help some industries reduce transportation costs and increase efficiency. Competition and changing market conditions puts pressure on freight-dependent industries to lower costs, to provide greater efficiencies and to increase service quality. The U.S. Department of Transportation recently completed a comprehensive examination of issues surrounding current Federal truck size and weight (TS&W) limits and potential impacts of changes to those limits. Safety has been one of the issues of greatest concern in previous TS&W studies, yet it is difficult to quantify many safety impacts.

Highway-railroad Grade Crossing Safety

Highway-railroad grade crossings are not wholly the responsibility of either the private railroad companies or highway authorities. Since crossings occur where the two modes of travel intersect, it is a shared responsibility. Iowa's current practices to address safety and security of rail operations are based on a four-point strategy summarized as:

- ***Education:*** *The state maintains a working relationship with Iowa Operation Lifesaver. This organization exists to increase public awareness of grade crossing traffic laws and hazards.*
- ***Enforcement:*** *Laws pertaining to highway-railroad grade crossings and trespassing are a key component of discouraging unsafe behavior. Educational programs for the public, as well as enforcement officers and the courts, regarding the possible consequences of breaking these laws help reduce the number of violators.*
- ***Engineering:*** *Maintenance and physical improvements to the crossings and highways are vital to the safety of the traveling public.*
- ***Funding Programs:*** *Programs in place to provide the grants to implement physical and system improvements along the rail network. The state identifies and prioritizes most highway crossing safety grant applications based on portions of the Iowa Benefit-Cost ratio.*

Funding has been legislatively allocated from the Road Use Tax Fund since 1961 to address the highway system's responsibility for crossings, but the annual amounts have not increased since the 1980's. However since that time, rail miles have decreased, rail tonnage has dramatically increased, and highway traffic has risen. In other words, trains are longer and heavier, crossings are more heavily traveled by both trains and motor vehicles, crossing surfaces are subject to more wear and tear and crossings represent a far greater safety concern due to the higher potential for vehicle/train interactions at crossings.

	1985	2013	Percentage Change
Rail miles in Iowa	4682	3850	18% fewer miles
Rail movements	127 million tons	352 million tons	177% increase in tonnage
Vehicle miles traveled	20 million miles	31.5 million miles	57.5% increase in miles traveled

Railroad Inspection

The Federal Railroad Administration has responsibility for safety and inspection on the bulk of the national rail system. Federal inspectors enforce safety regulations in five disciplines – track, signal, operating practices, equipment/mechanical, and hazardous materials. The Iowa DOT participates in a federal program that supplements the federal inspection program with two track inspectors that have the same authority as the federal inspectors. Their responsibilities include inspecting all track in the state at least annually, and have the authority to focus inspections on other areas where a need is shown or anticipated.

Security

Security is an important consideration in the transportation planning process, and has received heightened attention since the terrorist attacks of Sept. 11, 2001. Security should not be thought of only in terms of criminal or terrorist attacks, but also vulnerability to natural and manmade incidents, such as floods, tornadoes, and hazardous materials spills. In Iowa, recent flooding and winter weather events have dramatically impacted both rural and urban transportation systems, requiring adjustments to response policies and procedures. All modes of transportation are vulnerable to disruption due to natural or manmade incidents. The Iowa DOT partners with agencies at all levels of government, as well as private firms, to implement security initiatives.

Issue Questions

General safety

- *From your perspective, how do you rank the safety of the freight system in your community, near your home, and or near your business?*
- *What improvements could increase safety in these areas?*
- *Does the freight safety affect your business or quality of life? If so, how?*
- *What freight safety improvements are needed in Iowa? Why are these areas important?*
- *Do you have concerns about the volume of oversized/overweight loads on roadways? If so, please share*

Highway-railroad crossing safety, including crossing improvements

- *Are highway-railroad grade crossings in your community safe? Are there any problematic crossings that need to be addressed? If so, which ones.*

Hazardous materials shipments

- *Do you ship hazardous materials which require placarding? If so, explain.*
- *Does the shipment of hazardous materials affect you and/or your company? If so, how?*
- *What improvements could decrease potential risks associated with shipping hazardous materials?*
- *Are there high levels of concern for hazardous material shipping, or are existing procedures more than adequate to mitigate negative effects of shipping hazardous materials?*
- *Do you have an internal safety and compliance division or do you outsource this responsibility? If so, explain.*

Rail accidents/incidents not at crossings, like a trespassing pedestrian crossing the mainline, or a derailment

- *Do you have concerns about trespassing pedestrians crossing mainlines? Is so, please share.*
- *Do you have concerns about derailments due to poor track conditions, faulty equipment, or any other cause? If so, please share.*

Safety education

- *Are you aware of Operation Life Saver and other educational resources available to you? What other education is needed?*

Security

- *Do you have concerns about rail and/or freight terrorism and how to prevent it? If so, please share.*
- *Do you have concerns about the freight infrastructure's vulnerability to natural disasters, such as flooding and/or climate change?*

Rail investment

- *Do you have access or have you attempted to utilize Iowa DOT funded or facilitated rail safety programs? What is the effectiveness of these programs?*
- *Should the Iowa DOT explore alternative funding options to improve rail crossings?*
- *Should Iowa DOT lead the initiative to implement, operate, and add improved rail safety technology to the rail system? Are there other agencies that need to be involved? Are there alternative funding sources for this technology?*

Focus Group Break Out #3: Economic and Workforce Development

Facilitator: Jara Sturdivant-Wilson

Throughout Iowa's history, economic growth has occurred along thoroughfares of all forms, from our rivers to our railroads and highways. While, on the surface, the relationship between transportation improvements and economic growth seems rather straightforward, many professionals and academics would argue that it is not yet fully understood. Regardless, it is critical that the potential economic impacts of transportation projects are considered during the planning process. Within the Iowa DOT, the importance of this consideration is manifested in a number of ways. The Five Year Program, for example, identifies several transportation policies, the first of which is to promote a system that maximizes economic benefits for Iowa. As part of the programming process, economic development impacts are considered as candidate projects are identified and evaluated. In addition, the Revitalize Iowa's Sound Economy (RISE) Program has funded highway projects that have supported the creation of nearly 54,000 jobs over the program's 26-year existence and the Railroad Revolving Loan and Grant program supports rail economic development projects. The Linking Iowa's Freight Transportation System (LIFTS) program is a new grant funding opportunity to improve Iowa's freight transportation system. The LIFTS program grant funding is not limited to a particular mode of transportation, but is designed to assist projects that contribute to effective and efficient freight transportation. Project eligibility is far ranging. Iowa is not alone in these efforts, as many state transportation agencies support economic vitality through various policies and programs. This support can be provided indirectly through policies that recognize economic development as a consideration in funding decisions, or it can be provided more directly through dedicated funding sources for economic development projects.

- *How efficient is the overall transportation system in Iowa? What improvements would help increase efficiency?*
- *How competitive are the transportation modes in Iowa? What improvements would make Iowa more competitive?*
- *What are the current hurdles in the transportation system that may block future economic development?*
- *What industry developments and trends, both within Iowa and beyond, are most important for decisions related to the the rail and freight transportation system?*
- *Looking to the future, what one element, or combination of elements of the freight and rail transportation system requires the most attention to support the growth of the Iowa economy?*
- *In what ways will the planned expansion of the Panama Canal affect Iowa?*
    - *Should Iowa DOT be prepared to make changes in the rail and freight system that adapt to the changes the Panama Canal will have on the transport of goods?*
- *Should Iowa DOT funding be targeted at increasing access to barge facilities along the Missouri and Mississippi rivers?*
    - *Why? Why not?*
- *Should Iowa DOT funding be targeted at increasing the number/access to transloading/intermodal facilities throughout Iowa? Why? Why not?*
- *Assuming adequate federal, state, or public private partnership funding, what freight and rail projects should Iowa DOT prioritize to have the biggest impact on Iowa's economic competitiveness? What potential impacts are there if these improvements are not made?*
- *Are there federal and state transportation regulations that are a hindrance or obstacle to economic competitiveness in the state? If so, describe.*

Focus Group Break Out #4: Multimodal Freight Networks

Facilitator: Justin Fox

The State of Iowa, as a producer state, demands the efficient movement of freight. There is a growing need for adequate infrastructure to move freight safely, securely and efficiently. Like other states, freight in Iowa is moved a number of ways. The majority of freight is moved by truck and rail, both of which have experienced steady growth over the past two decades. Iowa's freight is also moved via air and water. Further, over the past 20 years, air cargo movements have remained stable, as trucking has been integrated into delivery systems. Although air cargo represents only a small portion of total freight movement, total ton-miles have doubled since the 1980s. Iowa's two major waterways, the Mississippi and Missouri rivers, move primarily grain and other bulk commodities to and from Iowa and provide access to the extensive network of inland waterways in the United States. Located along these rivers are 60 barge terminals, which transfer bulk commodities between barge, rail, and truck.

In addition, railroads are a vital part of Iowa's overall transportation system, helping to move both freight and passengers safely and efficiently. Railroads are absolutely critical for some Iowa freight commodities, including corn, soybeans, chemicals, motor vehicles and other equipment, wood and paper products, minerals and ores, coal, and biofuels.

Passenger rail can play a critical role in helping to address the ongoing challenges of unstable energy prices, higher levels of greenhouse gas emissions and the growing mobility needs of Iowans. Without efficient railroad transportation, Iowa's economy would suffer. Maintaining and improving railroad service in Iowa requires a proactive partnership between a number of organizations, including private rail carriers, rail shippers, passengers, the Iowa DOT, other state and federal agencies, and local governments

- *Different industries will have different modal needs (truck, rail, water, air). Currently, what are the strengths and weaknesses in these modal systems in Iowa?*
- *How efficient is the overall transportation system in Iowa? What improvements would help increase efficiency?*
- *How competitive are the transportation modes in Iowa? What improvements would make Iowa more competitive?*
- *What are the current hurdles in each transportation mode that need to be addressed in the state?*
- *What industry developments and trends, both within Iowa and beyond, are most important for decisions related to the the rail and freight transportation system?*
- *What are the most pivotal transportation issues for freight shipping in the state?*
- *Are there enough incentives to utilize all modes as a viable transportation and freight options? Are there specific disincentives for using certain modes?*
- *Is there enough education regarding all modes of transportation, and the benefits it provides for freight shipments?*
- *What should Iowa DOT's role be in developing, facilitating, and funding freight and rail improvements in the state?*
- *Is there a sufficient pipeline network in the state?*
- *Is there sufficient access to air cargo terminals in the state?*
- *Is the customs process timely and predictable?*

Focus Group Break Out #5: Multimodal Freight Links and Connectors

Facilitator: Libby Ogard

A majority of the movements by air, rail, and water are intermodal in the broadest sense. These movements usually begin or end with a truck movement for the first or final leg of a journey. These connections are critical to Iowa's competitive edge in the marketplace and take many forms, including but not limited to air freight or barge terminals, transloading facilities, cross docks, distribution centers, and intermodal container transfer facilities. Iowa DOT understands the importance of these connections, and supports rail intermodal facilities through the Railroad Revolving Loan and Grant Program. Currently, a one-time grant program called LIFTS is seeking applications for a wider range of multimodal connections.

- *Do you use domestic intermodal container service? Do you use international intermodal container service?*
- *Is Iowa's intermodal access sufficient to meet your business needs? What are the key intermodal network locations/lanes most important to your business?*
- *What are the barriers to your use of intermodal container service?*
- *Is chassis availability an issue for international container movement?*
- *Should the state establish overweight container highway corridors to facilitate international trade?*
- *What improvements are necessary to make Iowa more competitive?*
- *Is there sufficient container availability?*
- *Is there sufficient drayage capacity?*
- *Do transloading/intermodal facilities make sense to businesses in Iowa? What makes them useful? What makes them impractical?*
- *Is greater access to transloading/intermodal facilities needed? Where should they be located?*
- *Do you utilize transloading/intermodal facilities? Why or why not.*
- *What would be needed to increase transloading/intermodal facility use?*
- *Is there enough information available to help assess the costs and benefits of using a transloading/intermodal facility? Are you aware of the rail and barge transloading facility locations in Iowa?*
- *Should Iowa DOT funding be targeted at increasing the number/access to transloading/intermodal facilities throughout Iowa? Why? Why not?*
- *Should Iowa DOT funding be targeted at helping create logistics parks to encourage development where transportation assets are available?*
- *What strategies and solutions will be most effective in meeting the short and long-term needs for improving the efficiency of goods movement for Iowa region?*
- *Are the intermodal connectors between Iowa's highways, railways and ports adequate?*
- *As Iowa embarks on a container on barge pilot project, what support should Iowa DOT provide for Iowa users?*
- *Is the customs clearance process efficient and user friendly? What needs to be improved?*

Appendix H: Sign in Sheets

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Sign-in Sheet
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Contact Information		Notification & Demographic Information *(Optional)*			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name Jing DONG Organization *(if applicable)* ISU	Address 350 Town Engr. City/Zip Ames Phone 5001U Email jingdong@iastate.edu	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other _____	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name BRAD NEUMANN Organization *(if applicable)* MPOJC	Address 410 E WASHINGTON ST City/Zip IOWA CITY Phone 319-356-5235 Email ~~brad@~~ brad-neumann@iowa-city.org	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other _____	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Michael Dolch Organization *(if applicable)* Senator Joni Ernst	Address 733 Federal Building 210 Walnut City/Zip 50309 Des Moines, IA Phone 712-370-8188 Email michael_dolch@ernst.senate.gov	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other _____	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name GENA McCULLOUGH Organization *(if applicable)* BISTATE REGIONAL COMMISSION	Address PO BOX 3368 City/Zip ROCK ISLAND, IL 61204-3368 Phone 309-793-6302 EXT146 Email gmccullough@bistateonline.org	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other _____	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

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Contact Information		Notification & Demographic Information *(Optional)*			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name Jack Parliament Organization *(if applicable)* D&I Railroad	Address 300 S Phillips Ave # 200 City/Zip Sioux Falls SD 57117 Phone 605 330 6588 Email jdparliament@igeverist.com	☑ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☑ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☑ 55-64 ☐ 65+	☑ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Kyle Nodgaard Organization *(if applicable)* UP	Address 1400 Douglas St City/Zip Omaha 68179 Phone 402-544-2029 Email kdnodgaa@up.com	☑ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☑ Male ☐ Female	☐ 15-24 ☑ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☑ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Kelli O'Brien Organization *(if applicable)* Union Pacific	Address 1400 Douglas St City/Zip Omaha 68179 Phone 402 544. 4749 Email kobrien@up.com	☑ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☐ Male ☑ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☑ 45-54 ☐ 55-64 ☐ 65+	☑ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Zach Young Organization *(if applicable)* PMAMPO	Address 420 Watson Powell Suite 200 City/Zip 50309 Phone 515 334 0075 Email zyoung@dmampo.org	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

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Contact Information		Notification & Demographic Information *(Optional)*			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name Sam Shea Organization *(if applicable)* Iowa DOT	Address City/Zip Cedar Rapids IA Phone 319 364 0235 Email Sam.Shea@dot.iowa.gov	☒ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☒ Male ☐ Female	☐ 15-24 ☐ 25-34 ☒ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Don McDowell Organization *(if applicable)* Farm Bureau	Address 5400 University City/Zip WDM 50266 Phone 515-225-5547 Email dmcdowell@ifbf.org	☒ Email ☐ Social Media ☐ Letter ☐ Postcard ☒ Other Freight Advisory Mtg	☒ Male ☐ Female	☐ 15-24 ☒ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Andrew Hoth Organization *(if applicable)* Burlington Junction Railway	Address 200 Jefferson st City/Zip Burlington IA 52601 Phone 319 754-5000 Email hothlaw@mchsi.com	☒ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☒ Male ☐ Female	☐ 15-24 ☐ 25-34 ☒ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Steve Falck Organization *(if applicable)* ELPC	Address City/Zip DSM Phone 515 244 3113 Email sfalck@elpc.org	☒ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☒ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☒ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

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Contact Information		Notification & Demographic Information *(Optional)*			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name Jim Kvedaras Organization *(if applicable)* CN	Address 17641 S Ashland Ave City/Zip Homewood IL 60430 Phone 708-332-3508 (o) Email jim.kvedaras@cn.ca	☒ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other _____	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Tim Woods Organization *(if applicable)* ITL	Address City/Zip Phone Email	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other _____	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Nathan Johns Organization *(if applicable)* KJRY/PioneerRadio	Address City/Zip Phone Email	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other _____	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Stacy Timperley Organization *(if applicable)* Forbs	Address City/Zip Phone Email	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other _____	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

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Contact Information		Notification & Demographic Information *(Optional)*			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name PHIL MERAZ Organization *(if applicable)* IOWA DOT	Address 800 LINCOLN WAY City/Zip AMES 50010 Phone 515-239-1420 Email phillip.meraz@dot.iowa.gov	☒ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☒ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☒ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Jeff von Bom Organization *(if applicable)* Iowa DOT	Address City/Zip Same as above Phone Email	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☒ Other organizer	☒ Male ☐ Female	☐ 15-24 ☐ 25-34 ☒ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Jantina Wennerstrom Organization *(if applicable)* Say Transportation Coalition	Address 1255 SW Prairie Trail City/Zip Ankeny, IA 50023 Phone 515-334-1039 Email jwennerstrom@saytransportation.org	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☒ Other Mike Steenhoek	☐ Male ☒ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name STEPH CARLSON Organization *(if applicable)* IOWA PORK PRODUCERS ASSOCIATION	Address City/Zip Phone Email	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

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		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name Osama Shihadeh Organization *(if applicable)* Kent Corp.	Address 1600 Oregon St. City/Zip Muscatine, 52761 Phone 563-264-4380 Email osamashihadeh@grainprocessing.com	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other _____	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Liz McDonald elisabeth.mcdonald@ssab.com 563-260-1503 Organization *(if applicable)* SSAB	Address City/Zip Phone Email	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other _____	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Jim Daugherty Organization *(if applicable)* ADM Terminal Svc	Address PO Box 107 City/Zip Camanche IA 52730 Phone 563-259-4111 Email James.daugherty2@adm.com	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other _____	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Steve Lallier Organization *(if applicable)* JB Hunt	Address 155 S McKenzie Ln City/Zip North Liberty IA 52317 Phone 614-535-8116 Email Steve_lallier@jbhunt.com	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other _____	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

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Contact Information		Notification & Demographic Information *(Optional)*			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name Becky Nardy Organization *(if applicable)* RPA 14/ATDRA SICOG	Address 101 E. Montgomery City/Zip Creston Phone 641 782-8491 Email nardy@sicog.com	☒ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☐ Male ☒ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☒ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Lance Evans Organization *(if applicable)* IADOT	Address 6310 SE Convy Blvd City/Zip Ankeny IA 50021 Phone 515-237-3214 Email D.Evans@dot.iowa.gov	☒ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☒ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☒ 45-54 ☐ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Cindy Litwiller Organization *(if applicable)* Iowa Falls Area Dev.	Address 520 Rocksylvania Ave City/Zip Iowa Falls 50126 Phone 641-373-3455 Email director@iowafalls development.com	☒ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☐ Male ☒ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☒ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name MIKE LA PIETRA Organization *(if applicable)* FHWA	Address 105 6TH ST City/Zip AMES IA 50010 Phone 515-233-7300 Email mike.lapietra@dot.gov	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

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Contact Information		Notification & Demographic Information *(Optional)*			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name SARAH DHUM Organization *(if applicable)* BNSF	Address City/Zip FORT WORTH Phone Email	☑ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☑ Male ☐ Female	☐ 15-24 ☐ 25-34 ☑ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☑ Other
Name Jody Sandy Organization *(if applicable)* Hy-Vee, Inc.	Address WDM City/Zip Phone Email	☑ Email ☐ Social Media ☐ Letter ☐ Postcard ☑ Other	☐ Male ☑ Female	☐ 15-24 ☑ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☑ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Amy Homan Organization *(if applicable)* DNR	Address City/Zip CA Phone Email	☑ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☐ Male ☑ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☑ 45-54 ☐ 55-64 ☐ 65+	☑ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Shirley McGuire Organization *(if applicable)* USDOT FMCSA	Address AMES, IA City/Zip Phone Email	☑ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☐ Male ☑ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☑ 45-54 ☐ 55-64 ☐ 65+	☑ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

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Contact Information		Notification & Demographic Information *(Optional)*			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name Dave Johnston Organization *(if applicable)* Iowa HSEMD	Address 7900 Hickman City/Zip DesMoines IA Phone 515.725.3295 Email david.johnston@iowa.gov	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Bill Neese Organization *(if applicable)* West Central Coop	Address 404 First St City/Zip Ralston, IA 51459 Phone 712-667-3407 Email billn@westcentral.net	☑ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☑ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☑ 55-64 ☐ 65+	☑ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Phou Baccam Organization *(if applicable)* IDOT	Address 6310 SE Convenience Blvd City/Zip. Ankeny, IA 50321 Phone 515-237-3270 Email Phoumine.Baccam@dot.iowa.gov	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Phil Mescher Organization *(if applicable)* Iowa DOT	Address 800 Lincoln Way City/Zip Ames Iowa Phone 515-239-1629 Email phil.mescher@dot.iowa.gov	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

2016 **IOWA RAIL PLAN**

Sign-in Sheet
Issues-Based Workshop
September 24, 2015

Contact Information		Notification & Demographic Information *(Optional)*			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name Sam Hiscocks Organization *(if applicable)* Iowa DOT	Address 800 Lincoln Way City/Zip Ames, IA 50010 Phone 515-239-1004 Email samuel.hiscocks@dot.iowa.gov	☒ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☒ Male ☐ Female	☐ 15-24 ☒ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☒ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Mike Helgerson Organization *(if applicable)* MAPA	Address 2222 Corning St City/Zip 68102 Phone 402-444-6669 Email Mhelgerson@mapacog.org	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name CRAIG MARKLEY Organization *(if applicable)* IOWA DOT	Address 800 LINCOLN WAY City/Zip AMES 50010 Phone 515-239-1027 Email CRAIG.MARKLEY@DOT.IOWA.GOV	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Joe Parsons Organization *(if applicable)* Iowa Interstate RR	Address 5900 6th ST SW City/Zip Cedar Rapids IA 52404 Phone 319 298 5418 Email jbparsons@iaisrr.com	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

2016 **IOWA RAIL PLAN**

Sign-in Sheet
Issues-Based Workshop
September 24, 2015

Contact Information		Notification & Demographic Information *(Optional)*			
		How were you notified about the meeting?	Gender	Age Range	Race/Ethnicity
Name Ed Engle Organization *(if applicable)* Iowa DOT	Address City/Zip Phone Email	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other ______	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
Name Organization *(if applicable)*	Address City/Zip Phone Email	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other ______	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other
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Name Organization *(if applicable)*	Address City/Zip Phone Email	☐ Email ☐ Social Media ☐ Letter ☐ Postcard ☐ Other ______	☐ Male ☐ Female	☐ 15-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65+	☐ White ☐ Hispanic/Latino ☐ Black or African American ☐ American Indian/Alaska Native ☐ Asian ☐ Native Hawaiian/Pacific Islander ☐ Other

Invitation List

FIRST NAME	LAST NAME	ORGANIZATION
Fjay	Allison	10-15 Regional Transit Agency
Jim	Dougherty	ADM
Brett	Madison	ADM
Joel	Brinkmeyer	Agribusiness Association of Iowa
John	Riches	Alcoa
Kevin	Burke	Alliant Energy Transportation/ CR & IA City Railroad
Derrick	James	Amtrak
Adam	Krom	Amtrak
Craig	Kroeger	Appanoose County Community Railroad (APNC)
Melody	McHugh	Army Corps of Engineers
Ron	White	ARTCO Fleeting Service
Becky	Nardy	ATURA Transportation Planning Affiliation
		Barr Nunn Transportation Inc.
		Beisser Lumber Co.
Denise	Bulat	Bi-State Regional Commission
Gena	McCullough	Bi-State Regional Commission
Becky	Passman	Bi-State Regional Commission
Sarod	Dhuru	BNSF Railway
Paul	Nowicki	BNSF Railway Company
Fenner	Stevenson	Boone & Scenic Valley Railroad & Museum
Brian	Keierleber	Buchanan County Engineers Office
Steve	Hoth	Burlington Junction Railway
Andrew	Hoth	Burlington Junction Railway (BJRY)
Jonathon	Wingate	Burlington Junction Railway (BJRY)
Robert	Wingate	Burlington Junction Railway (BJRY)
Steve	Hoambrecker	Burlington Urban Service
Brian	McClatchey	Cambus
Herb	Jones	Canadian Pacific Railroad
Brad	Hildebrand	Cargill
Larry	Rooney	Cartersville Elevator Inc.
Justin	Fox	CDM Smith
Jeff	Woods	Cedar Rapids and Iowa City Railway Co. (CRANDIC) Railroad
Mark	Buschkamp	Cherokee Area Economic Development Corporation
Kurt	Scheible	Citibus
Greg	Reeder	City of Council Bluffs
Mayor Roy	Buol	City of Dubuque
Mayor Gordon	Canfield	City of Grinnell
Geoff	Fruin	City of Iowa City
Tom	Determann	Clinton Regional Development Corpoartion
Jim	Kvedaras	CN Railroad
Vicky	Robrock	Coralville Transit
Chad	Lambi	CRANDIC

Jack	Parliament	D & I Railroad Co. (DAIR)
Elizabeth	Presutti	DART
Troy	Russell	Decker Truck Line, Inc.
Susan	Dixon	Department of Homeland Security
Dave	Johnston	Department of Homeland Security & Emergency Management
Todd	Ashby	Des Moines Area Metropolitan Planning Organization
Zach	Young	Des Moines Area Metropolitan Planning Organization
Jack	Sawyer	Des Moines Transportation Company
William	Boal	Drake University
Steve	Falck	Environmental Law and Policy Center
Shirley	McGuire	Federal Motor Carrier Safety Administration
Kyle	Gradinger	Federal Railroad Administration
Rob	Toncar	FedEx
Teresa	Valenta	FedEx
Caitlin	Hughes Rayman	FHWA
Nicole	Katsikides	FHWA
Sean	Litteral	FHWA
Mike	LaPietra	FHWA
John	Wahlert	Firestone
Murry	Fitzer	Florilli Transportation
Stacy	Timperley	Forbs
Beth	Bilyeu	Forest City Economic Development
Wynne	Davis	FRA
Peter	Schwartz	FRA
Dave	Wilcox	Global Processing Inc.
Jay	Byers	Greater Des Moines Partnership
Greg	Jenkins	Greater Muscatine Chamber of Commerce & Industry
Dave	Coppess	Heartland Co-Op
Tom	Hauschel	Heartland Co-Op
Todd	Phillips	Heartland Co-Op
Steve	Engemann	Hermann Sand & Gravel
		HNI
		Hormel Foods Corp.
Karl	Kruse	Hy-Vee, Inc.
Peter	Rickershauser	Independent Board Member Iowa Interstate Railroad
Ron	Lang	Independent Trucker
Tim	Woods	International Traders of Iowa
Basak	Aldemir-Bektas	InTrans
Jing	Dong	InTrans
Delia	Moon-Meier	Iowa 80 Group
Rebecca	Neades	Iowa City Chamber
Chris	O'Brien	Iowa City Transit
		Iowa Corn Processors Glidden
Harold	Hommes	Iowa Department of Agriculture and Land Stewardship

Jennifer	Wright	Iowa Department of Natural Resources
Brett	Tjepkes	Iowa Department of Public Safety
John	Adam	Iowa Department of Transportation
Stu	Anderson	Iowa Department of Transportation
Phou	Baccam	Iowa Department of Transportation
Kyle	Barichello	Iowa Department of Transportation
Bonnie	Castillo	Iowa Department of Transportation
Mike	Clayton	Iowa Department of Transportation
Mitchell	Dillavou	Iowa Department of Transportation
Ed	Engle	Iowa Department of Transportation
Major Lance	Evans	Iowa Department of Transportation
Sam	Hiscocks	Iowa Department of Transportation
Laura	Hutzell	Iowa Department of Transportation
Sandra	Larson	Iowa Department of Transportation
David	Lorenzen	Iowa Department of Transportation
Mark	Lowe	Iowa Department of Transportation
Craig	Markley	Iowa Department of Transportation
Amanda	Martin	Iowa Department of Transportation
Diane	McCauley	Iowa Department of Transportation
Phil	Meraz	Iowa Department of Transportation
Phil	Mescher	Iowa Department of Transportation
Tamara	Nicholson	Iowa Department of Transportation
Garrett	Pedersen	Iowa Department of Transportation
John	Selmer	Iowa Department of Transportation
Sam	Shea	Iowa Department of Transportation
Cindy	Shearer	Iowa Department of Transportation
Paul	Trombino III	Iowa Department of Transportation
Jeff	Von Brown	Iowa Department of Transportation
John	Wilson	Iowa Department of Transportation
Adam	Broughton	Iowa DNR
Joseph	Rude	Iowa Economic Development Authority
Cindy	Litwiller	Iowa Falls Area Development Corporation
Don	McDowell	Iowa Farm Bureau
Joanne	Tinker	Iowa Governor's Traffic Safety Bureau
Carrie	Evans	Iowa Interstate Railroad
Jerry	Lipka	Iowa Interstate Railroad
Joe	Parsons	Iowa Interstate Railroad
Cheryl	Rangel	Iowa Interstate Railroad
Kathy	Evert	Iowa Lakes Corridor Development
Robert	Palmer	Iowa League of Cities
Brenda	Neville	Iowa Motor Truck Association
Amy	Homan	Iowa Northern Railway Company
Dan	Sabin	Iowa Northern Railway Company
Dan	Sabin	Iowa Northern Railway Company

Stephanie	Carlson	Iowa Pork Producers Association
Renee	Schachterle	Iowa River Railroad Inc. (IARR)
Tim	Borich	Iowa State University
Judi	Eyles	Iowa State University
Scott	Grawe	Iowa State University
Bobby	Martens	Iowa State University
David	Fellon	Iowa Traction Railway Co. (IATR)
Michael	Johns	Iowa Traction Railway Co. (IATR)
Cecil	Wright	Iowa Utilities Board
Steve	Lallier	J. B. Hunt Transport
Gary	Whicker	J. B. Hunt Transport
		Jacobson Companies Jacobson Transportation Company
Kent	Jordan	Jacobson Companies, Jacobson Transportation Company
		John Deere
Walt	Valiant	Kent
Osama	Shihadeh	Kent Corporation
Scott	Cirksena	Kenworth Truck Company
Mike	Hadley	Keokuk County Board of Supervisors
Nathan	Johns	Keokuk Junction Railway Co. (KJRY)
Scott	Stabbe	Key Cooperative
Ernie	Steffensmeier	Lee County Engineers Office
Carla	Eysink	Marion County Development Commission
Michael	Helgerson	Metropolitan Area Planning Agency
Greg	Youell	Metropolitan Area Planning Agency
Brad	Neuman	Metropolitan Planning Organization of Johnson County
Kent	Ralston	Metropolitan Planning Organization of Johnson County
		MidAmerican Energy Company
Melanie	Gray	Monsanto
Brad	Neuman	MPO of Johnson County
Brad	Spratt	Muscatine Power and Water
Bill	Winkelman	National Pork Board
Michael	Dolch	Office of United States Senator Joni Ernst
Francis	Edeker	Operation Life Saver
Dave	Silverio	Ottumwa Transit
		Owen Industries Carter Lake
Kip	Wills	PHMSA
Richard	Grenville	PortKC, Kansas City, MO
Terry	Bailey	Pottawattamie County Growth Alliance
Jason	Hutcheson	Professional Developers of Iowa
Libby	Ogard	Prime Focus LLC
Rick	Hunsaker	Region XII Council of Governements
Ben	McLean	Ruan
Kevin	Ekstrand	Scarbrough International, LTD
Corey	Nikkel	Schillinger Genetics, Inc.

Mike	Norris	Southeast Iowa Regional Planning Commission
Leesa	Lester	Southern Iowa Trolley
Mike	Steenhoek	Soy Transportation Coalition
Jantina	Wennerstrom	Soy Transportation Coalition
Liz	McDonald	SSAB, Inc.
John	Tobin	SSAB, Inc.
Dave	Purdy	State of Nebraska Passenger Rail Advocate
David	Ewing	States for Passenger Rail
Steve	Ford	Stonebridge Ltd.
Brent	Vanderleest	Sully Transportation
Randy	Draper	Target
		TMC
		Trinity Towers Newton
Col. Craig	Baumbartner	U.S. Army Corps of Engineers
Christine	Schrage	UNI-College of Business
Wayne	Borg	Union Pacific Railroad
Kyle	Nodgaard	Union Pacific Railroad
Kelli	O'Brien	Union Pacific Railroad
Rabah	Amir	Uoflowa - Economics
Ann	Campbell	Uoflowa - Logistics
Paul	Hanley	Uoflowa - Transportation Policy
Mark	Peterson	UPS
		Van Wyk Freight Lines Inc.
Matt	Decker	Vermeer
Bill	Neeses	West Central Co-Op
Bill	Horan	Western Iowa Energy, LLC
Thomas	Kopp	World Food Processing, LLC- St. Paul
Tina	Draur	XPO Logistics
Tyler	Vande Vorde	XPO Logistics
Heather	Clark	
Jackie	Corletto	
Shane	Cullen	
Natalie	Hammer	
Onna	Houck	
Jeff	Kurtz	
Daniel	LaKemper	
Raymond	Lang	
Dennis	Miller	
Charles	Monte Verde	
Calvin	Nutt	
Jim	Obradovich	
Henry	Posner III	
Joshua	Sabin	
Mark	Sabin	

Daniel	Sanchez	
Alan	Schroeder	
Lon	Van Gemert	

F.4 Survey Summary

HDR/IOWA DEPARTMENT OF TRANSPORTATION

Survey Results

State Rail and Freight Plan: Trends, Concerns, Comments, and Future Outlook Analysis

IOWA STATE UNIVERSITY
COLLEGE OF BUSINESS

1/14/2016

Table of Contents

Executive Summary

Objective

Implement a public survey and analyze the results to summarize the support, concern, and interest among Iowa transportation system stakeholders for HDR and the Iowa Department of Transportation (IADOT). This report combines a summary and analysis of the results from the public survey in partnership with CyBIZ Lab addressing the support, concern and interest among Iowa transportation stakeholders.

Findings

- Almost half of survey respondents (48%) are in the 51-65 age range.
- The majority of survey respondents (39%) indicated they are involved with Iowa transportation as a public agency.
- The category "Safety and Security" was the most answered section with 102 respondents (47%).
- Overal**l, respondents are concerned with the infrastructure for all modalities in Iowa** and want more funding to rebuild highways, create new rail connections and have more transloading facilities.
- The most pivotal transportation issues are **Iowa's infrastructure** and the **truck driver shortage**.
- 74% of the respondents suggest that funding should be targeted at increasing access to barge facilities.
- The barrier in using intermodal carrier services chose majority of respondents chose was **location**.
- There is a clear pattern from respondents that there is a **shortage of containers available** in Iowa.
- With more connections to major Midwest hubs were made, more passengers would travel by rail for business.
- 75% of the respondents want **equal to larger investment into passenger rail** than other transportation modes.
- Respondents are more concerned with the **connections rail has** to other cities than any other category.

Process

1. Review State Rail and Freight Plans to familiarize with process.
2. Interview key Iowa transportation stakeholders to obtain common topics that will be addressed.
3. Participate in the Issues-Based Workshop public forum and record discussions.
4. Generate survey questions for HDR/Iowa Department of Transportation (DOT) approval.
5. Collaborate with HDR to create optimal survey and distribution dates.
6. HDR rolls-out the survey utilizing their network; CyBIZ Lab monitors responses.
7. Gather all data after survey close date and identify common elements.

8. Download, clean, and send raw results to HDR.
9. Review raw data, analyze and summarize into a final report.

Overview

The survey this report analyzes and summarizes was designed to capture the current perception of industry and market players utilizing Iowa's rail and freight infrastructure. The survey was distributed to an audience of stakeholders of transportation in Iowa. Due to the way responses were collected (via website advertisement), it is difficult to estimate how many people the survey was sent to directly; however, 272 individuals responded to the survey. Responses were collected between the dates of October 23 and November 15, 2015, with reminders sent midway by HDR.

Of the 272 survey respondents: **100** responded to the Economic Workforce section, **66** responded to the Multimodal Networks section, **54** responded to the Multimodal Link section, **82** responded to the Passenger Rail section and **102** responded to the Safety and Security section. Note that individual respondents were able to select multiple sections.

Survey Design

The survey has five individual sections categorized by the type of questions asked in each section. This survey was uniquely designed to take a respondent through different sections of the survey based on their answer to a qualifying question. This route was taken to increase the response rate to questions by pinpointing which type of questions respondents would be interested in answering and reducing the number of questions they answered overall (for a quicker and simpler experience). For example: If a respondent answered Passenger Rail and Multimodal Links as their interests, they were taken through only those two sections.

Because of the nature of this design, and the general impatience of respondents in taking surveys, the rate at which respondents drop out of the survey increases the more questions they answer. Those who answered that they are interested in all or many of the categories have higher drop rates because of the amount of questions they have to answer. Our team considered these issues and worked with HDR and IADOT to reduce this drop rate with this design and have as many respondents finish the survey as possible.

Report Structure

This report covers the questions asked in the State Rail and Freight Plan survey, the respondents' answers and their overall comments. The report is organized by topical section, and each question is analyzed and summarized based on the responses. The beginning of every section analyzes the comments and overall trends for that particular section, and then continues into each question separately.

Conclusions are made from each question and supported by data from the survey and the Issues-Based Workshop summary.

Demographics

A total of 272 people responded to the survey. Of this, 219 indicated their age. The majority of respondents (48.4%) indicated they fell in the 51-65 age range. The next closest age range was 26-50 (40.6%). Figure 1 illustrates the age breakdown of all participants. A total of 103 respondents entered their zip code. After analyzing the zip codes, it appears that the largest represented area was 50010 – or the Ames area.

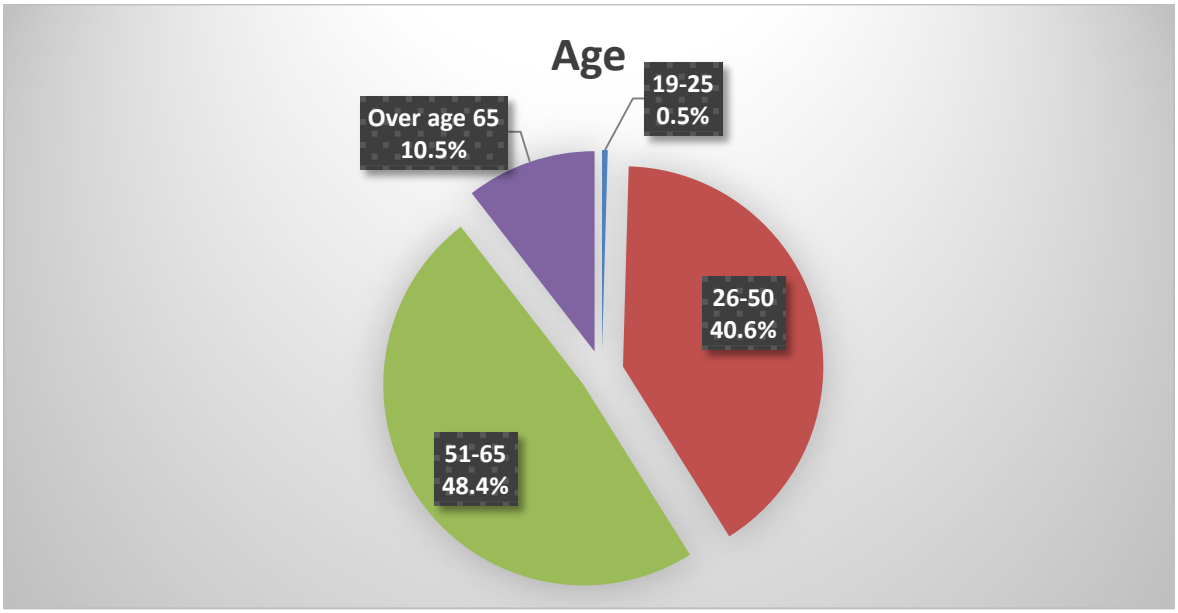

Figure 1: Age of Participants

While there was a wide representation of interests reported, there is some potential for bias due to a large representation of respondents that have experience within a given field as seen in Figure 2 of the demographic questions. A total of 220 respondents indicated their primary involvement with Iowa transportation. The largest group of respondents (39%) indicated their primary involvement with transportation in Iowa identified as a member of a "public agency" (see Figure 2). The next highest representation (20%) identified as "individuals." Class I Railroads and Regional Railroads represented some of the lowest respondent groups (4% each), and Shortline Railroads represented only 1% of respondents. Emergency responders accounted for at least four responses; however, these respondents identified this in the "other" category.

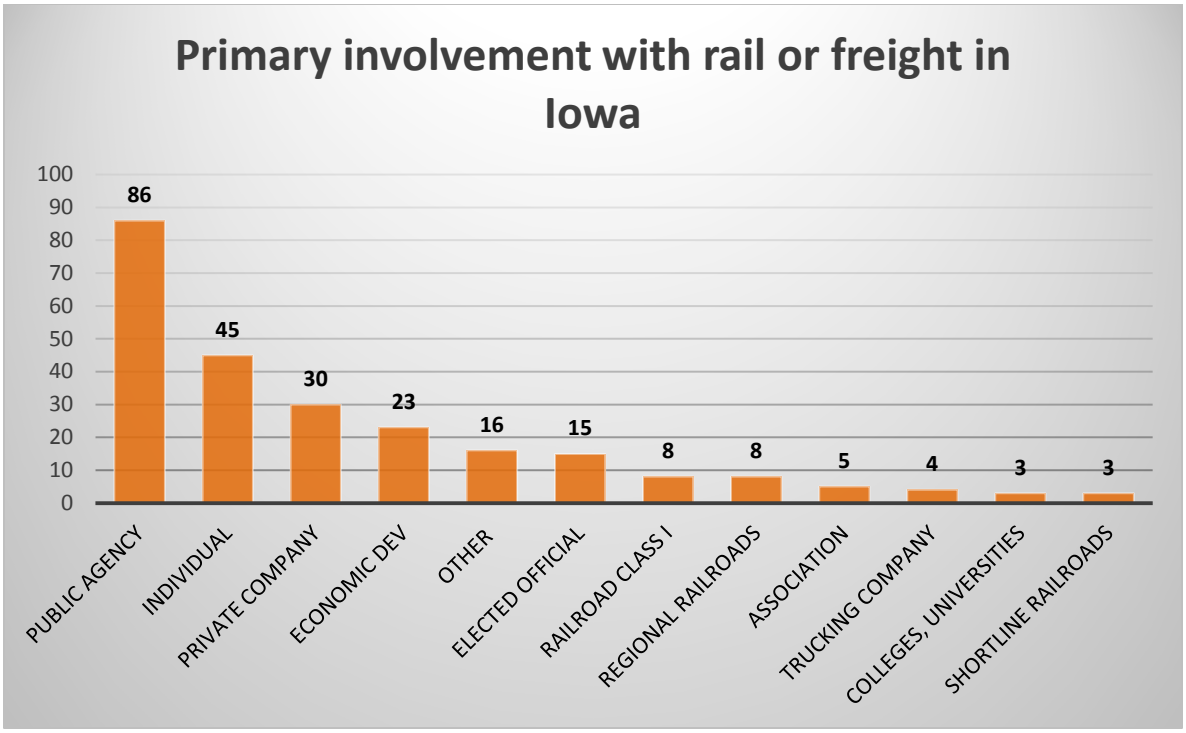

Figure 2: Participant Involvement

Economic and Workforce Development

The Economic and Workplace Development section of the survey focuses on the participants' current perception of various transportation modes in Iowa and their relationship using them. One hundred participants responded to these questions. The questions asked to produce these comments include:

- What improvements would make transportation modes in Iowa more competitive?
- Why/why not are transportation modes competitive in Iowa?

In the Economic and Workforce Development portion for the survey, respondents mentioned **rail** and he need for additional facilities the mot. Respondents also mentioned the improvement of the facilities located near **rivers**. **Competition** was mentioned to be more aggressive in trucking than rail, and comments on **infrastructure** mention improving bridges, highways and loadout facilities. This seems to enforce the topics discussed in the Issues-Based Workshop as well. A closer look at the comments exposed major areas of concern involving increasing efficiency, funding infrastructure improvements, increasing rail access for users, and increasing the number/access of river facilities.

How efficient is the overall transportation system in Iowa?

Summary: There were 91 respondents for this question. The majority of respondents, 61%, indicated that Iowa's current transportation system is "Moderately Efficient." Only two respondents indicated that the transportation system was not efficient at all, while only three respondents indicated that it was extremely efficient.

Conclusions: From reviewing the results of the questions in Figure 3, it can be seen that the overwhelming majority sees that Iowa's transportation system is efficient with room for improvement. Learning from the comments section and this question, it is understood among those who utilize the system, that though there are some infrastructure issues, the efficiency of the system as a whole is moderate to very efficient.

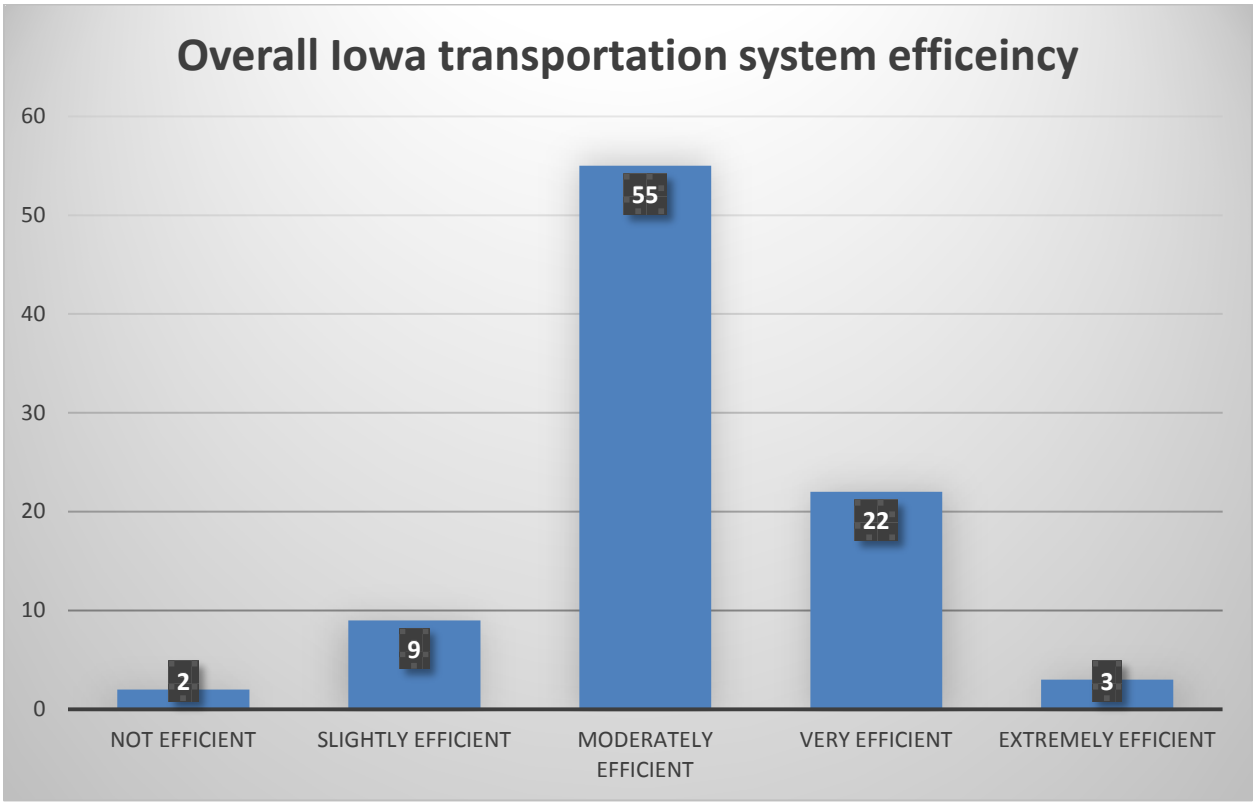

Figure 3: Iowa's transportation system efficiency

What are the current hurdles in the transportation system that may block future economic development?

Summary: Eighty respondents answered this question and had the choice to select all answers that applied. The majority of respondents (55%) indicated that "infrastructure" was one of the biggest hurdles that would affect economic development. This topic appeared highly ranked and mentioned in other sections of the survey comments. The next biggest hurdle indicated was "connectivity" (37%) followed by "access to number of viable modes" (28%). Only 10 (9%) of respondents indicated that "Training/Education" would be a hurdle that affects Iowa's economic development. Figure 4 highlights what respondents indicated as the current hurdles in the transportation system.

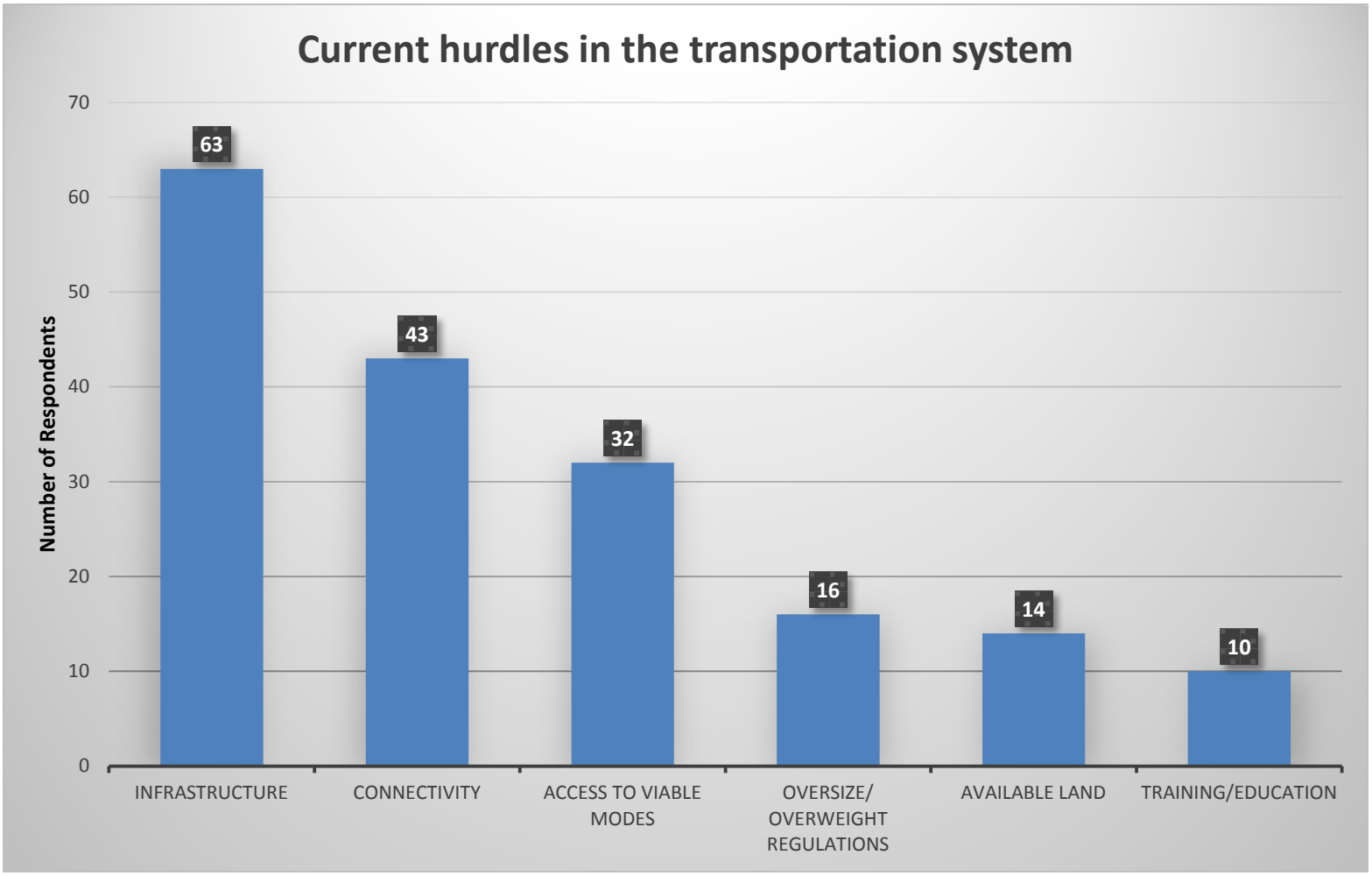

Figure 4: Current hurdles in the transportation system

Conclusions: It is clear that the infrastructure of Iowa's roads, bridges and facilities are the main concerns. This affects both connectivity and access to other modes. Also from the comments and discussions at the workshop, this concern mainly encompasses trucking transportation.

Using a scale from 1 to 5, rank what industry developments and trends that are most important for decisions related to the rail and freight transportation system (1 is most important, 5 is least important).

Summary: A total of 69 respondents answered this question. Out of the five different options to rank, "Transportation Connectivity" was ranked first the most number of times with 30 respondents putting it at the top. "Technology Advancements" had the lowest number of first place rankings with only four votes, however "Government Regulation" was ranked last the most with 36 votes. When analyzing the results of the rankings, the weighted average was taken for each of the categories and compared in Figure 5. The closer the category is to the center, the higher the category is rated.

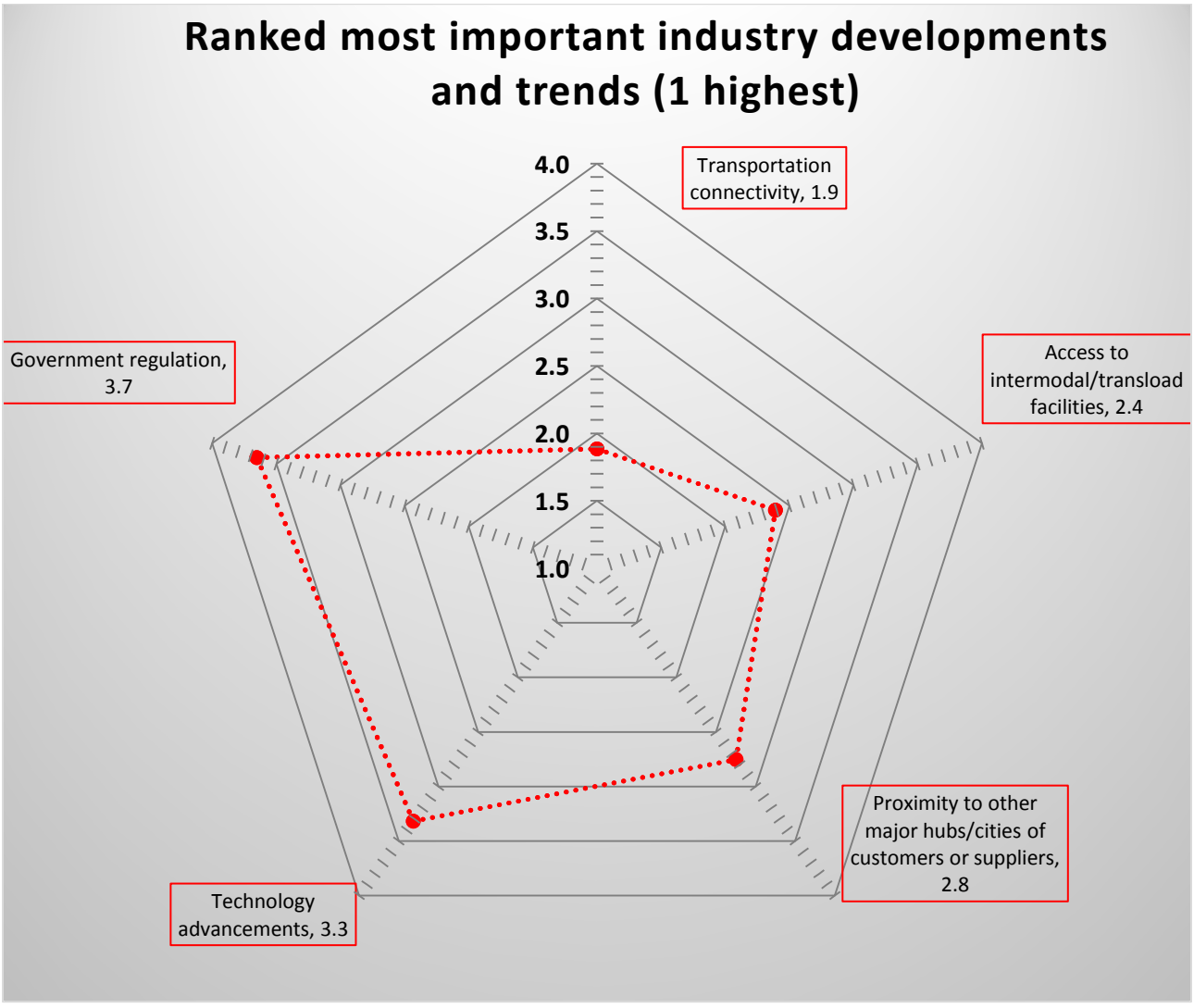

Figure 5: Ranked industry developments and trends (weighted average)

Conclusions: From the weighted average of respondents' answers, rankings from most important to least are as follows: transportation connectivity, access to intermodal/transload facilities, proximity to

other major hubs/cities of customers or suppliers, technology advancements and last government regulation. Transportation connectivity is the highest ranked industry development and trend.

Should Iowa DOT funding be targeted at increasing access to barge facilities? If yes, where?

Summary: A total of 78 respondents answered this question. The majority of respondents (41%) indicated that funding should be focused on both the Missouri and Mississippi Rivers. If only one river could be focused on, 28% of respondents overwhelmingly indicated that facilities along the Mississippi River should be funded first – compared to the Missouri River funding priorities of 5%. There were 20 respondents (26%) who indicated that funding shouldn't be targeted at increasing access to barge facilities at all. Larger trends for barge facility access can be seen in Figure 6.

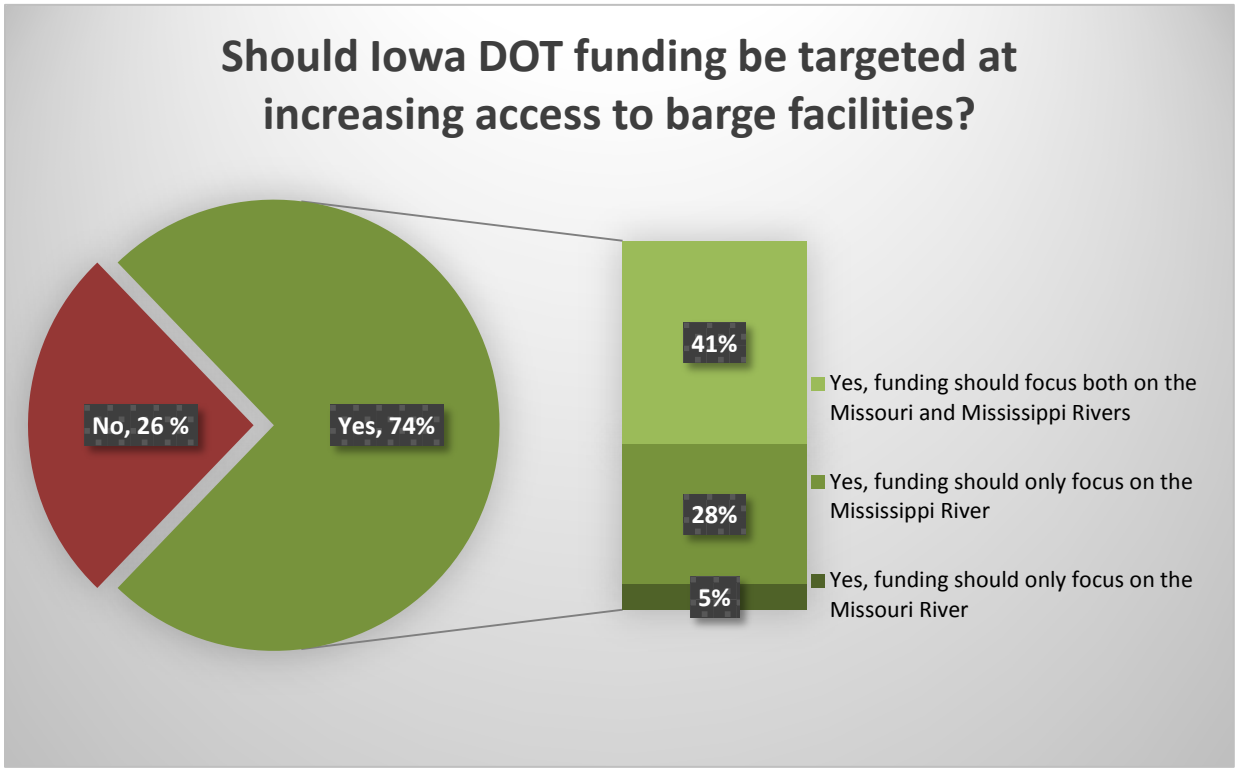

Figure 6: Funding targeted at increasing barge access and where

Conclusions: When the data is grouped into just "Yes" and "No" categories, some larger trends can be seen in Figure 6. With 74% of the respondents suggesting that funding should be targeted at increasing access to barge facilities, it is clear that barge infrastructure is suffering. Also, when pinpointing which river needs more support, the Mississippi is on top; yet the majority answered that both need funding.

Are there federal and/or state transportation regulations that are a hindrance or obstacle to economic competitiveness in the state?

Summary: A total of 56 respondents answered this question. There is a near even split between those who believe regulations are an obstacle to economic competitiveness, and those who do not see regulations being in the way of growth. The latter took the majority with just 52%. For those who indicated regulations were an obstacle, 15 entered a comment as to why. The most popular comment entailed "truck weight limits" (or similar) as being an obstacle to overcome. Some unique comments from this question included development of barriers along the Mississippi River and union labor contracts. Figure 7 illustrates the percentages of responses that indicate if regulations are hindrances in economic competitiveness.

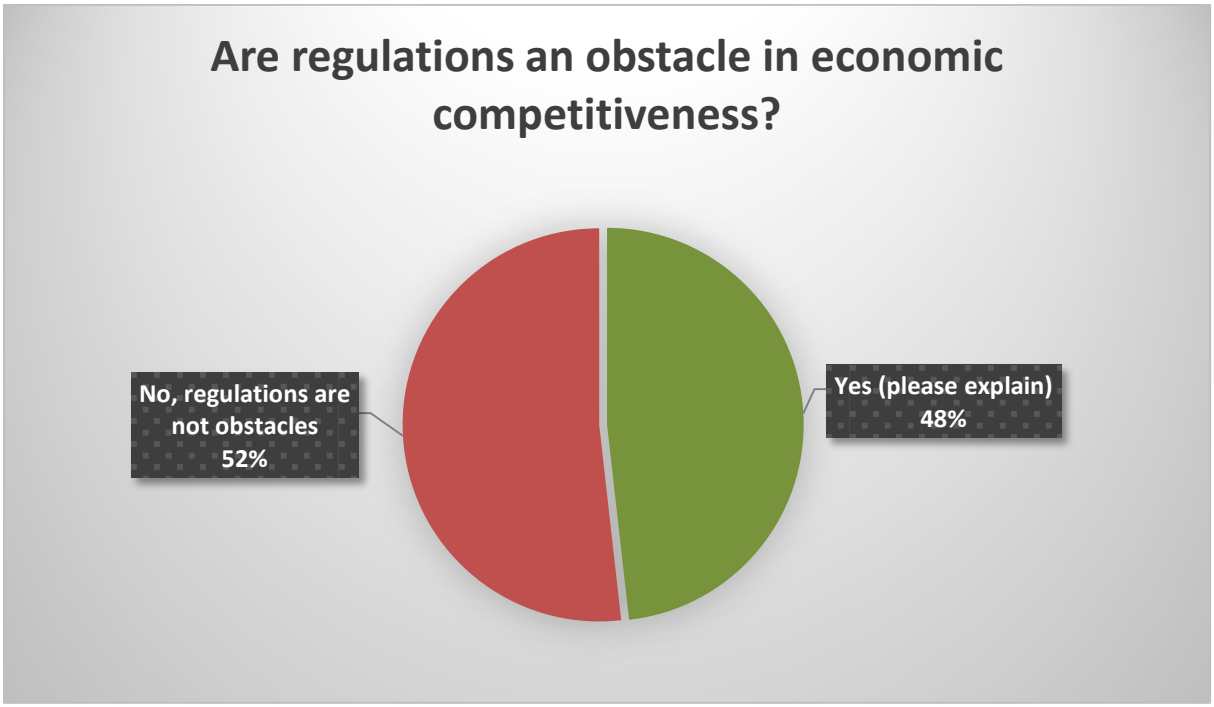

Figure 7: Are regulations an obstacle in economic competitiveness

Conclusions: Since there are many different ways regulations can affect industries, some parties benefit and some do not. For example, in the recent tank-car regulations[1], organizations and companies challenge safety regulations that would support other companies in the industry providing more services for safer rail systems. From the comments for those who answered "Yes", the underdevelopment of riverside infrastructure is mentioned again which seems to be a general theme to survey taker responses.

[1] Wronski, Richard. Chicago Tribune: "*New federal regulations on tank-cars*", 6/28/15. http://www.chicagotribune.com/news/ct-train-hazmat-safety-met-20150629-story.html

Multimodal Networks

The multimodal networks section of the survey focuses on the participants' current perception of regulations, current issues and education across different modes of transportation. 66 participants responded to these questions.

What are the most pivotal transportation issues for freight shipping in the state? (1 is the most pivotal, 6 is the least pivotal)

Summary: A total of 53 respondents answered this question. Out of the six options to choose from, "infrastructure" was ranked the highest (number 1) the most amount of times. It was also ranked the second highest (number 2) the most amount of times. "truck driver shortage" followed closely behind with 16 respondents indicating it was the second most pivotal transportation issue. The choice "equipment supply/availability" was only ranked as the most pivotal issue once, but was ranked last in comparison to "political uncertainty".

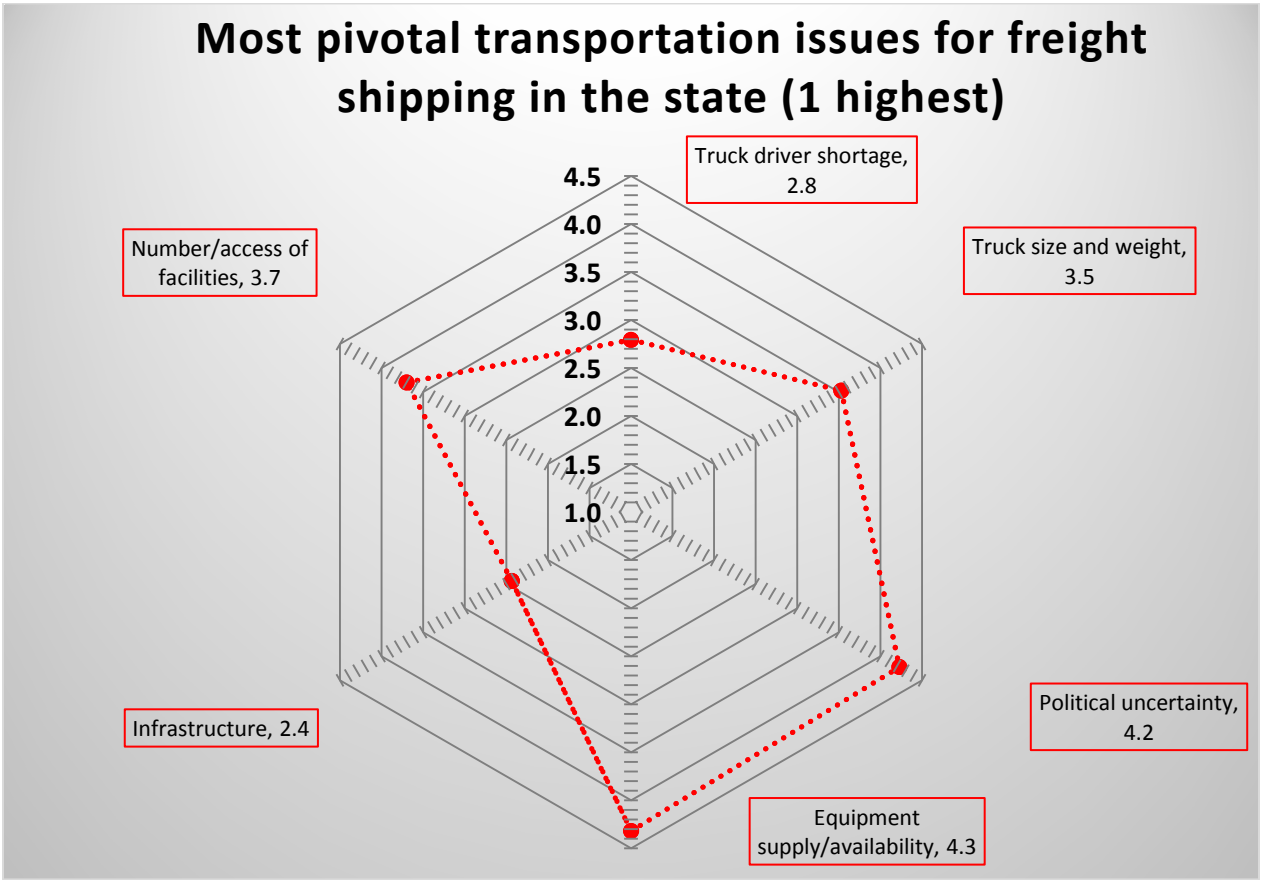

Figure 8: Most pivotal transportation issues for freight (weighted average)

Conclusions: When analyzing the results of the rankings, the weighted average was taken for each of the categories and compared in Figure 8. The closer the category is to the center, the higher the category is rated. From the weighted average, ranks from most important to least is as follows: Infrastructure, Truck driver shortage, Truck size and weight, Number/access of facilities, Political uncertainty and Equipment supply/availability.

Are oversized truck and weight permits easy and accessible to obtain?

Summary: A total of 38 respondents answered whether or not permits were easy to obtained, and only three expressed permits are not easy to obtain. All three of the respondents indicated that "online access" would make oversize permits easier to obtain, while only one respondent felt that the overall process could be quicker. The majority of respondents (92%) indicated that the permits are already accessible and easy to obtain.

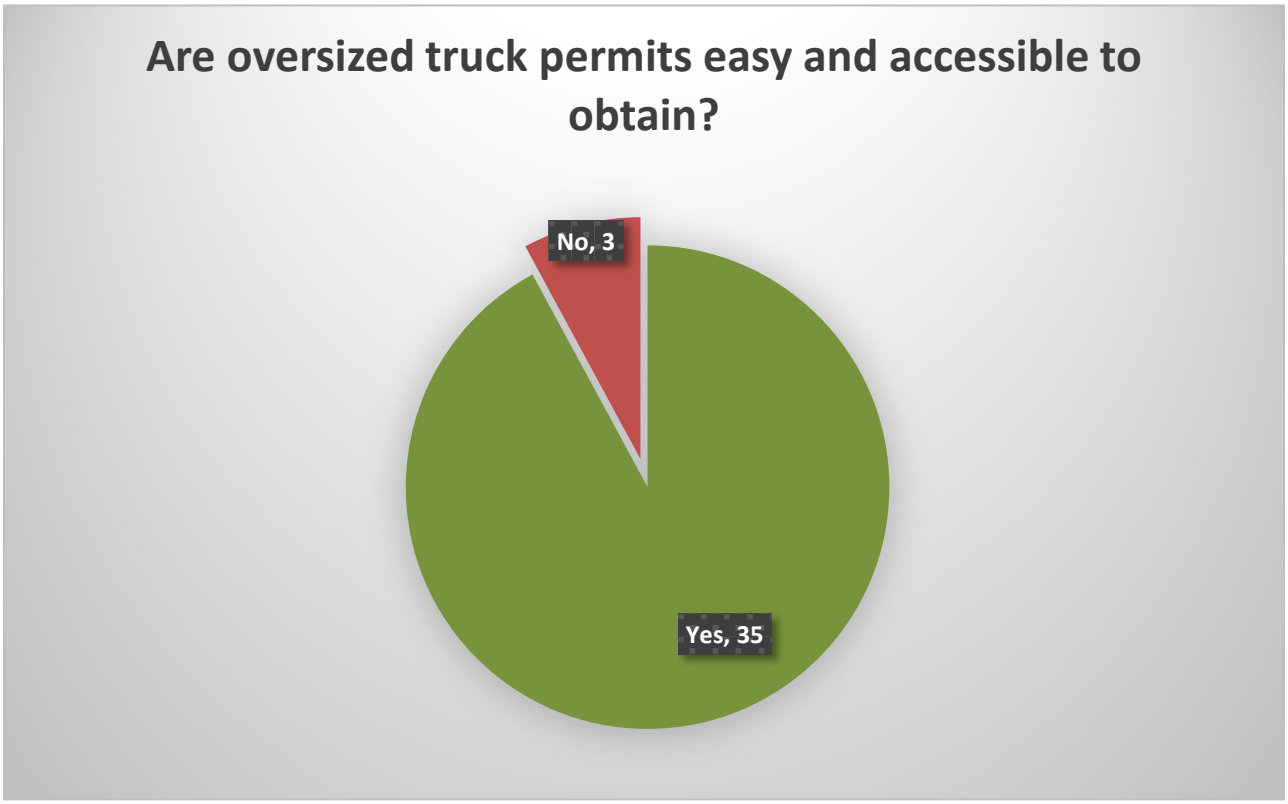

Figure 9: Accessibility of oversized truck permits

Conclusions: This question has a straightforward response that indicates the large majority does not struggle in obtaining permits.

Is there enough education regarding all modes of transportation and the benefits it provides for freight shipments?

Summary: A total of 43 respondents answered this question. The majority of respondents (56%) indicated that there are not enough education resources about transportation options in Iowa. Only seven respondents (16%) believed there was enough education and knowledge about the different transportation modes available. The remaining 28% think there are enough education resources available, but they may not be used appropriately – as there is a lack of knowledge about different mode options among shippers.

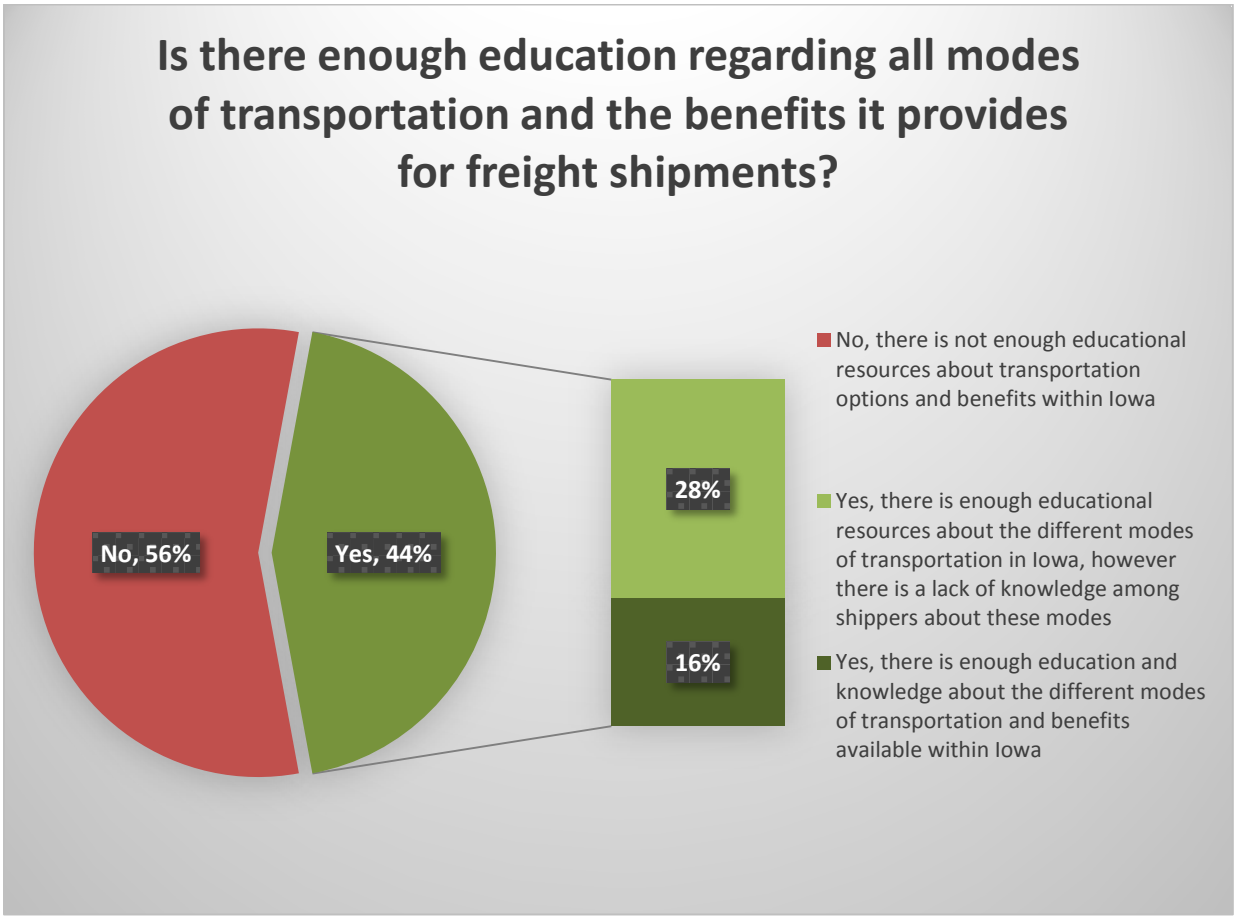

Figure 10: Availability of education for all modes of transportation

Conclusions: When asked about the availability of education and benefits provided, respondents were closely tied but leaned toward saying there was not enough education. When those who answered "Yes" indicated that "a lack of knowledge among shippers about modes" is the major concern.

Multimodal Links

The multimodal links section of the survey focuses on the participants' current perception of trainload connection, access and usage. Fifty-four participants responded to these questions.

Note that due to the low amount of responses in this section, there is a concern in stating that the results are statically significant. Since this was not all the data used in this report, findings were incorporated from the Issues-Based Workshop to confirm these results.
There weren't many comments in this section of the survey due to the lower number responding to this section; however, the common themes seem to involve **Chicago**, **Iowa**, and **increasing investment**. It appears that **legislature** and **politics** are also common throughout responses.

Do you use domestic intermodal container service and/or international intermodal container service?

Summary: Figure 11 highlights the responses of the 12 respondents who answered this question. It appears that most people either use both international and domestic services, or none at all. Only two respondents indicated they only use international container services, and none of the respondents solely use domestic container service.

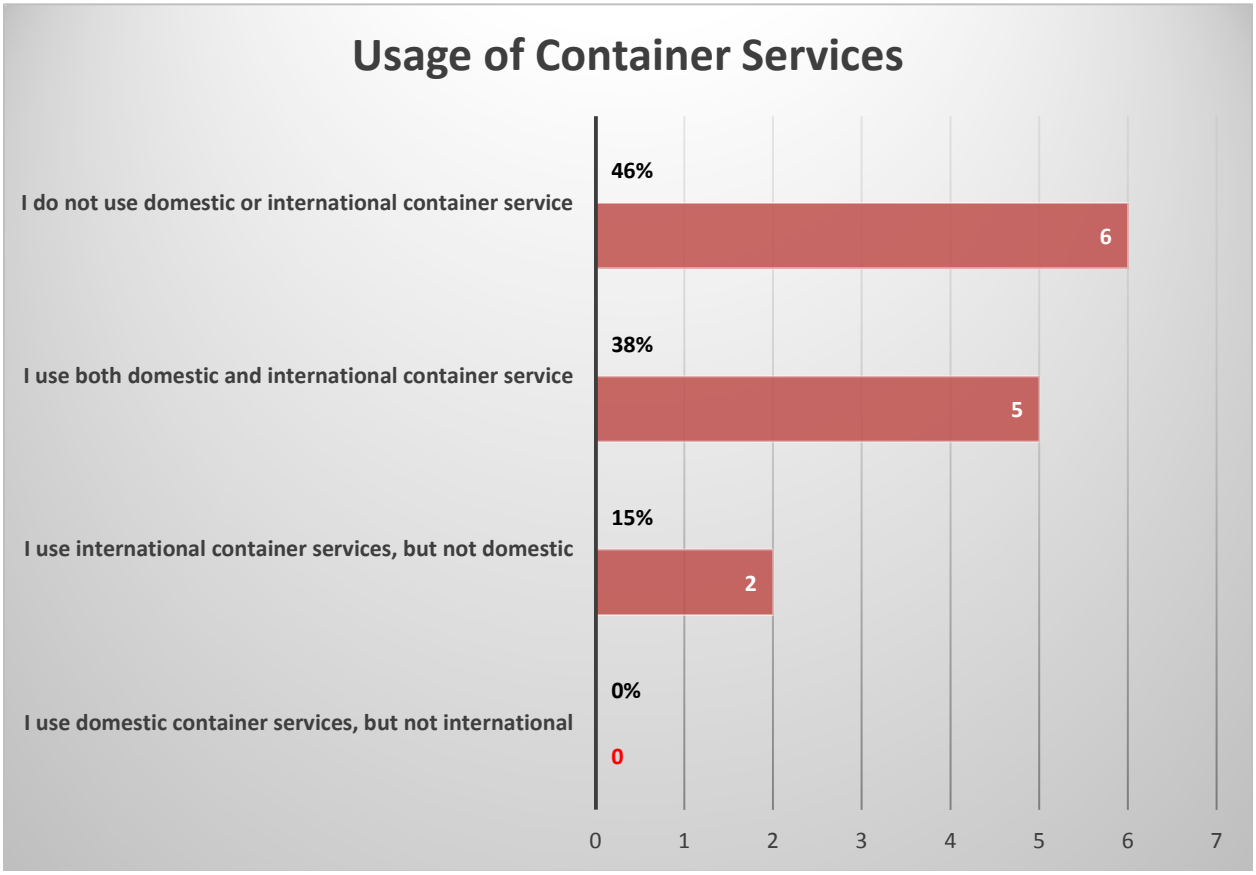

Figure 11: Usage of container services

Conclusions: When examining the results of this question, there are a low number of responses. In fact, many questions in this section have a lower number of responses, but it does not mean the results are irrelevant. In the case of usage, respondents are split between both ends of container use.

Is Iowa's intermodal access sufficient to meet your business needs?

Summary: Figure 12 displays the responses of the 13 respondents who answered this question. The majority of respondents (69%) indicated that Iowa's intermodal access is not sufficient to meet their needs. Four respondents (31%) believe that Iowa's intermodal access is sufficient.

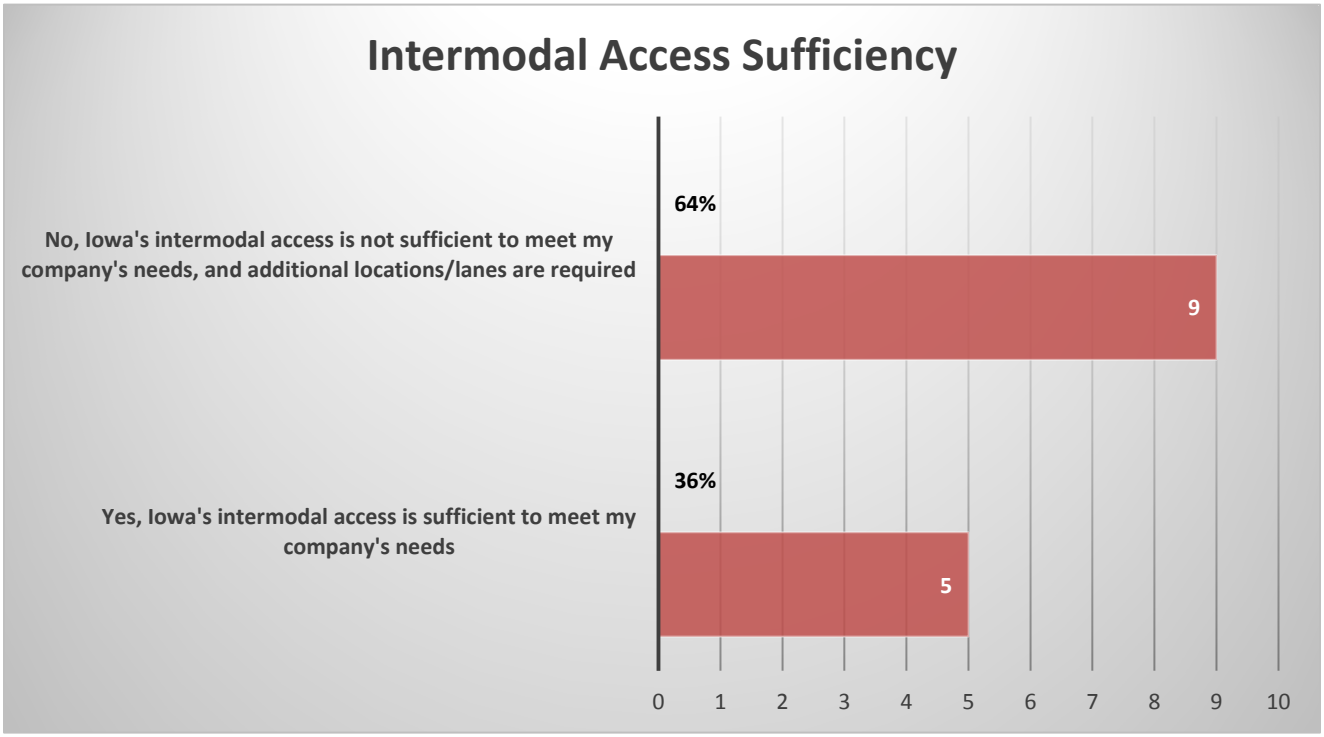

Figure 12: Intermodal access sufficiency

Conclusions: From the respondents' answers, it can be said that Iowa's intermodal access can be improved through infrastructure investment.

What are the barriers to your use of intermodal container service?

Summary: A total of 12 respondents answered this question, selecting all that apply. Respondents could select all of the barriers they felt were applicable. The most indicated barrier with 75% of respondents choosing was "location of intermodal facilities." The next biggest barrier to the use of intermodal container service was "equipment availability" with 50% of respondents indicating it affected their use of intermodal services. Only two respondents indicated that their company does not have any barriers to intermodal container service use.

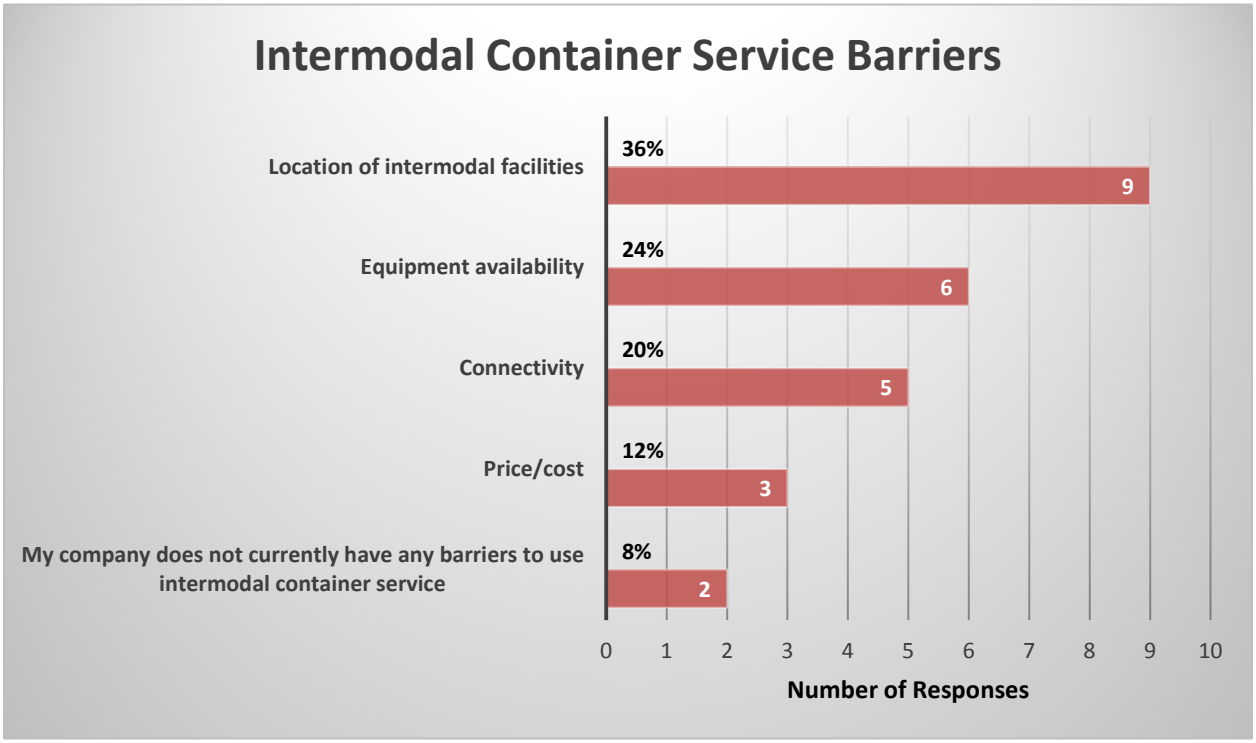

Figure 13: Intermodal container service barriers

Conclusions: The barrier that majority of respondents indicated was location, which means it is even more important to ensure that infrastructure and alternative transportation is available to facilitate reaching these facilities.

Is there sufficient container availability?

Summary: A total of 12 respondents answered this question. The majority of respondents (83%) indicated that there are not enough containers available in Iowa. The other 17% indicated that there are enough containers available, but better utilization is needed.

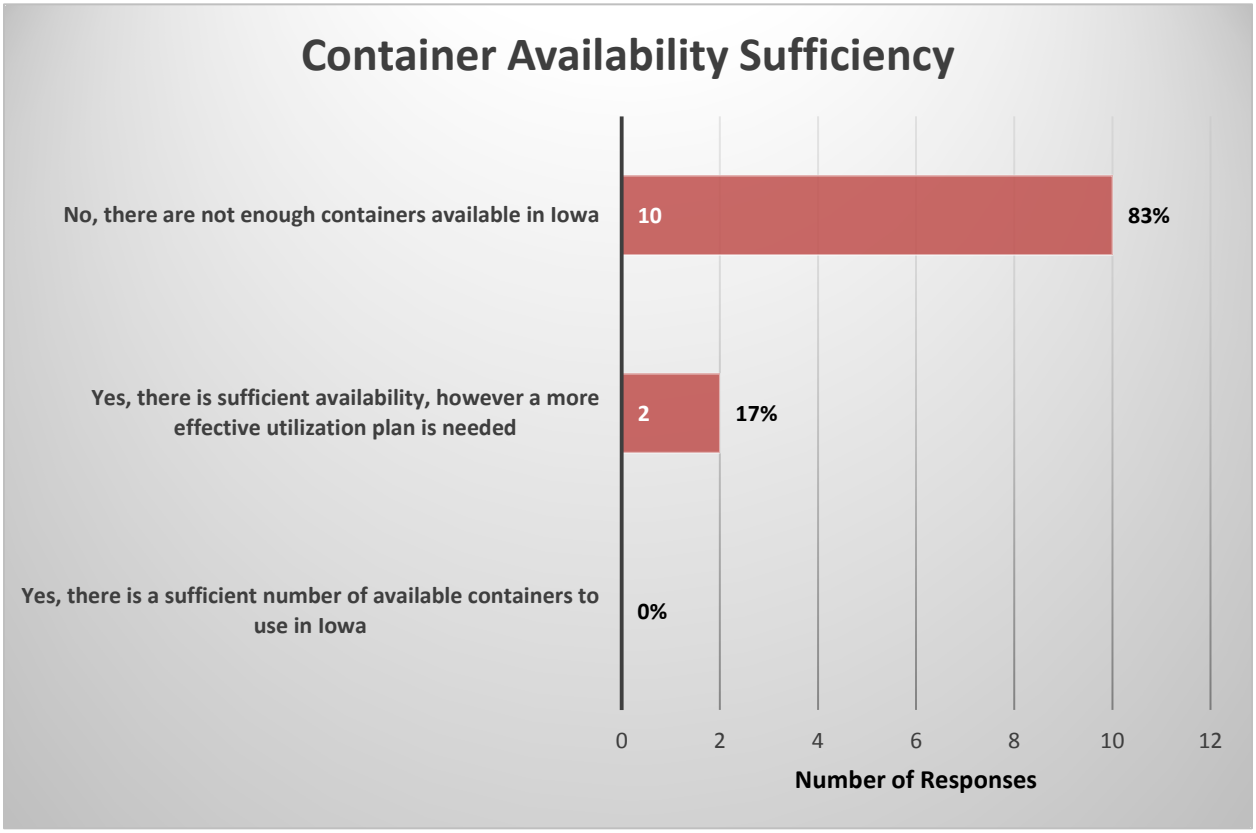

Figure 14: Container availability sufficiency

Conclusions: There is a clear pattern from respondents that there is a shortage of containers available in the State of Iowa.

Do transloading facilities make sense to businesses in Iowa?

Summary: A total of 27 respondents answered this question. Nineteen respondents (70%) indicated support that transloading facilities make sense for Iowa businesses, and that they should be located throughout Iowa. Five respondents think that these kinds of facilities make sense in Iowa, but they are not the highest priority right now. Only three respondents (11%) indicated that transloading facilities do not make sense in Iowa.

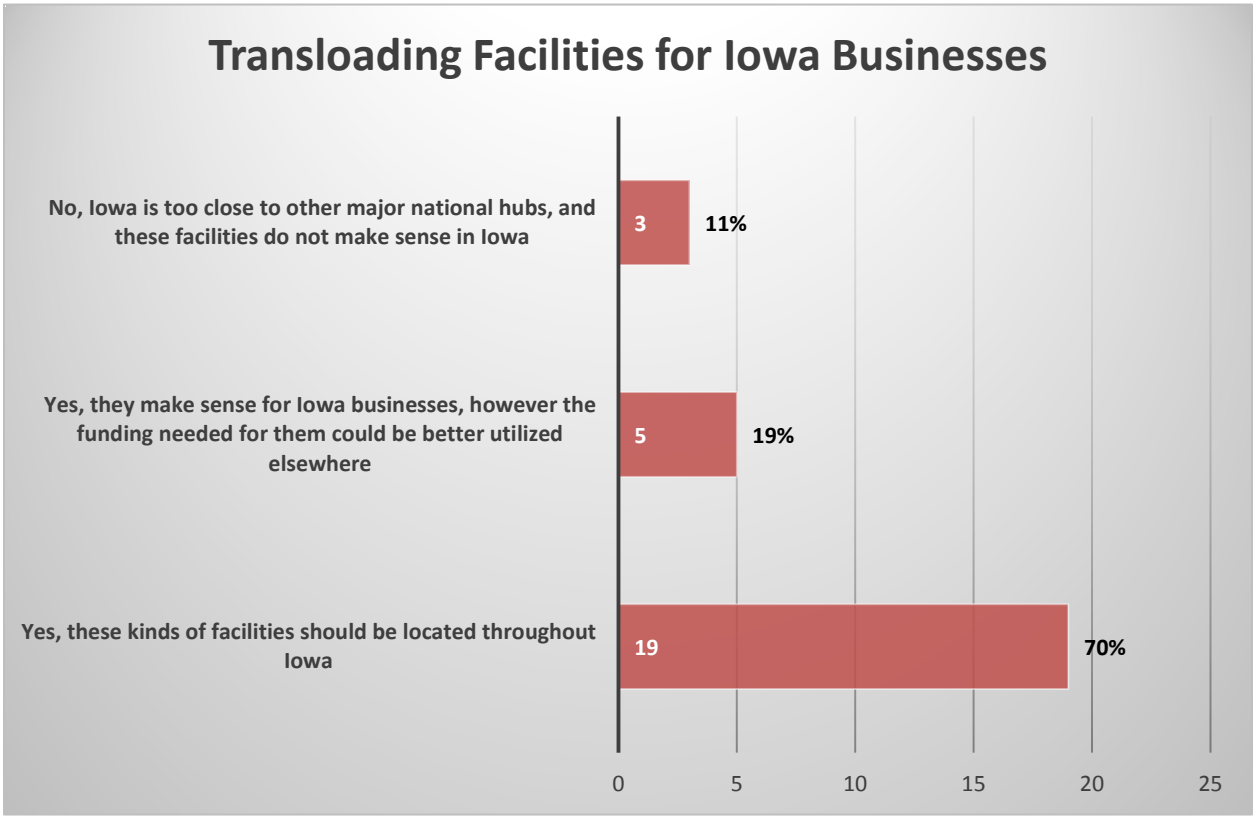

Figure 15: Transloading facilties for Iowa businesss

Conclusions: Respondents agree that having more transloading facilities will make transitioning to different modes much easier. Iowa is an area where many companies are using multimode methods to lower costs in shipping; Transferring loads from trains to trucks, ethanol being one of the main cargos[2].

[2] Ford, George. The Gazette: "*Transloading links trains, trucks moving ethanol, freight",* 4/3/14. http://www.thegazette.com/2011/11/17/transloading-links-trains-trucks-moving-ethanol-freight .

For those who answered "Yes", where should additional transloading facilities be located?

Summary: From the 19 respondents that indicated transloading facilities make sense, 17 responded to where facilities should be located. These respondents could select all areas that were applicable. There was a tie between the top three options – Northeast region, Southeast region, and Central Iowa. The Northwest region received slightly fewer votes with 18% of respondents indicating transloading facilities should be located there, and the Southwest region received the fewest votes.

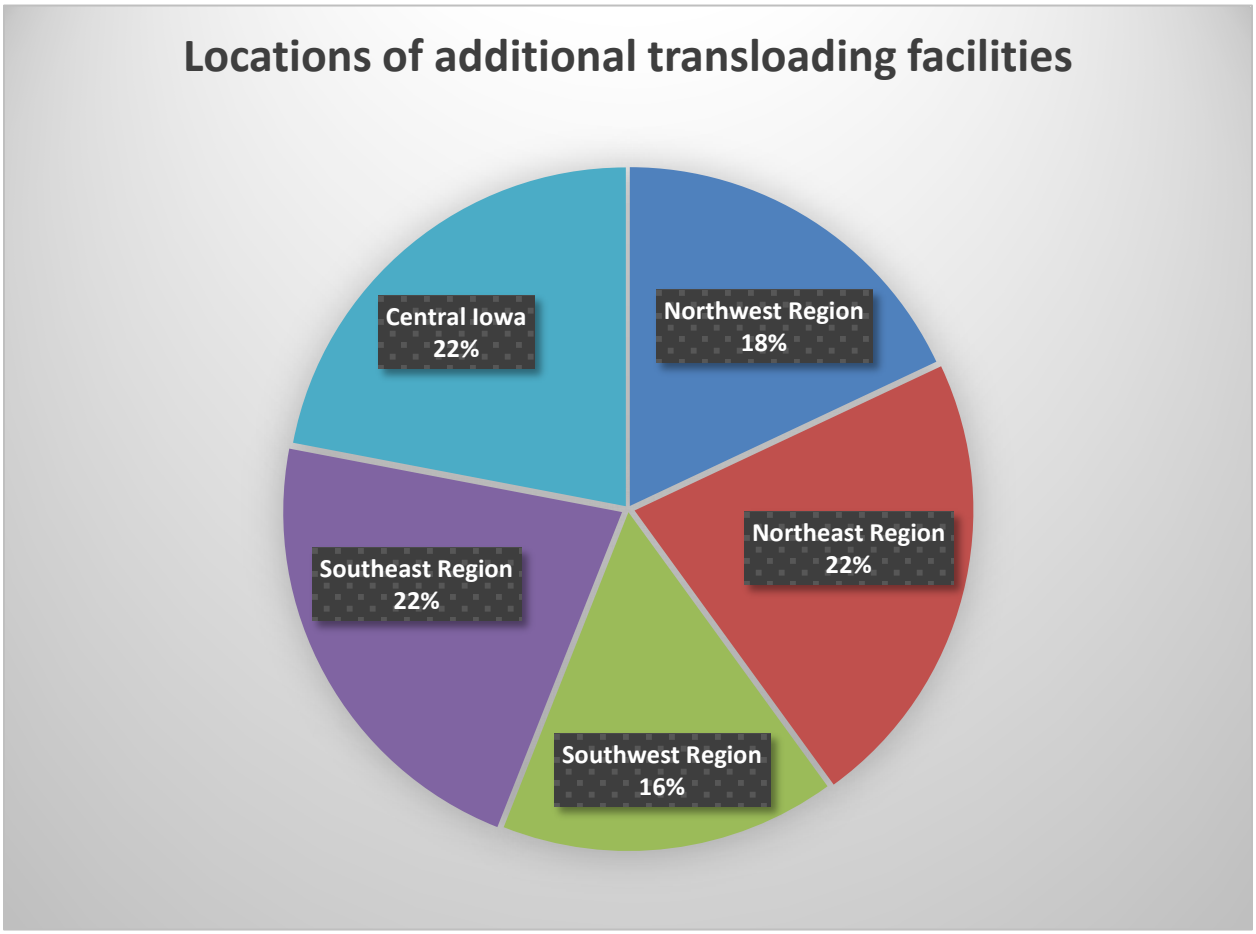

Figure 16: Locations of additional transloading facilities

Conclusions: Respondents are evenly split among where transloading facilities should be located. It looks as if there were efforts to create transloading facilities, they should be located in the Central and Eastern areas of Iowa which are lacking facilities.

Is there enough information available to help assess the costs and benefits of using a transloading/intermodal facility?

Summary: A total of 15 respondents answered this question. The majority of respondents (73%) indicated that there was not enough information available to assess the costs and benefits of using a transloading facility. Three respondents indicated that there was information available but took a long time to find, and only one respondent felt that they could assess whether or not transloading facilities made sense to their business.

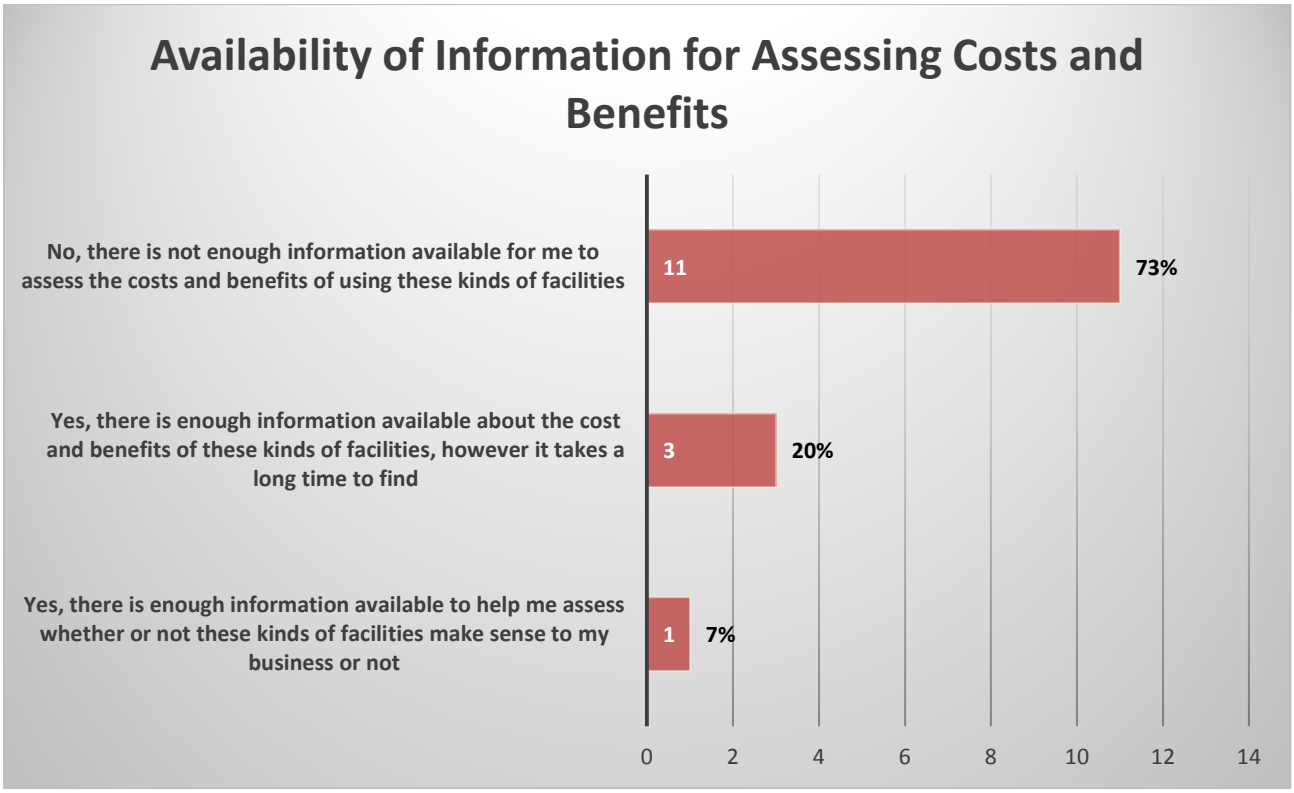

Figure 17: Availability of information for assessing costs and benefits

Conclusions: Respondents indicate that there is a lack of information accessibility to costs and benefits of using a transloading/intermodal facility. This is a gap that can be resolved through education and informative marketing tactics.

Are the intermodal connectors between Iowa's highways, railways, and ports adequate?

Summary: A total of 21 respondents answered this question. The majority of respondents (67%) indicated that intermodal connectors are not adequate. Four respondents (19%) indicated that connectors are adequate and easy to use, while only three respondents (14%) felt that accessibility needed improvement for intermodal connectors.

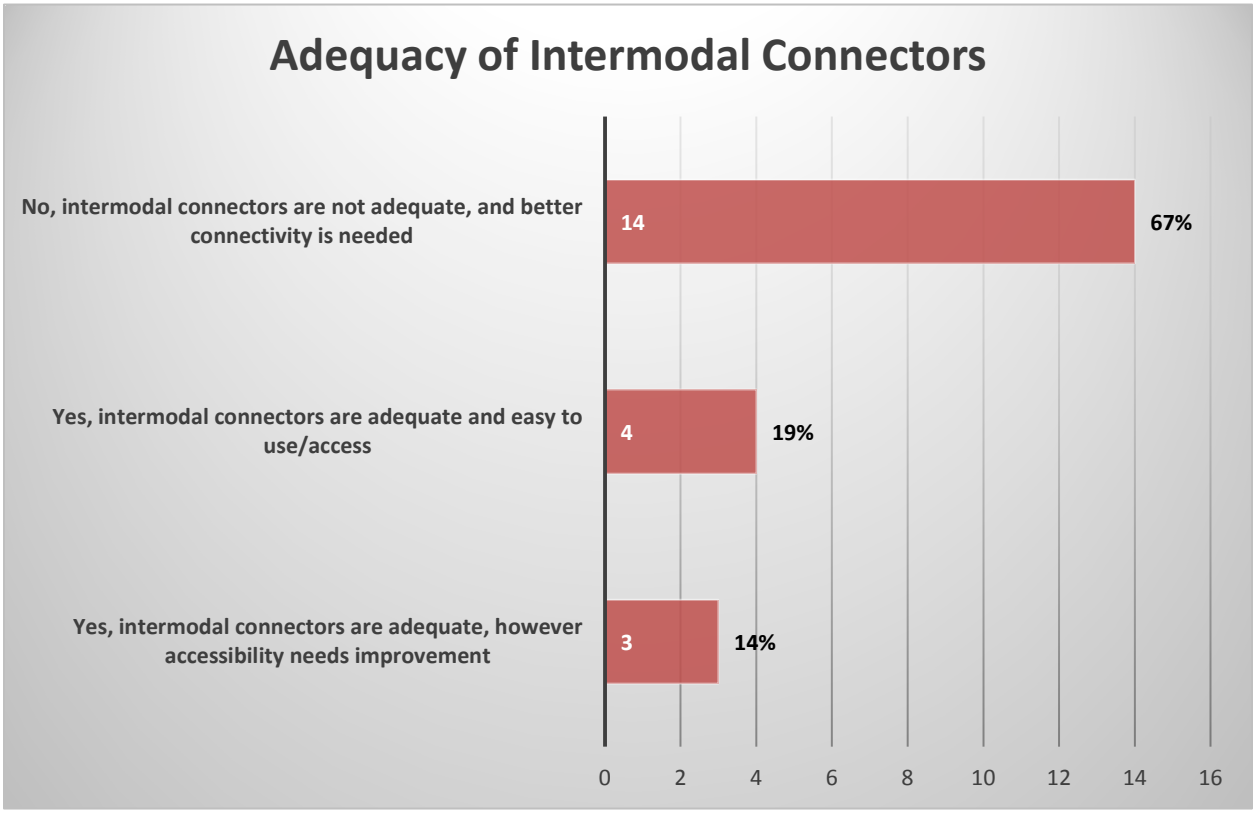

Figure 18: Adequacy of intermodal connectors

Conclusions: Respondents seem to agree that intermodal/transload facilities and connectors do not exist and the ones that currently do are inadequate. It is a clear that an investment in intermodal connectors is wanted by the respondents to have additional facilities and improve current ones.

Passenger Rail

The passenger rail section of the survey focuses on the participants' current perception of the use of rail for passenger travel. Eighty-two participants responded to these questions.

How likely would you use passenger rail in the state of Iowa for business trips?

Summary: A total of 58 respondents answered this question. The results varied; however, 20 respondents (34%) indicated that they would likely use passenger rail for business travel. Combining this with those who indicated "Extremely likely," over half of respondents would most likely utilize rail for business. While nine respondents remained neutral, a total of 17 indicated that utilizing passenger rail for business wasn't very likely for them.

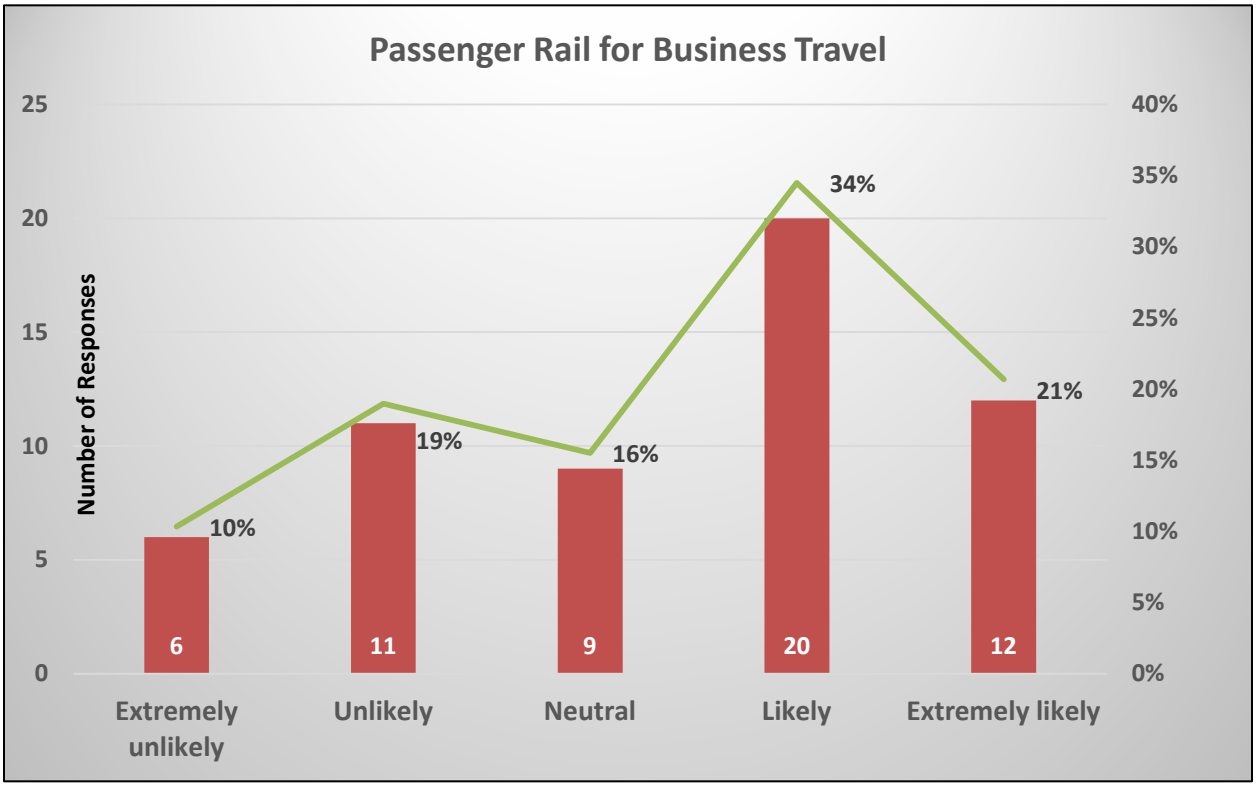

Figure 19: Passenger rail business travel

Conclusions: After reviewing the comments in this section and understanding what numerous connections respondents wanted, the results of asking what the passengers would use the rail system for seems to mirror these desires. The trend of the respondents show in Figure 19 that if more connections to major Midwest hubs were made, more passengers would travel by rail for business.

How likely would you use passenger rail in the state of Iowa for leisure trips?

Summary: A total of 63 respondents answered this question. These responses are much different than the question about passenger rail being utilized for business travel, and a large majority of respondents would utilize passenger rail for leisure trips. Only eight respondents indicated either neutrality on the subject or that they would likely not utilize passenger rail for leisure.

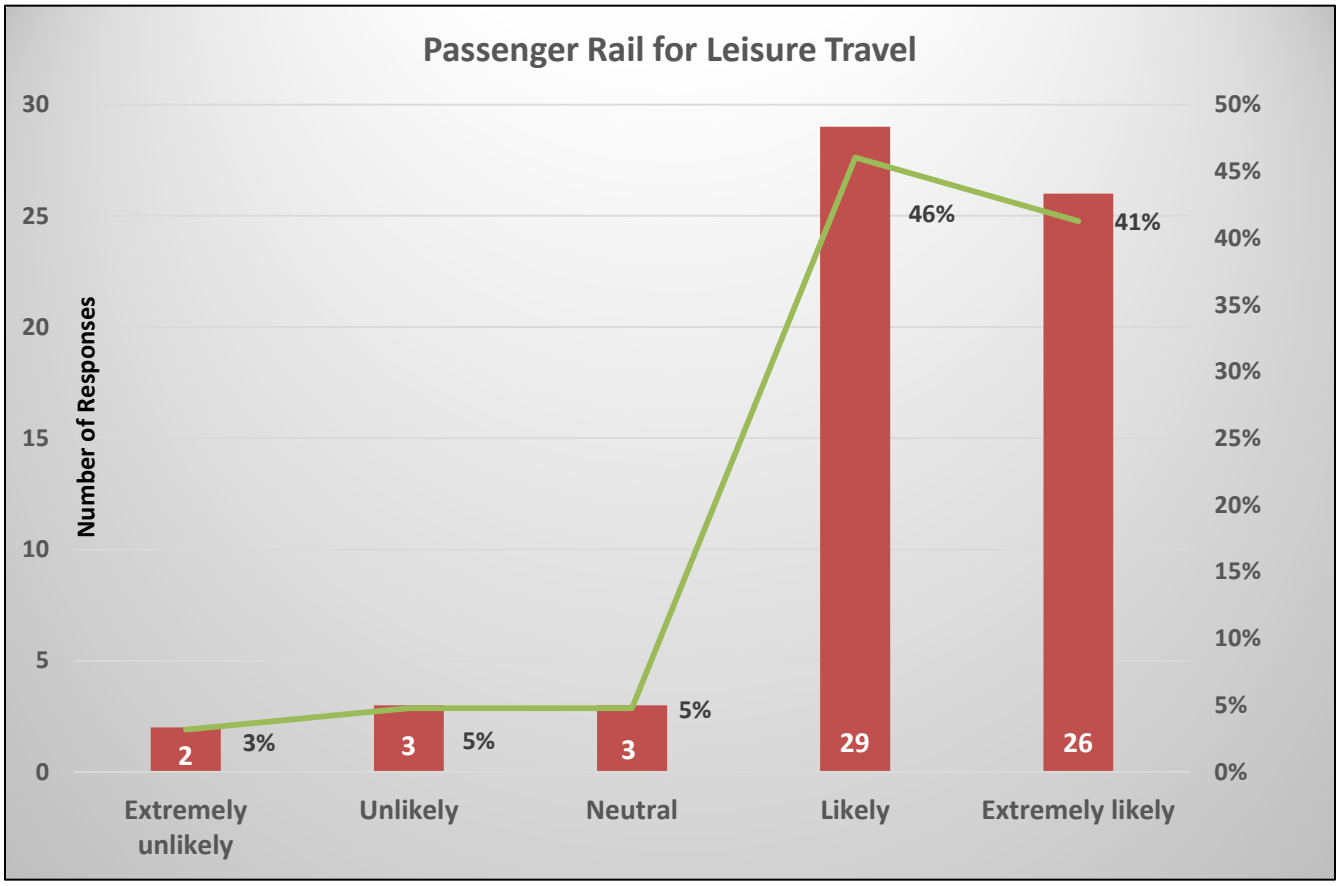

Figure 20: Passenger rail for leisure travel

Conclusions: Respondents are overwhelmingly likely to use rail as a mode of transportation for leisure traveling. From the comments it is mentioned that it is assumed train travel would be cheaper than air and this is one of the main reasons for the popularity of passenger rail.

To what level of investment should Iowa DOT focus on improving passenger rail in the state of Iowa?

Summary: A total of 63 respondents answered this question. The majority of respondents (60%) indicated that passenger rail should be treated equally with other forms of transportation. The next most popular answer was "Small investments, if extra funds" with 15 respondents (24%) indicating this choice. Only one respondent indicated that no investment should be made.

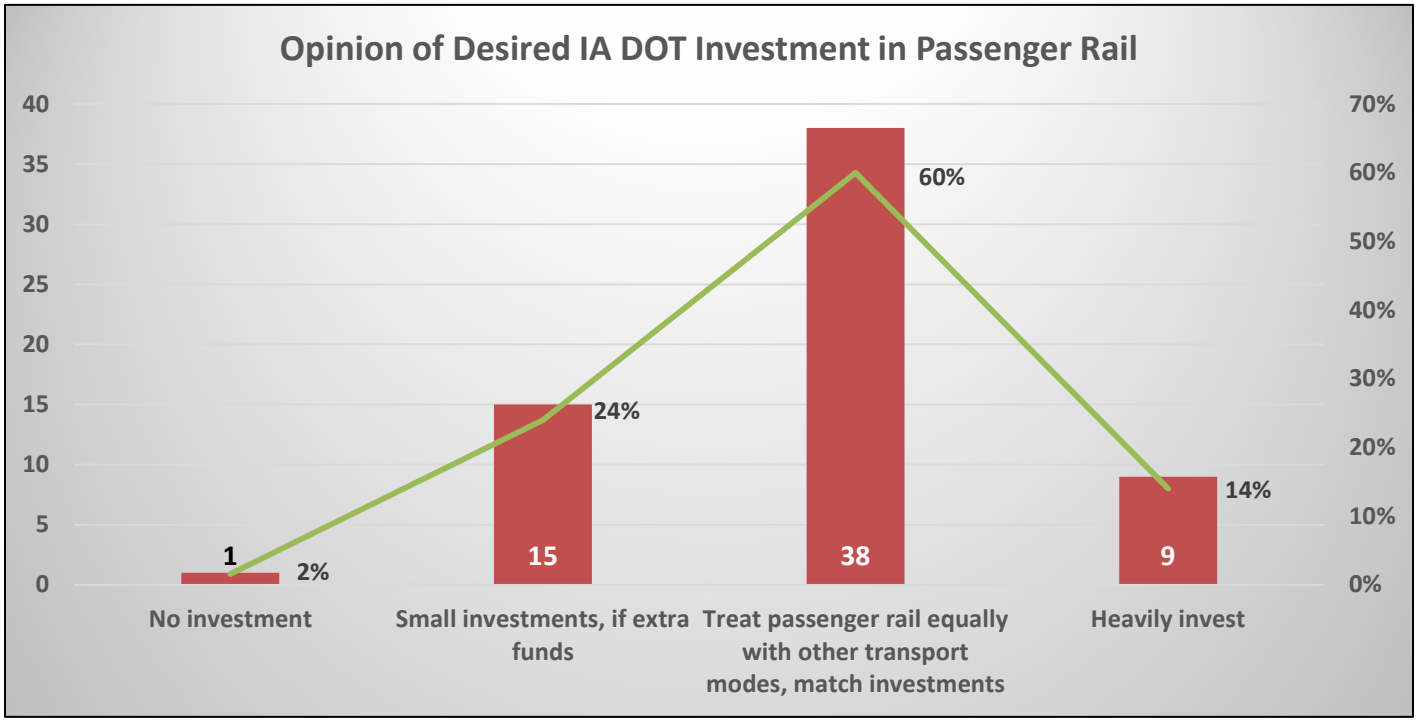

Figure 21: Opinion of desired Iowa DOT investment in passenger rail

Conclusions: Respondents indicate in Figure 21 that an investment in the passenger rail system is highly demanded. With 75% of the respondents wanting an equal to larger investment than other transportation modes, there is a trend of more Iowans wanting to use rail to travel.

If the Iowa DOT continues to focus on improving passenger rail in the state of Iowa, who will be the primary audience to educate on the need for improved service?

Summary: A total of 59 respondents answered this question. Respondents were able to select all that applied, and the most popular answer with 48 votes (23%) was "The general public." The next most popular group that should be educated about passenger rail was indicated as "Collegiate students" with 14%. There were three respondents (1%) that indicated the Iowa DOT should not continue to focus on improving passenger rail.

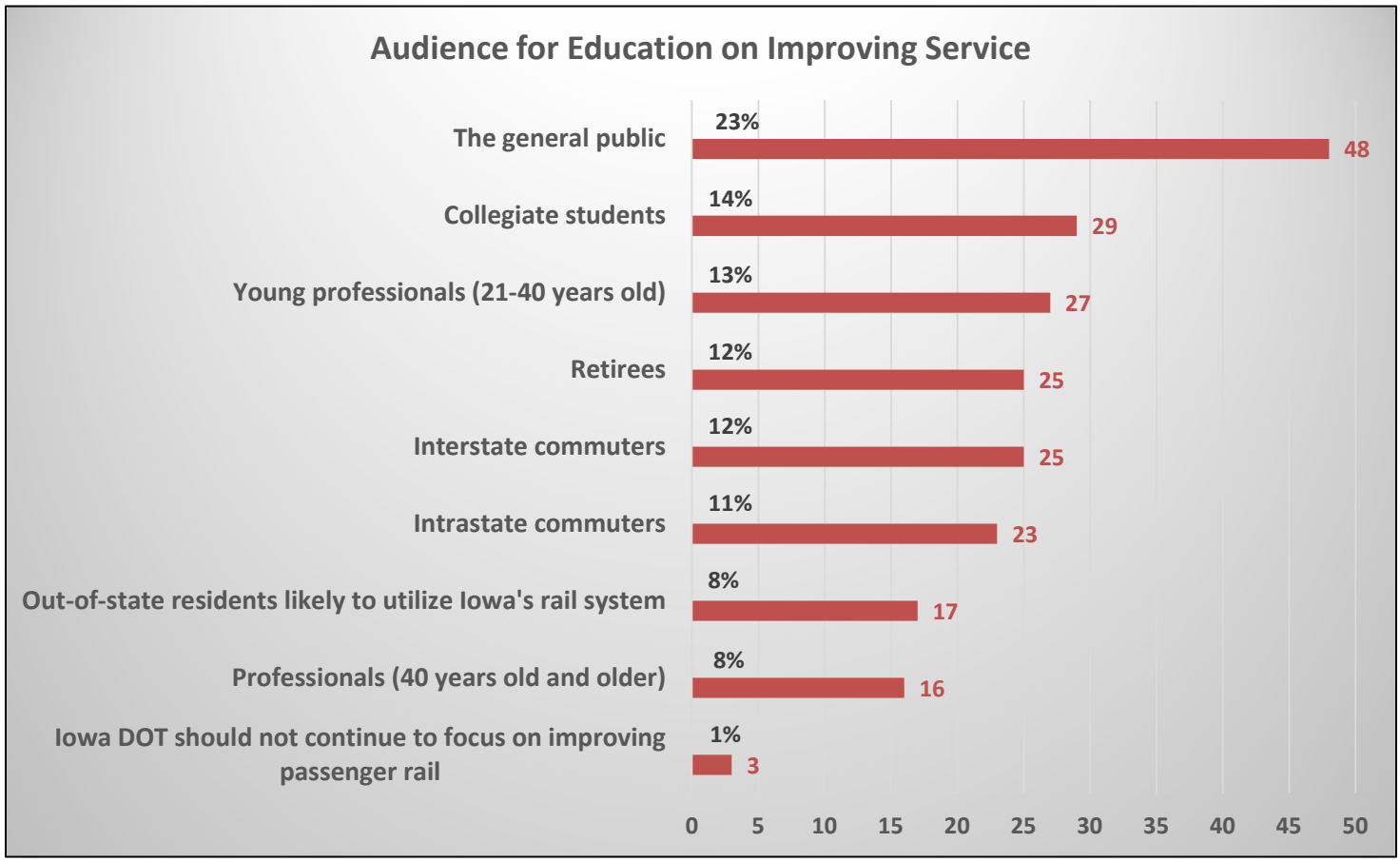

Figure 22: Audience for education on improving service

Conclusions: This question is useful in identifying how the respondents view who the DOT is responsible for educating. There is an overwhelming response that the DOT is committed to the general public, but what is more interesting is the responsibility respondents feel toward students and young professionals. This would be a good result to examine with IADOT's current target audiences and see if they align with what the respondents are portraying.

What should Iowa DOT focus on to improve and maintain the existing passenger rail service through the state of Iowa?

Summary: A total of 58 respondents answered this question. Respondents could select all applicable answers, and "Connection with other cities" received the most answers at 34%. This was followed by "Reliability/timeliness" with 24% of respondents including it in their selection. The lowest category was "Education" with only 12% of respondents including it in their selection.

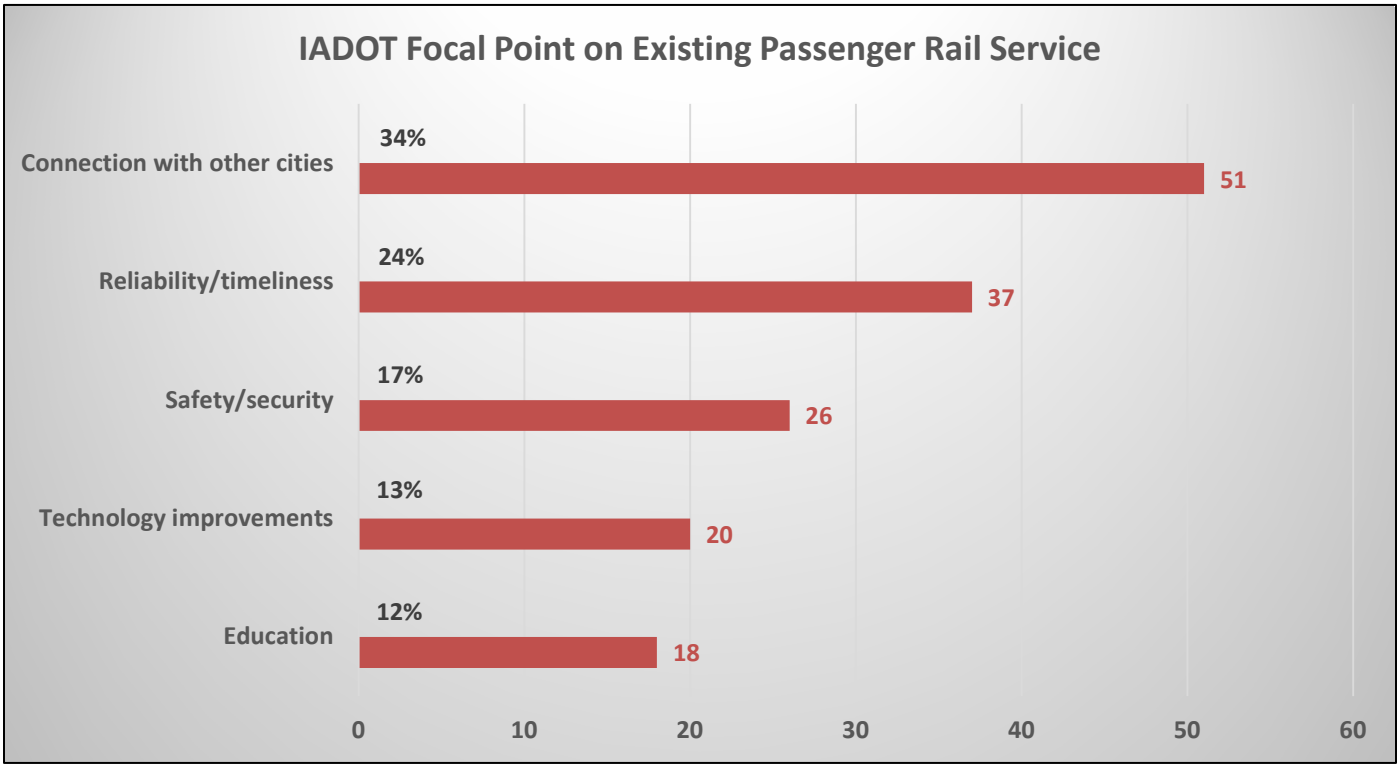

Figure 23: IA DOT focal point on existing passenger rail service

Conclusions: As seen in Figure 23, and in the comments analyzed in this section, respondents are more concerned with the connections that rail has to other cities than any other category. Infrastructure and accessibility is the main concern of respondents.

Safety and Security

The safety and security section of the survey focuses on the participants' current perception of safety concerns, regulations and implementation in all modes of transportation. One hundred and two participants responded to these questions.

I have concerns with the safety of highways in my community because:

Summary: A total of 71 respondents answered this question. Respondents could select all answers that were applicable, and the majority (21%) had "Vehicular accidents" included in their selection. Only eight respondents (15%) indicated that they do not have concerns with the safety of highways in their community.

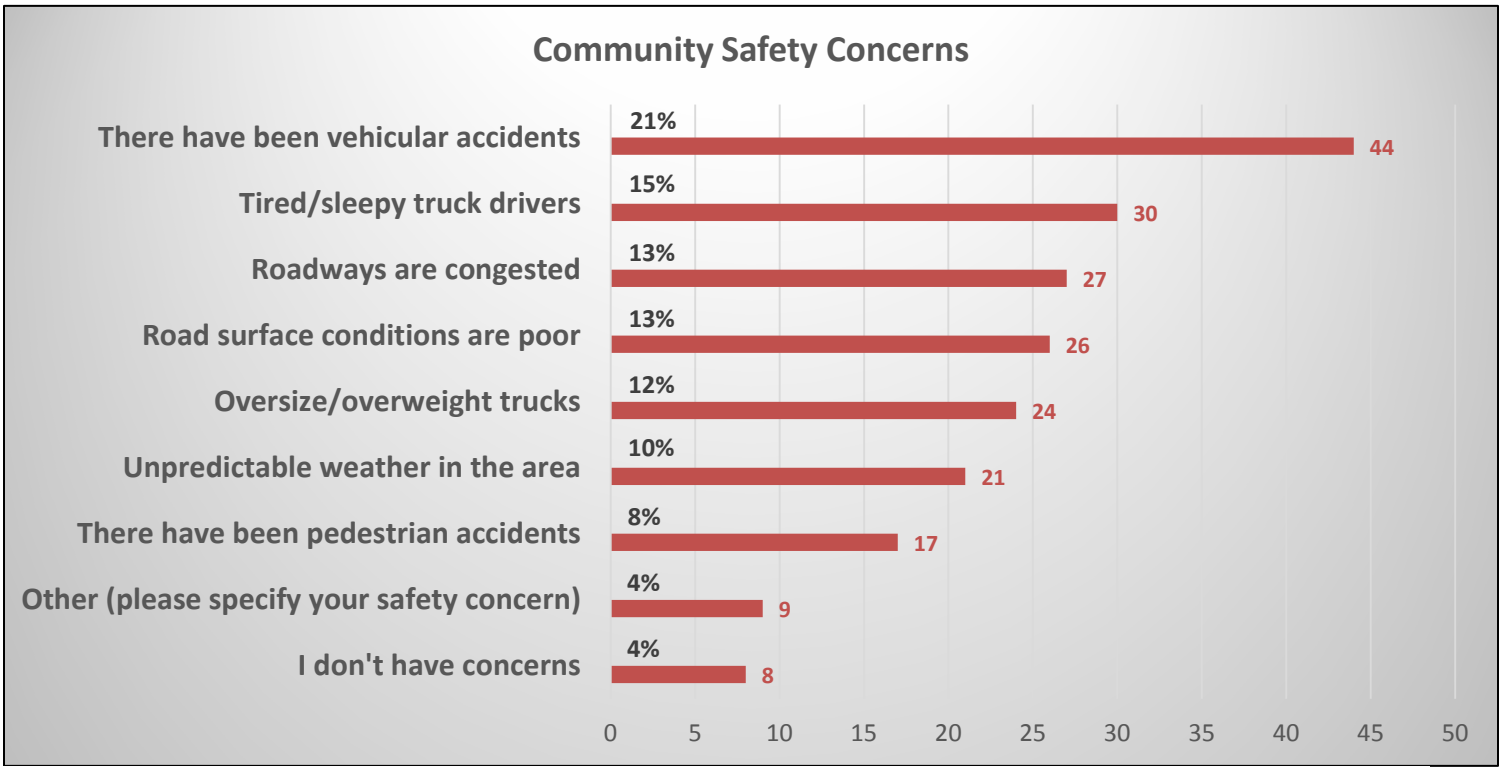

Figure 24: Community safety concerns

Conclusions: Taking the comments and response to safety concerns, traffic and large trucks on the highways are on the minds of the respondents than any other issue. The top five concerns all deal with highways. Boiling down the comments and results from respondents' concerns show a clear pattern that highway infrastructure and flow of traffic is on the minds of the majority.

What would increase safety in your community?

Summary: A total of 72 respondents answered this question. Respondents were able to select all answers that were applicable, and 37% included "Infrastructure improvements" in their selection. This was followed by "Technology improvements" with it being included in 23% of respondent choices.

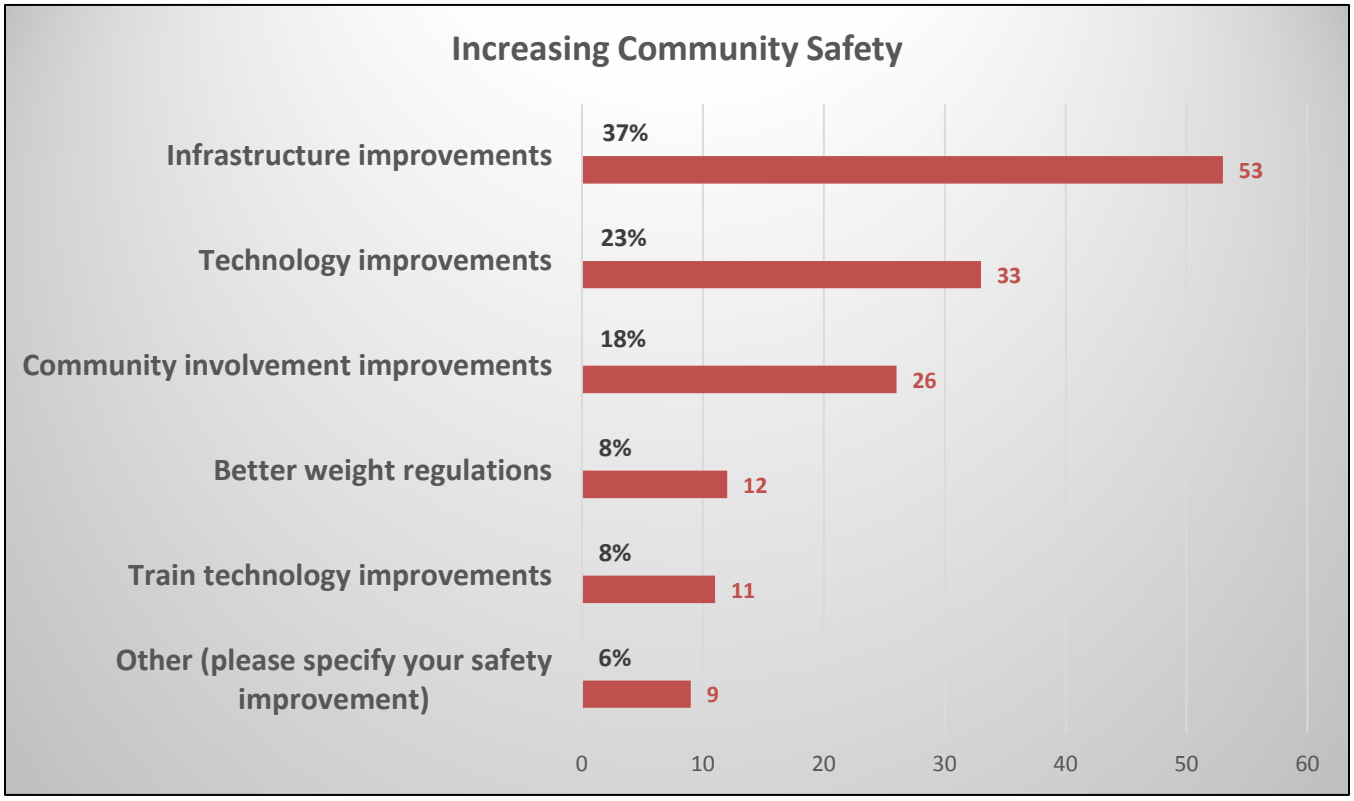

Figure 25: Increasing community safety

Conclusions: A reoccurring theme in this survey show that the respondents are wanting more investment from the state in improving the transportation infrastructure. This trend seems to link into all modes of transportation and categories involving spending and safety.

Those who selected other had mentioned: Rail capacity, quiet zones and education.

How does freight safety affect your business or quality of life?

Summary: A total of 72 respondents answered this question. Many respondents were evenly distributed across the possible answers, although only four respondents indicated freight safety has no effect on their business or quality of life. It appears the two most popular answers tied between "Minor affect" and "Major affect" with both answers receiving 25% of respondent votes.

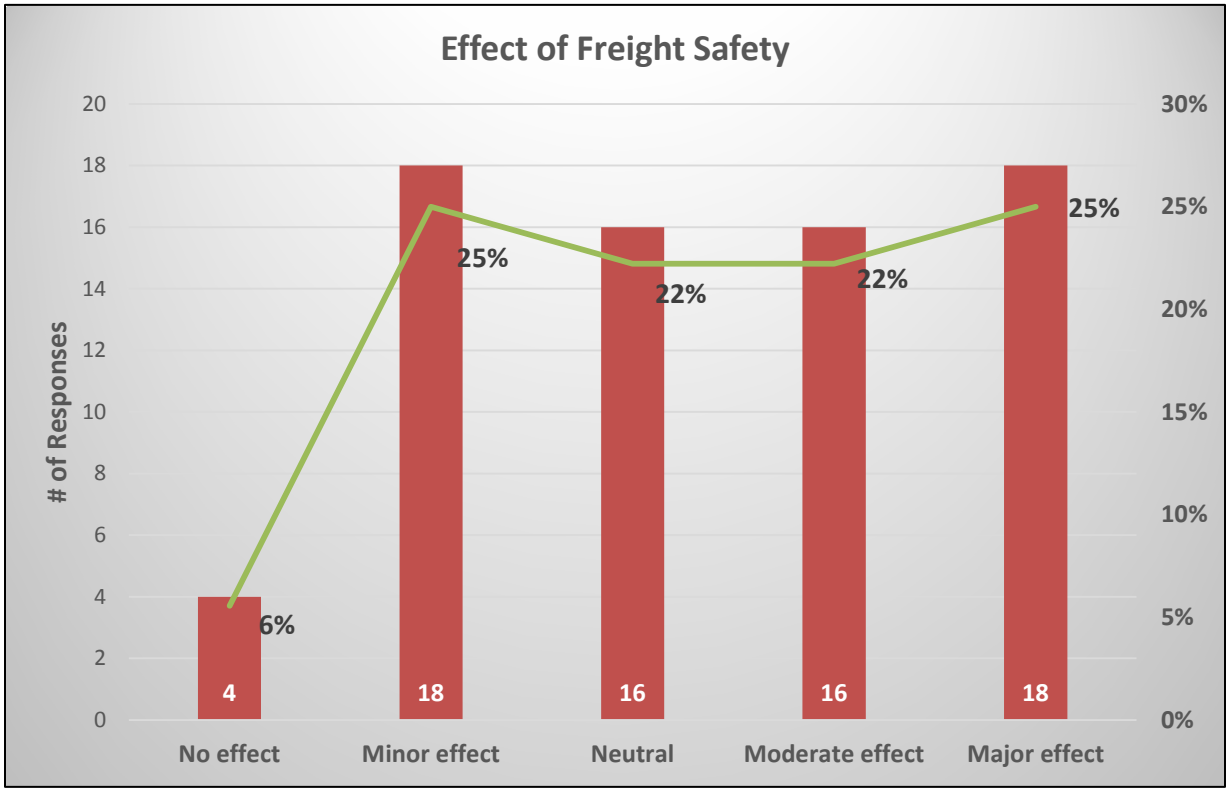

Figure 26: Effect of freight safety

Conclusions: Respondents seem to be split on the effect of freight safety on their business and life quality. This is a tricky question because not all of the respondents has a daily interaction with freight, and may not have experienced a situation in which safety had a major role in saving a life or preventing an accident. Respondents agree that it would have some effect (even it may not be major), but it is a broad spectrum based on their own experiences.

Are highway-railroad grade crossings in your community safe?

Summary: A total of 71 respondents answered this question. The majority of respondents (66%) indicated that highway-railroad grade crossings in their community were safe.

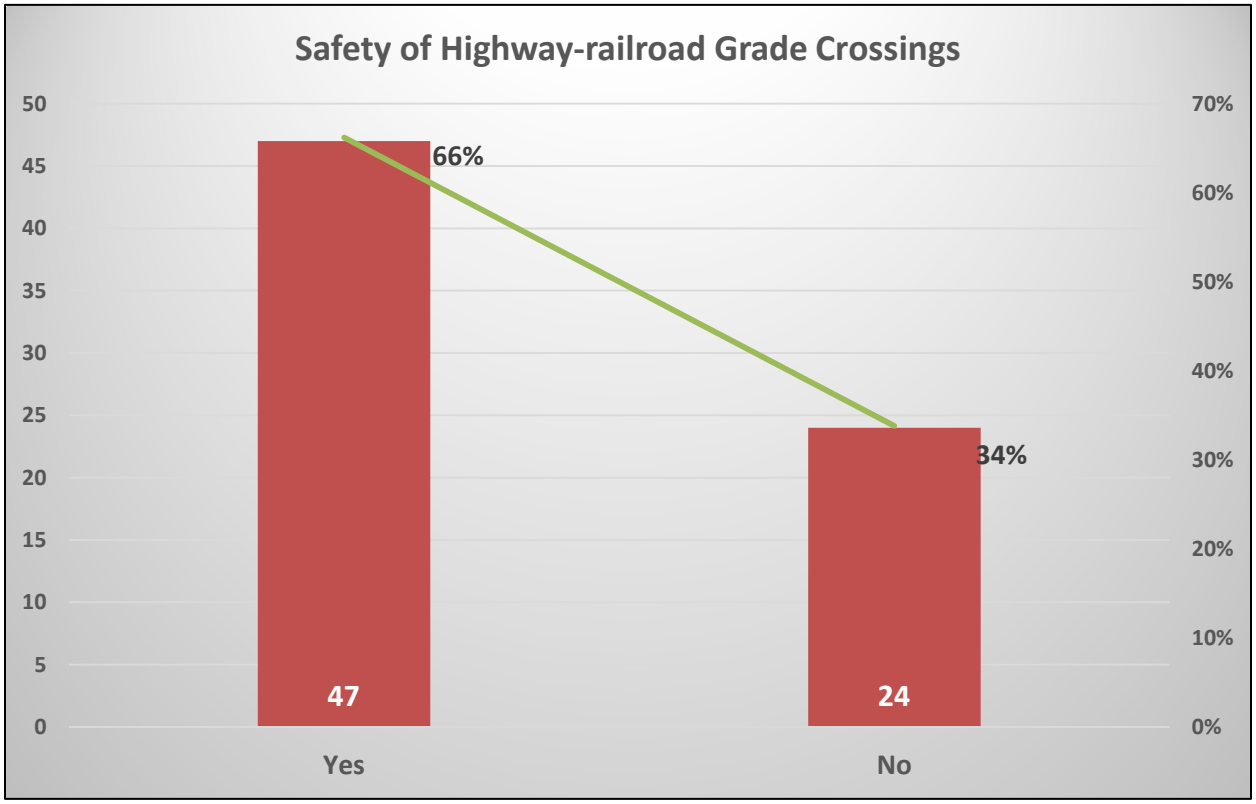

Figure 27: Safety of highway-railroad grad crossings

Conclusions: Almost double the respondents believe that their crossings are safe, and do not need any more improvements.

Question: Does your company ship hazardous materials which require placarding?

Summary: A total of 57 respondents answered this question. The majority of respondents (86%) do not ship hazardous materials that require placarding. Only seven respondents indicated their company did transport hazardous materials – mainly consisting of farm/agricultural products.

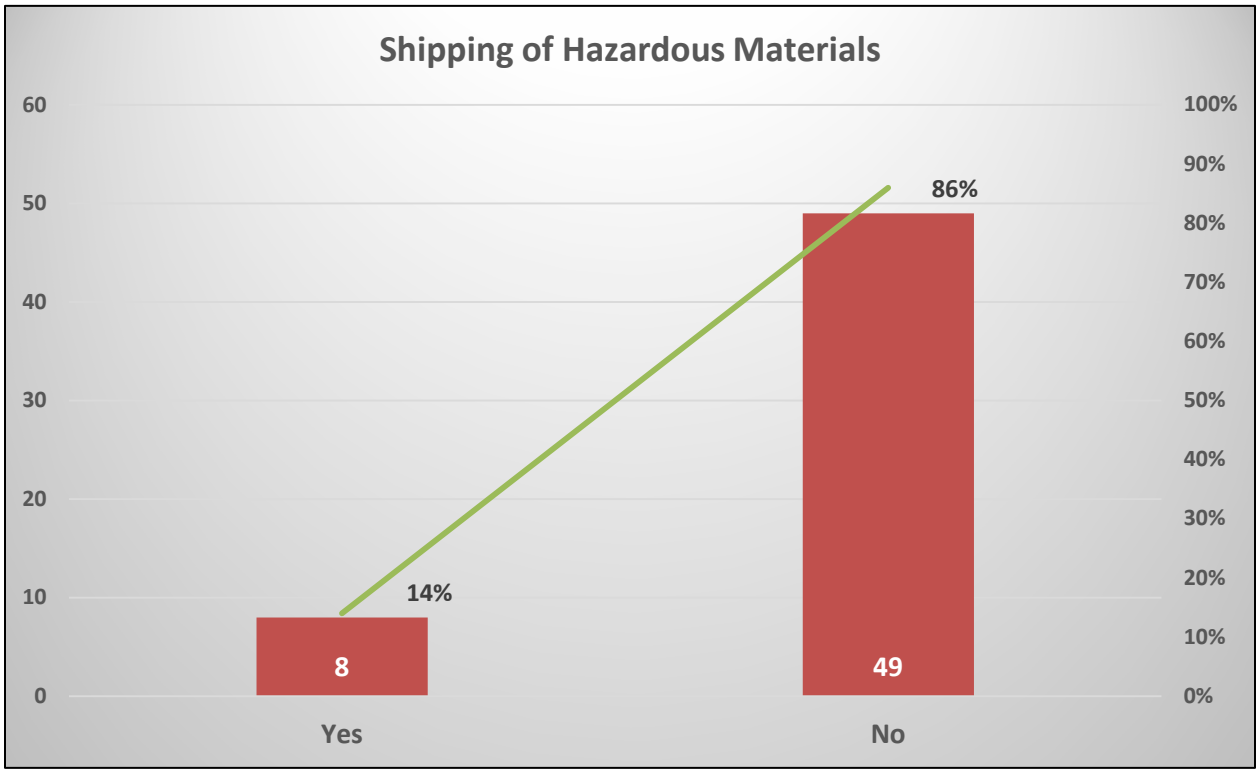

Figure 28: Shipping of hazardous materials

Conclusions: Majority of the respondents do not ship hazardous materials, and if they do it would be a farm or agricultural product.

Question: Do you have concerns about rail and/or freight terrorism and how to prevent it?

Summary: A total of 57 respondents answered this question. Most respondents either indicated they had concerns about freight terrorism, or they didn't. The majority (47%) indicated that they had concerns but did not know how to prevent it. Thirty seven percent of respondents indicated that they simply do not have concerns about freight terrorism. A combined total of nine respondents indicated that their company has taken the appropriate steps to address freight terrorism.

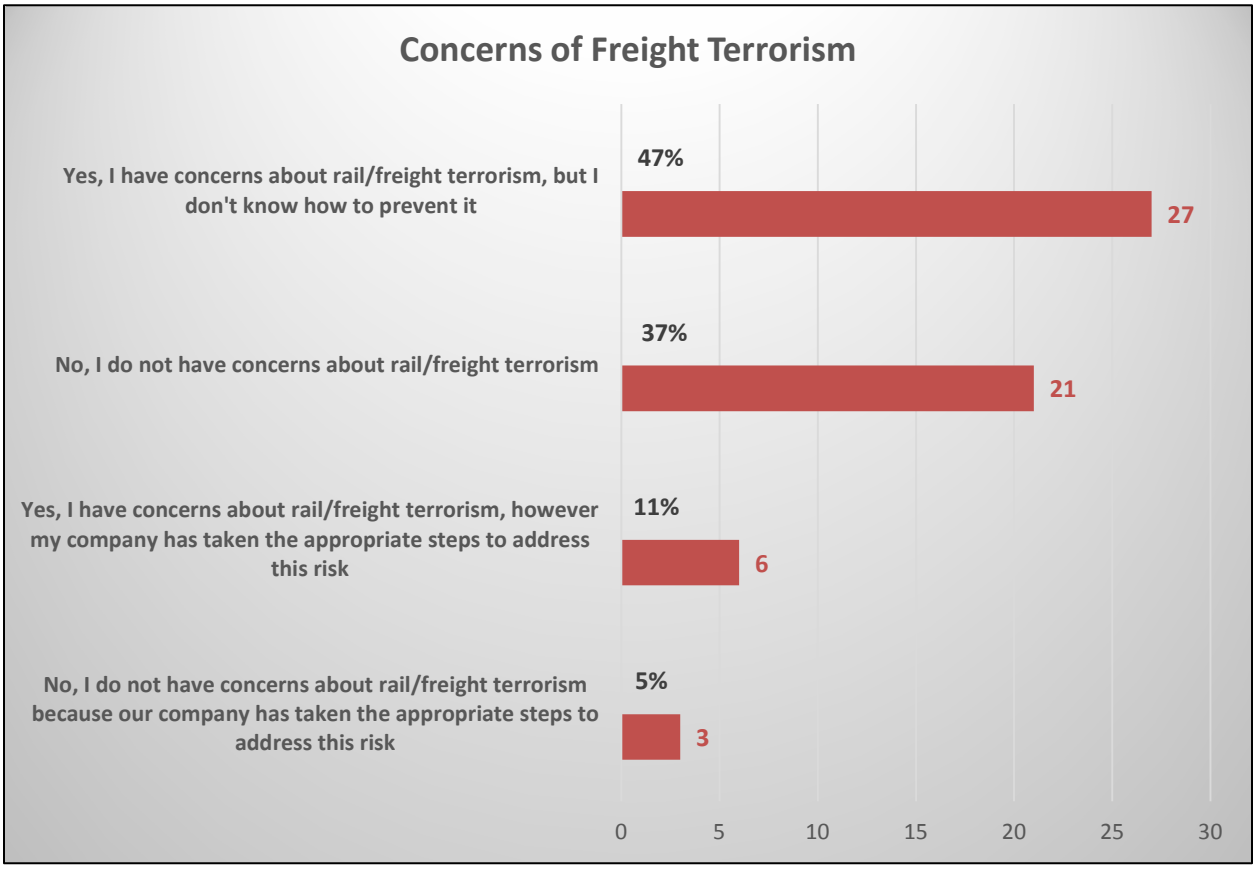

Figure 29: Concerns of freight terrorism

Conclusions: Respondents have mixed reactions to freight terrorism. The slight majority is concerned with it and is not educated on how to prevent terrorism with the second majority has no concerns at all. The population with concerns would appreciate education about freight terrorism, while others who have concern work in the industry and have already taken preventive steps.

Question: How high of a priority should increasing funding for Iowa's highway system be for the state legislature?

Summary: A total of 71 respondents answered this question. The majority (32%) indicated that increasing funding for Iowa's highway system is an "Essential priority" for state legislature. If respondents did not think it was essential, it was indicated as either a "High priority" or "Moderate priority." A combined total of only seven respondents indicated a lower priority status than being neutral.

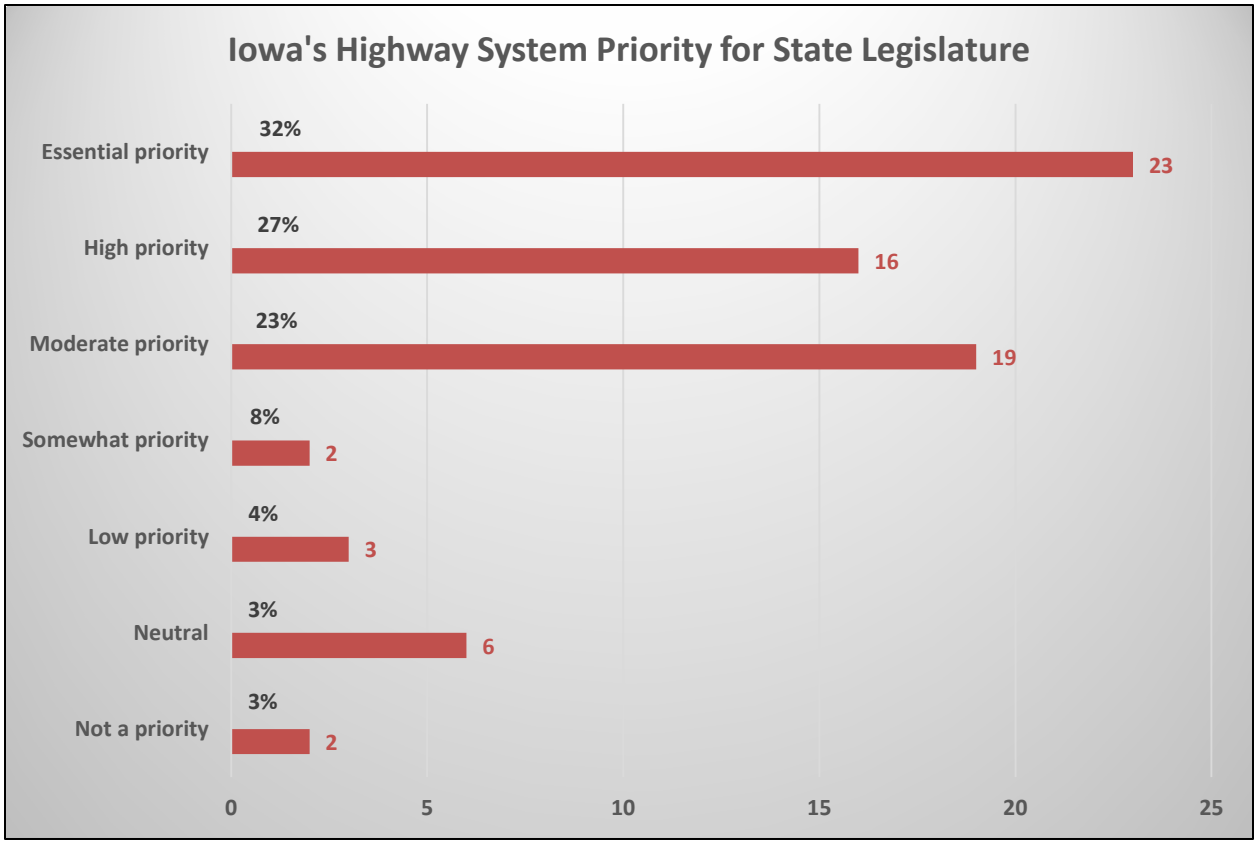

Figure 30: IA's highway system priority for state legislature

Conclusions

Figure 31: Combined comments from entire survey

Conclusions

After reviewing the entirety of the survey, there is a clear trend that respondents are concerned with Iowa's highway infrastructure. Comments, previous questions and dialogs spoken at the Issues-Based Workshop reveal that priority should be given to improving the current highway system in Iowa. Figure 36 is an excellent representation of how respondents are demanding more effort in the upkeep of highways

Figure 31 uses all of the comments respondents gave in the entire survey and identifies what elements were most touched upon. Besides the obvious "Iowa," "Rail," and "State", which don't provide much information, "**infrastructure**," "**funding**," "**access**," and "**value**" are the most mentioned words that confirm the conclusions made from the questions and comments in each section.

Overall, respondents are concerned with the infrastructure for all modalities in Iowa and want more funding to rebuilding highways, creating new rail connections and having easier access to transloading facilities.

Further conclusions were made based on information gathered at the Issues-Based Workshop. Many of the findings in this report are supported by the comments and topics discussed at the workshop. The final section will describe our conclusions based on the comments in this survey compared to what was said during the workshop.

Based on comments from this survey and the Issues-Based Workshop, we have summarized:

1. **Stakeholders want to see improvement in Iowa Freight and Rail infrastructure**
    - Reasons and viewpoints:
        - Economic development- With more access to connecting cities, tourism and business will grow to the connected cities. Traveling costs will be lowered and the systems will be utilized more.
        - Safety- With an up-to-date infrastructure, traffic and car accidents are assumed to decrease.
2. **Respondents want to see the best value for any expenditure made**
    - Carefully evaluate what project would have the biggest impact
    - There is disagreement on what would make the "biggest impact"
        - Different regions of Iowa indicate different priorities
        - Future projects to express overall benefit to Iowa (versus certain areas)
        - Ensures continued support of DOT agendas
3. **Stakeholders want to see an increase in connectivity**
    - Primarily a concern for intermodal and transloading facilities
    - Increased access among current transportation options is important
    - Increasing connections (or the number of connections) for freight transportation
        - Includes increased access to barge and rail facilities

F.5 Shipper Interview

Twelve shipper interviews were completed during October and November 2015. These interviews included large manufacturers, rural agriculture producers, retailers, and Third Party Logistics (3PL) providers.

Shippers interviewed used Class I and Class III (short line) railroads, a trucking company, and logistics service providers, who were asked about nine aspects of freight service and perceptions. The nine areas included three to five questions each, for a total of 39 inquiries. These nine freight and freight rail aspects, and an additional aspect related to passenger rail, are identified below:

- Safety
- Economic and Workforce Development
- Policy and Communications
- Multimodal Intermodal Development
- System Conditions
- Performance Measures
- Industry Trends
- Transportation Solutions and Implementation Strategies
- Project Prioritization
- Passenger Rail

Executive Summary

The vast majority of freight in Iowa moves by truck, and infrastructure is rated at a B-C level on an A-F scale. Performance measures are highly correlated with cost and on-time performance. Users identified that communication in Iowa could be improved with the development of push emails or cell phone Apps and more customized for users. Several users indicated the importance of empty equipment visibility to help reduce repositioning costs and improve equipment availability. This was noted by truck, rail, and intermodal users. Multimodal access is absolutely essential to the freight network. One shipper identified interest in an Iowa-owned rail fleet to facilitate short-haul movement between the Mississippi River and Iowa producers. Priority projects include maintaining the current highway/bridge network and improving rail and freight routes. Increased terminal access and an increase in truck parking was a common theme, and concern over grade crossing safety was noted in some areas. Cost benefit analysis and public private partnership development seemed to be the best way to prioritize projects. Concern over driver shortages, industry regulation, and overall transportation funding levels were mentioned.

Survey Summary

SAFETY

The Iowa freight system is considered very safe. Several respondents included that they have hazardous material certified drivers and a safety team in place with regular safety training and certification.

The areas of highest safety concern include:

- Congestion, limited truck parking, farm implements on rural roads at dusk, worker safety, bridge condition, flood routes, many freight routes in rural Iowa go through downtown areas, more bypasses should be built, infrastructure is tired, and weather and winter mobility issues represent transportation risk.
- Recommended public actions include: expanded rest stops, grade crossing safety, infrastructure upgrades (bridges),and professional transportation education. In rural areas it is often difficult to maneuver large trucks, and there are few designated truck routes. Infrastructure in rural areas was not designed for today's trucks, and many routes are tired and need updates.
- Iowa infrastructure grades
- Rail — concern over abandonment, rail responsiveness, container and rail capacity
- Highway — attention needed on bridge condition
- Pipeline — little knowledge of state's network

- Waterway — needs for lock/dam upgrades and replacement on the Mississippi River
- Multimodal — Significant interest for increased access
- Air Cargo — almost no direct flights to anywhere from Iowa

ECONOMIC AND WORKFORCE DEVELOPMENT

The vast majority of Iowa's freight moves by truck and this network is essential to Iowa's economy.

Access to a multimodal network was rated absolutely essential; however, many multimodal terminals for rail and air cargo are not located within the state.

Availability of qualified transportation workers is a critical factor followed by education and resources to support workforce development. Access to funding programs ranked least important of these three factors.

One respondent indicated that more access to rail is essential. One facility is served by rail and the other is not. Container users feel that Iowa is not cost competitive with other states. Rail and river connectors are not efficient and coordination between the two networks is difficult.

POLICY AND COMMUNICATIONS

Most companies and service providers did not have a frame of reference to compare Iowa programs and policies with other states. In general, Iowa DOT policies are considered business friendly.

Several noted that Iowa could improve communication with the use of a selective push email system. They requested messages on a need-to-know basis. Several indicated that they rely on information from Chambers of Commerce and County Economic Development organizations at the local level. An Iowa DOT cell phone App was recommended for specific alerts (weather, congestion, construction). One shipper noted a need for a public load board to monitor the location of empty trucks. Another indicated that rail car visibility could be improved. Concern about a national driver shortage and the ability to get trucks was mentioned often. Another shipper noted that it was hard to identify the availably of rail cars in the region (across multiple railroads) and that public access to rail car availability was needed. A container user mentioned that container availability in the state should be improved. It is hard to identify empty containers for reload and thatdraying from distant markets is not cost effective.

Weather conditions, communication about congestion, and planned construction were the most used Iowa DOT communication channels; however, many larger organizations rely on their own weather monitoring networks. Severe storms and winter driving hazardous were most commonly noted as reasons to visit the Iowa DOT website.

MULTIMODAL INTERMODAL DEVELOPMENT

Multimodal users most commonly cited the use of Chicago for intermodal container movements. Several mentioned that Chicago intermodal facilities have gotten too big and service levels are declining. For air cargo shipments, many freight forwarders truck time sensitive freight to Chicago or Minneapolis, while a few use Iowa airports at Des Moines and Cedar Rapids. Cedar Falls airport was also mentioned.

Due to the lack of intermodal freight networks in Iowa, comments about assuring that intermodal corridors connecting to Chicago, Minneapolis, Omaha, and Kansas City operate at highest levels of performance were made. For long drays it is essential to ensure multimodal freight makes it to distant terminals on time.

Multimodal terminal development is needed as Chicago is getting larger, which has resulted in chassis shortages and congestion. Intermodal terminal development at Rochelle, Illinois (west of Chicago) and in Iowa could relieve pressure on Chicago intermodal operations.

Expanded multimodal development and terminals would result in lower costs and a more competitive business environment. Highway conditions impact service, cash flow, and inventory levels. Intermodal is

viewed as a lower cost option and an important consideration as logistics costs continue to increase.

SYSTEM CONDITIONS

Freight system users generally ranked Iowa's highway system as good, and better than the state's railroads. Waterway systems were rated the worst. Few were able to comment on the condition of pipelines. Air cargo systems were considered less than adequate in the state for frequent users due to lack of direct flights.

Rail and highway system conditions are critical for the movement of Iowa's freight. Concern over rail line abandonments and service reduction was noted. Chicago was noted as the economic capital of the Midwest and connections to Chicago are essential to commerce.

Most felt that deficient systems should be funded by federal sources, Iowa fuel tax, and several mentioned tolls and user fees. Private investment is also needed for larger projects.

Few regulatory burdens were noted; however, hours of service rules have made the truck driver shortage worse. There is concern about increased regulation in the future.

PERFORMANCE MEASURES

Key performance measures included on-time and within budget. A few noted damaged free shipping.

Travel time reliability ranked most important with capacity issues named second most important. Velocity was not a critical factor.

Most freight system users felt Iowa's multimodal freight system was "good."

The most popular low-cost system improvements named included: additional truck parking, added turning lanes, and shoulder improvements. Several noted rail and marine connector improvements were needed due to difficulty in coordinating river, rail, and truck transfers. Grade crossing upgrades were noted.

River users mentioned that coordination between rail and waterway shipments was often difficult to manage. Some river terminals have limited parking, creating congestion at ports.

INDUSTRY TRENDS

The Panama Canal expansion is anticipated to reduce reliance on the West Coast ports and to help keep transportation costs competitive.

An increase in truck size and weight was universally popular and was mentioned as a way to reduce transportation costs; however, due to the multistate distribution systems, an increase in truck size and weight would need to be adopted on a nationwide basis for maximum effectiveness.

Every respondent identified that a truck driver shortage would have a significant impact on their business.

Surprisingly few shippers were aware of potential business impacts from the implementation of Positive Train Control on the state's rail network. Several were skeptical of actual improvements to be realized by PTC.

Top industry issues include:

- Truck driver shortage
- Panama Canal expansion
- Industry regulation
- West Coast intermodal disruption
- Access to intermodal networks
- Anti-dumping

- Commodity costs
- Weather
- Railroads are not responsive
- Total transportation costs are increasing

TRANSPORTATION SOLUTIONS AND IMPLEMENTATION STRATEGIES

Most shippers felt that project improvements should be prioritized by cost-benefit analysis or return-on-investment calculations.

Most felt that transportation improvements should be paid for through federal and state taxes and Public-Private Partnerships (PPPs) if feasible.

PPPs were considered as a positive method of increasing infrastructure development. It seemed that more information is needed to help support this option.

PROJECT PRIORITIZATION

Benefit-cost measures were considered to be the fairest way to prioritize projects in the state. Several said that projects should be prioritized in areas of highest demand.

There was no statistically valid rating of the most important improvement. Essentially everyone wanted every improvement in an unconstrained cost environment. Several mentioned intermodal and more rail access projects should be prioritized to gain access to lower cost shipping modes. Bridges and more railheads were noted as important since highway transportation is the most often used mode. Multimodal transfer stations are needed to reduce multi-state drayage costs and provide access to more transportation capacity, especially if a truck driver shortage worsens.

Others mentioned the high reliance of the trucking industry on the maintenance of current roads and bridges, and that those should be the highest priority.

PASSENGER RAIL

Passenger rail is not viewed as an option to benefit business travel. Several noted the passenger rail system is impractical in Iowa.

Passenger rail was not considered an important investment for the state. Respondents felt that passenger rail should pay for itself.

F.6 Meeting Comments

25650 Email Comment from J Parliment

Date: 6/8/2016 **Type:** Comment **Status:** Open

Summary: Amanda, I submitted a comment, but wanted to be sure something was changed. Concerning the notes for Table 2.1 … note a.The BNSF has no trackage rights on the SD State owned rail line between Elk Point, SD and Canton, SD which is solely operated by the D & I Railroad (DAIR).

Participants

Person Attendee

Jack Parliament	D & I Railroad Co. (DAIR)
jdparliament@lgeverist.com	(605) 330-6588

25833 Web Comment from C Litwiller

Date: 6/29/2016 **Type:** Website Comment **Status:** Open

Summary: Due to being unable to attend the public meeting that was scheduled, I appreciate being able to access information online. Thanks!

Participants

Person Attendee

Cindy Litwiller	Iowa Falls Area Development Corporation
director@iowafallsdevelopment.com	(641) 373-3455

26857 Comments from Norfolk Southern

Date: 7/1/2016 **Type:** Comment **Status:** Open

Summary: - NS and CP do not interchange at Ottumwa. I saw it referenced on pages 2-5, A-21, and A-28.- The main gateway to NS's network from its BNSF Des Moines haulage rights is St. Louis, not Hannibal. I saw this referenced on page A-29, both in the first paragraph and on the map.- Table 8 (page A-30): In the mileage column, Tracy – Hamilton should be 16 miles, while Swan – Des Moines should be 11 miles.- 2015 Iowa State Railroad Map: The legend refers to NS as Norfolk and Southern. There actually is no "and" in our name.

Participants

Person Attendee

Gregory Pope	Norfolk Southern
Gregory.Pope@nscorp.com	

26904 Web Comment from S Kossayian

Date: 7/12/2016 **Type:** Website Comment **Status:** Open

Summary: No comment given, added to mailing list only

Participants

Person Attendee

Stephen Kossayian

skossayian@msn.com

27961 BNSF Comments on Rail Plan

Date: 7/22/2016 **Type:** Comment **Status:** Open

Summary: Page 2-4 Definition of a Class 1 is revenue in excess of $289.4m. The items listed in the document are other characteristics.Page 2-35 AARA = ARRAPage 2-44 Section 2.1.6.5 makes it sound like the deadline was missed. Recommend combining last paragraph in section with second paragraph.Page 2-56In the Inbound Tonnage Origin section, where it states "movements originating out-of-state are transported to the following", I believe it should say "movements originating out-of-state are transported from the following". Page 2-69 (Table 2.26)• Remove the capacity column from this table• For BNSF subdivisions, Creston and Ottumwa, change capacity constraint to “No”• Note that the Estimated Trains per day is the same for both Creston and Ottumwa, despite one being single track and the other double.• Also note that the estimated trains per day for Ottumwa is already higher than the practical capacity, calling the model into question• Recommend removing the table entirely

Participants

Person Attendee

Sarod Dhuru BNSF Railway

sarod.dhuru@bnsf.com

27962 UPRR Comments on Rail Plan

Date: 7/22/2016 **Type:** Comment **Status:** Open

Summary: I wanted to quickly give you some feedback to the Iowa State Rail Plan draft that is currently online and open for comment. Union Pacific does not support the conclusions reached in Table 2.26: Major Iowa Rail Line Capacity Evaluation. Our concern is the methodology used to determine the line capacity and constraints (columns 7 and 8) uses data that not valid anymore and can be used out of context. As a result, we don't support the conclusions outlined on pages 2-69 and 2-70.

Participants

Person Attendee

Kelli O'Brien	Union Pacific Railroad
kobrien@up.com	(402) 544-4749

State Freight Plan

25648 Web Comment - J Parliament (D and I RR Co)

Date: 6/8/2016 **Type:** Website Comment **Status:** Open

Summary: Concerning the notes for Table 2.1,the first note a: The entire statement is FALSE. The BNSF has no trackage rights over the SD State owned rail between Elk Point, SD and Canton, SD which is solely operated by the DAIR.

Participants

Person Attendee

Jack Parliament	D & I Railroad Co. (DAIR)
jdparliament@lgeverist.com	(605) 330-6588

State Rail Plan

25811 Comment on Rail Plan - IAIS

Date: 6/27/2016 **Type:** Comment **Status:** Open

Summary: Dear Ms. Martin:Below please find our comments for items contained in the Draft Iowa State Rail Plan. We are impressed with this comprehensive document that required a significant effort by all those involved.ITEMS FOR FACTUAL UPDATES OR CORRECTIONSChapter 2, Table 2.1 and Note (c) thereto In October 2016, CIC will again be operating its Iowa City to Hills segment with the lease expiration.Chapter 2, Section 2.1.1.1.2 parenthetical description of IAIS1. WS still has trackage rights over Metra to Blue Island.2. The line segment from Hancock Jct. to Oakland was mostly abandoned in 2014; less than a mile of stub track remains.3. In the 2°d paragraph to avoid confusion, please place the word "previously" in front of"leased from Lincoln & Southern ... "4. We do not have trackage rights over the CIC to go from the Yocum Connection to Cedar Rapids; this is only a marketing agreement with CIC.5. In October 2016, CIC will again be operating its Iowa City to Hills segment with the lease expiration.6. Please also note that IAIS connects with all Class 1 carriers.Chapter 31. Table 3 .1 notes the initiation of passenger service in 2015 between Chicago and the Quad Cities and extension to Iowa City in 2017. You may wish to revise the timeline.2. Section 3 .3 .1.1, last paragraph. Please know that, in discussions with the Illinois DOT, BNSF has steadfastly stated that its capacity would not allow for more than the two trains in each direction envisioned in the Chicago-Wyanet segment.3. Section 3.3.1.2.5 - First line of the first paragraph has a typo with an isolated "i" that should be deleted before the word "infrastructure".4. Section 3.3.1.5 should possibly be revised for consistency with the extension being sought for completion of the study in 2017, not 2016.5. In Section 3.4.1, it is WS, not IANR, which provides the operations of the Hawkeye Express. IANR leases its equipment to the University of Iowa. IAIS does the actual work on its lines.6. In table 5.2, in the Short-Range Passenger Rail Projects section, we are unaware of any local sources to fund Phase 1 of passenger service from Chicago to the Quad Cities.7. Regarding references to IAIS in appendix A,a. Changes may be needed for earlier comments.b. We are unsure of what the references to "Rigg" and "Peter" are in the line heritage section for Council Bluffs on page A-49.ITEMS FOR CLARIFICATIONChapter 31. Section 3 .3 .1.2.6 Ridership, Revenue, and Costs. We would highly suggest adding cautionary language to the effect that the amounts are only preliminary estimates, given the history of actual matters. We further note that IAIS has not been consulted with respect to the ongoing costs of hosting passenger service andwe offer no opinion and no support for any statements made with respect to such costs.2. Regarding Proposed Commuter Rail Services in Section 3.3 and elsewhere, IAIS has not been consulted as to any of the items affecting any of our lines and, accordingly, we reaffirm ourpreviously written and oral communications that, with respect to any project as follows:a. Freight service and train capacity on the IAIS will not deteriorate, or its future growth be limited, due to passenger service,b. All costs involved to both build and/or maintain track above our current Class 3 track standards will be paid for by the party or parties seeking to have passenger service on ourrail lines, and c. Any additional construction or ongoing costs including, but not limited to, positive train control, road crossing protection upgrades, liability and other items for safety, operating needs, and/or to comply with other parties' concerns or regulations in providing rail passenger service will be borne by those parties.3. IAIS does not support additional passenger excursions over its rail lines beyond that to which we are a current party with the Iowa DOT. Specifically, IAIS does not support and will not allow any tourist rail excursions or other similar trains ope

Participants

Person Attendee

Jerome Lipka	Iowa Interstate Railroad

June 22, 2016

Ms. Amanda Martin
Freight and Passenger Policy Coordinator
Iowa Department of Transportation
Office of Rail Transportation
800 Lincoln Way
Ames, IA 50010

Re: Draft Iowa State Rail Plan

Dear Ms. Martin:

Below please find our comments for items contained in the Draft Iowa State Rail Plan. We are impressed with this comprehensive document that required a significant effort by all those involved.

ITEMS FOR FACTUAL UPDATES OR CORRECTIONS

Chapter 2, Table 2.1 and Note (c) thereto
In October 2016, CIC will again be operating its Iowa City to Hills segment with the lease expiration.

Chapter 2, Section 2.1.1.1.2 parenthetical description of IAIS

1. IAIS still has trackage rights over Metra to Blue Island.
2. The line segment from Hancock Jct. to Oakland was mostly abandoned in 2014; less than a mile of stub track remains.
3. In the 2nd paragraph to avoid confusion, please place the word "previously" in front of "leased from Lincoln & Southern…"
4. We do not have trackage rights over the CIC to go from the Yocum Connection to Cedar Rapids; this is only a marketing agreement with CIC.
5. In October 2016, CIC will again be operating its Iowa City to Hills segment with the lease expiration.
6. Please also note that IAIS connects with all Class 1 carriers.

Chapter 3

1. Table 3.1 notes the initiation of passenger service in 2015 between Chicago and the Quad Cities and extension to Iowa City in 2017. You may wish to revise the timeline.
2. Section 3.3.1.1, last paragraph. Please know that, in discussions with the Illinois DOT, BNSF has steadfastly stated that its capacity would not allow for more than the two trains in each direction envisioned in the Chicago-Wyanet segment.
3. Section 3.3.1.2.5 – First line of the first paragraph has a typo with an isolated "i" that should be deleted before the word "infrastructure".
4. Section 3.3.1.5 should possibly be revised for consistency with the extension being sought for completion of the study in 2017, not 2016.
5. In Section 3.4.1, it is IAIS, not IANR, which provides the operations of the *Hawkeye Express*. IANR leases its equipment to the University of Iowa. IAIS does the actual work on its lines.

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6. In table 5.2, in the Short-Range Passenger Rail Projects section, we are unaware of any local sources to fund Phase 1 of passenger service from Chicago to the Quad Cities.
7. Regarding references to IAIS in appendix A,
    a. Changes may be needed for earlier comments.
    b. We are unsure of what the references to "Rigg" and "Peter" are in the line heritage section for Council Bluffs on page A-49.

ITEMS FOR CLARIFICATION

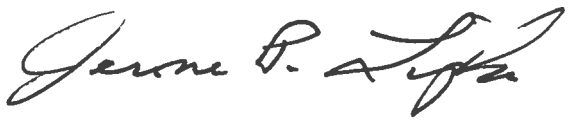
Chapter 3

1. Section 3.3.1.2.6 Ridership, Revenue, and Costs. We would highly suggest adding cautionary language to the effect that the amounts are only preliminary estimates, given the history of actual matters. We further note that IAIS has not been consulted with respect to the ongoing costs of hosting passenger service and we offer no opinion and no support for any statements made with respect to such costs.
2. Regarding Proposed Commuter Rail Services in Section 3.3 and elsewhere, IAIS has not been consulted as to any of the items affecting any of our lines and, accordingly, we reaffirm our previously written and oral communications that, with respect to any project as follows:
    a. Freight service and train capacity on the IAIS will not deteriorate, or its future growth be limited, due to passenger service,
    b. All costs involved to both build and/or maintain track above our current Class 3 track standards will be paid for by the party or parties seeking to have passenger service on our rail lines, and
    c. Any additional construction or ongoing costs including, but not limited to, positive train control, road crossing protection upgrades, liability and other items for safety, operating needs, and/or to comply with other parties' concerns or regulations in providing rail passenger service will be borne by those parties.
3. IAIS does not support additional passenger excursions over its rail lines beyond that to which we are a current party with the Iowa DOT. Specifically, IAIS does not support and will not allow any tourist rail excursions or other similar trains operated by third parties on its lines.

Chapter 5

IAIS has not been consulted with respect to any of the cited costs on its rail lines for passenger service and, accordingly, we express no opinion or support regarding the amounts.

Sincerely,



Jerome P. Lipka
President and CEO

Cc: Mr. Paul Trombino
Ms. Diane McCauley

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F.7 Outreach Elements and Comments

Outreach Elements

The Iowa Department of Transportation (Iowa DOT) used the following public engagement outreach techniques throughout development of both plans.

- *Website*
- *Email*
- *Phone calls*
- *Yammer*
- *Iowa DOT internal blog*
- *Media advisory*

Table 1 summarizes the outreach efforts for each meeting.

Table 1: Outreach Efforts by Meeting

Meeting	Meeting Date	Type of Outreach					
		Website	Email	Phone calls	Yammer	Iowa DOT internal blog	Media advisory
Issues-based Workshop	9/24/2015		x			x	
High Leverage Stakeholder Committee Meeting #1	11/18/2015		x	x			
High Leverage Stakeholder Committee Meeting #2	2/25/2016		x	x			
Public Meeting/ High Leverage Stakeholder Committee Meeting #3	5/8/2016	x	x		x		x

Issues-based Workshop Outreach

Multiple email notifications were sent to a database of 188 stakeholders. An email invitation letter was distributed on August 31 and September 2, 2015; a reminder invitation email was distributed on September 11, 2015; an extension invitation email was sent on September 18, 2015; and a follow-up email invitation was sent on September 23, 2015 (Appendix B, Example Workshop Invitations). Table 2 summarizes the outreach efforts for this meeting

Table 2: Issues-based Workshop Outreach

Outreach	Date

Outreach	Date
Save the Date email	8/31
Save the Date email	9/2
Invitation email	9/11
RSVP Deadline email	9/18
Agenda email	9/23

High Leverage Stakeholder Committee Meeting #1

Invitations and several emails were distributed to 40 stakeholders. Table 3 summarizes the outreach efforts for this meeting. See Appendix A: Meeting Invitation. The Iowa DOT followed up with invitees through phone calls.

Table 3: High Leverage Stakeholder Committee Meeting #1 Outreach

Outreach	Date	Number of Emails Distributed
Agenda Email	11/13/2015	40

High Leverage Stakeholder Committee Meeting #2

Invitations were distributed to 41 recipients via email. Table 4 summarizes the outreach efforts for this meeting. The consultant team followed up with invitees through phone calls.

Table 4. High Leverage Stakeholder Committee Meeting #2 Outreach

Outreach	Date	Number of Emails Distributed/Phone Calls
HLSC #2 invitation email	1/8/2016	41
HLSC #2 reminder invitation email	2/12/2016	41
HLSC #2 agenda email	2/19/2016	41
HLSC #2 follow-up phone calls	2/22/2016	6

Public Meeting/High Leverage Stakeholder Committee Meeting #3

Invitations were distributed to 1,968 recipients via email. Table 5 summarizes the outreach efforts for this meeting. See Appendix A: Meeting Invitation for the invitation content.

Table 5. Public Meeting/High Leverage Stakeholder Committee Meeting #3 Outreach

Outreach	Date	Number of Emails Distributed
Public meeting email invitation	5/19/2016	1,968
Public meeting email invitation for HLSC members	5/19/2016	42
Public meeting email reminder	6/6/2016	1,839 *
Public meeting email reminder for	6/6/2016	42

Outreach	Date	Number of Emails Distributed
HLSC members		
Yammer outreach	5/2016 - 6/2016	n/a
Media advisory	5/2016 - 6/2016	n/a

* This number accounts for opt-outs, bounces, etc.

IOWA DOT