

34th meeting of the
IOWA FREIGHT ADVISORY COUNCIL

September 10, 2021
10:00 AM to 1:00 PM

Ramada Tropics Resort and Conference Center
5000 Merle Hay Rd, Des Moines, Iowa 50322

Meeting input objectives

1. Discuss regional, national, and international freight trends and opportunities.
2. Provide input on multimodal freight improvements and priority locations in the state freight plan.

10:00 AM Safety Briefing

Amanda Martin
Iowa DOT

Welcome & Introductions

Ice breaker: Provide any comments, updates, notable items, etc. on your business since the last time we met in-person.

Mike Steenhoek, Chair
Soy Transportation
Coalition

10:30 AM Iowa DOT Update

Overview of the DOT's perspective on the Federal infrastructure bill, summary of the State legislative session, and other agency updates.

Stu Anderson
Iowa DOT

10:50 AM Federal Infrastructure Bill and Funding

Update on discussions/debates for a new transportation bill.

Susan Wallace
Iowa DOT

11:10 AM Des Moines Transload

Status of the new multimodal freight facility being constructed in Des Moines.

Gabe Claypool
Des Moines Industrial

11:40 AM Mooring Cell Project Update

Update on Iowa DOT's work with the U.S. Army Corps of Engineers to construct a mooring cell on the Mississippi River.

Sam Hiscocks
Iowa DOT

11:50 AM State Freight Plan: Improvements

Presentation of the multimodal improvements and priority locations to be included in the plan.

Sam Hiscocks
Iowa DOT

12:20 PM Lunch

1:00 PM Adjourn

Future meetings:

- Friday, December 10th
- 2022 meetings TBD

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IOWA FREIGHT ADVISORY COUNCIL

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Members

	Tom Determann, Clinton Regional Development		Joe Parsons, Iowa Interstate Railroad
x	Greg Dickinson, Ten D/Merchants Distribution	x	Dan Sabin, Iowa Northern Rail.
	Gary Handley, Iowa Motor Truck Association		Jody Sandy, Hy-Vee
	Calean Kokjohn, Cryotech	x	Mike Steenhoek, Soy Transportation Coalition
	Ron Lang	x	Reilly Vaughan, Agribusiness Assoc. of Iowa
x	Don McDowell, Iowa Farm Bureau		Jillian Walsh, Traverro
	Delia Moon-Meier, Iowa 80 Group	x	Ron White, Artco Fleeting Service
	James Niffenegger, Landus Cooperative	x	Tim Woods, Woods Development
x	Kelli O'Brien, Union Pacific Railroad		

Ex-Officio Members

	Todd Ashby, Des Moines Area MPO		Mike Norris, Southeast Iowa RPC
x	Mike Hadley, Keokuk County	x	Paul Ovrom, IDALS
x	Michael Kober, Iowa Dept. of Public Safety	x	Joseph Rude, Iowa Economic Dev. Authority
x	Sean Litteral, FHWA Iowa Div.		Col. Steven Sattinger, USACE Rock Island District
	Scott Marler, Iowa DOT		Louis Vander Streek, Iowa Utilities Board
	Tim Marshall, FHWA Iowa Division	x	Jennifer Wright, Iowa DNR
x	Shirley McGuire, FMCSA		

Iowa DOT

x	Stu Anderson	x	Tammy Nicholson
	Zac Bitting		Garrett Pedersen
	Mikel Derby	x	Charlie Purcell
	Brenda Freshour-Johnston		Ryan Ridout
x	Sam Hiscocks		Angel Robinson
	Troy Jerman		Melissa Spiegel
x	David Lorenzen		Jeff von Brown
	Craig Markley	x	Susan Wallace
x	Amanda Martin		Andrea White
x	Justin Meade		Lee Wilkinson
	David Miller		

Guests

x	Gabe Claypool, Des Moines Industrial		
x	Paul Cownie, Des Moines Industrial		

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10:00 AM Safety Briefing

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Welcome & Introductions

Ice breaker: Provide any comments, updates, notable items, etc. on your business since the last time we met in-person.

Mike Steenhoek, Chair
Soy Transportation
Coalition

Chair Mike Steenhoek opened the meeting by thanking the group for attending the first in-person meeting of the Freight Advisory Council since December 2019. Each attendee introduced themselves and provided recent updates in their industry. Items included:

- Western wildfires and Hurricane Ida have impacted supply chains and commodity flows
- Infrastructure bill discussions are encouraging
- Iowa's international intermodal footprint is growing
- Highway fatalities are up in the state again
- Increased interest in renewable diesel, especially in California
- Labor shortages are impacting agriculture and other industries

Chair Steenhoek also provided an overview of the impact of Hurricane Ida on the Lower Mississippi River in Louisiana. The category four storm damaged grain facilities that will likely take weeks to repair. Although overall damage wasn't as serious as Hurricane Katrina, there are concerns that the facilities won't be ready for this year's harvest.

10:30 AM Iowa DOT Update

Overview of the DOT's perspective on the Federal infrastructure bill, summary of the State legislative session, and other agency updates.

Stu Anderson
Iowa DOT

Stu Anderson provided an update from Iowa DOT, including COVID-19 impacts, funding overviews, and the status of the five-year program. The Iowa Moody index score is now 100 percent of the pre-COVID level, while the national average is 93 percent. Rail numbers and passenger enplanements continue to improve. Several funding items were also covered. Additionally, Iowa DOT is involved a carbon sequestration task force and a truck driver shortage workshop, both of which will be covered at future meetings.

10:50 AM Federal Infrastructure Bill and Funding

Update on discussions/debates for a new transportation bill.

Susan Wallace
Iowa DOT

Susan Wallace provided an in-depth overview of current federal infrastructure bill discussions. The current bipartisan infrastructure bill is the Infrastructure Investment and Jobs Act (IIJA). Ms. Wallace covered the

status of the bill and provided examples of changes to policy and new or significantly altered programs of interest. These include:

- Bill covers transportation, energy, drinking water, wastewater, broadband, climate, cybersecurity, etc.
- Emphasis on greenhouse gas reduction, automated vehicles, multimodalism, equity, innovation, planning, etc.
- Senate passed on 8/10/2021 and the House plans to vote 9/27/2021
- Five-year surface transportation reauthorization (\$383.3 billion)
- Adds to recommended representatives, roles, and qualifications for state freight advisory committees
- Creates Office of Multimodal Infrastructure and Freight
- Adds new multimodal transportation programs and proposes changes to others

11:10 AM Des Moines Transload

Status of the new multimodal freight facility being constructed in Des Moines.

Gabe Claypool

Des Moines Industrial

Gabe Claypool with Des Moines Industrial provided an update on the Des Moines Transload Facility that is currently under construction. The facility is being built on approximately 40 acres close to interstates 35 and 80 with access to four railroads. Phase 1 includes 115,000 sq. ft. of warehouse space, 15,500 feet of track, and 350,000 sq. ft. of incremental cold storage. Phase 2 will include 115,000 sq. ft. warehouse expansion and 100,000 sq. ft. of additional cold storage. The facility will be capable of transloading dry bulk materials, building materials, intermodal containers, waste/recyclables, heavy equipment, and consumer products.

The facility is expected to open by January 2022.

11:40 AM Mooring Cell Project Update

Update on Iowa DOT's work with the U.S. Army Corps of Engineers to construct a mooring cell on the Mississippi River.

Sam Hiscocks

Iowa DOT

Sam Hiscocks provided an update on the ongoing partnership between Iowa DOT and the U.S. Army Corps of Engineers to build a mooring cell at Lock 14 on the Mississippi River. Building a mooring cell was the top recommendation of the 2019 Alternative Financing Study. The contributed funds agreement is currently being finalized and has been reviewed by the legal teams of each agency. Construction is still targeted for 2022 but could be delayed until 2023.

11:50 AM State Freight Plan: Improvements

Presentation of the multimodal improvements and priority locations to be included in the plan.

Sam Hiscocks

Iowa DOT

Sam Hiscocks presented on the status of the State Freight Plan update. The presentation included a recap of plan development and input from the Freight Advisory Council up to this point. Input exercises and the results were overviewed for freight trends, issues, goals, performance measures, networks, and bottlenecks.

Attendees were then asked for input on the identification of freight improvements. These were compiled for air, highway, railroad, and inland waterways. Des Moines International Airport and the Eastern Iowa Airport were consulted for air cargo projects, INRIX traffic data and truck counts were used to identify highway improvements, railroad companies were consulted for rail projects, and the U.S. Army Corps of Engineers provided priority projects on the inland waterways.

12:20 PM Lunch

1:00 PM Adjourn

Future meetings:

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- 2022 meetings TBD



Iowa DOT Update
Iowa Freight Advisory Council
September 10, 2021

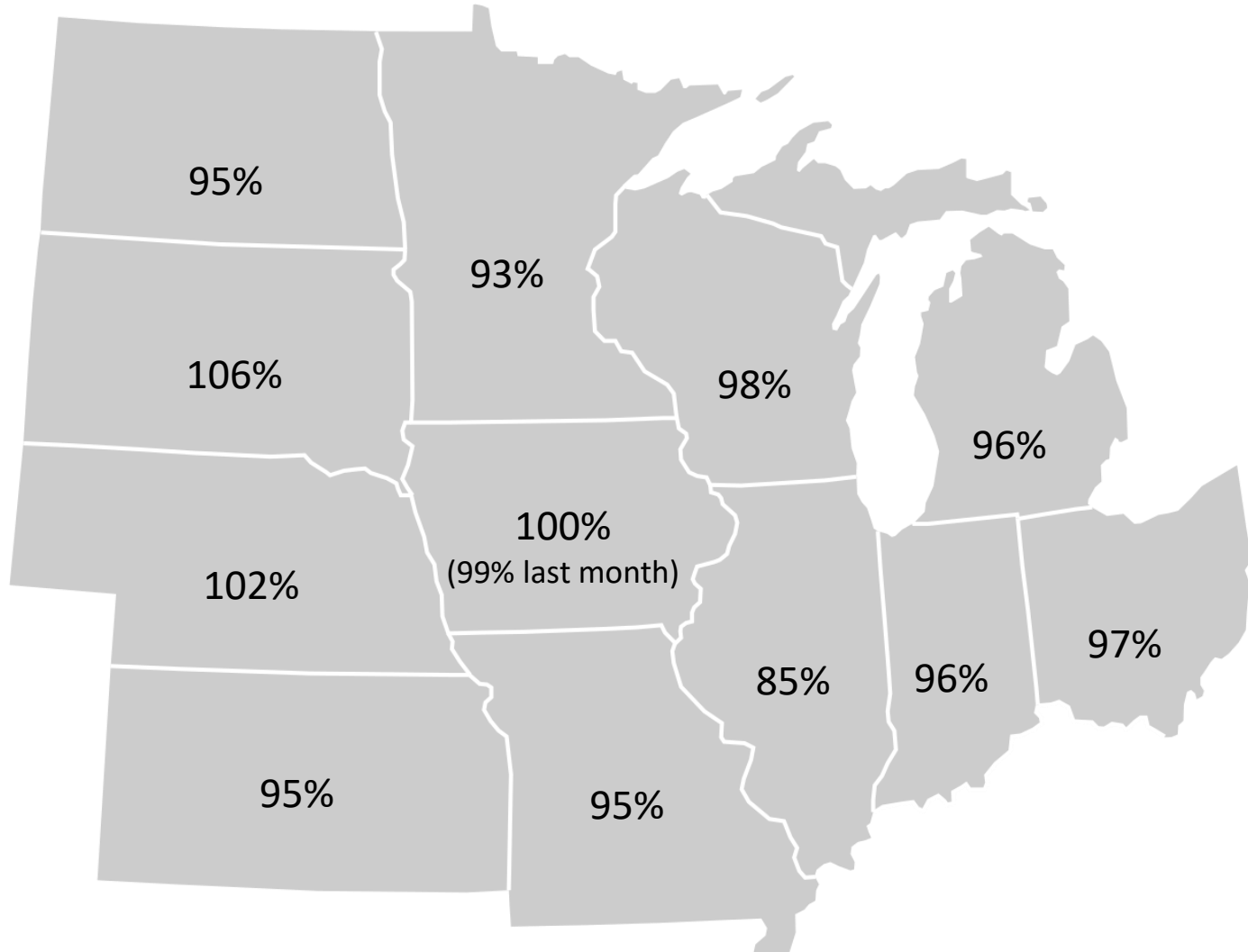


Overview

- **COVID-19 Impacts**
 - Economy
 - Travel
 - Funding

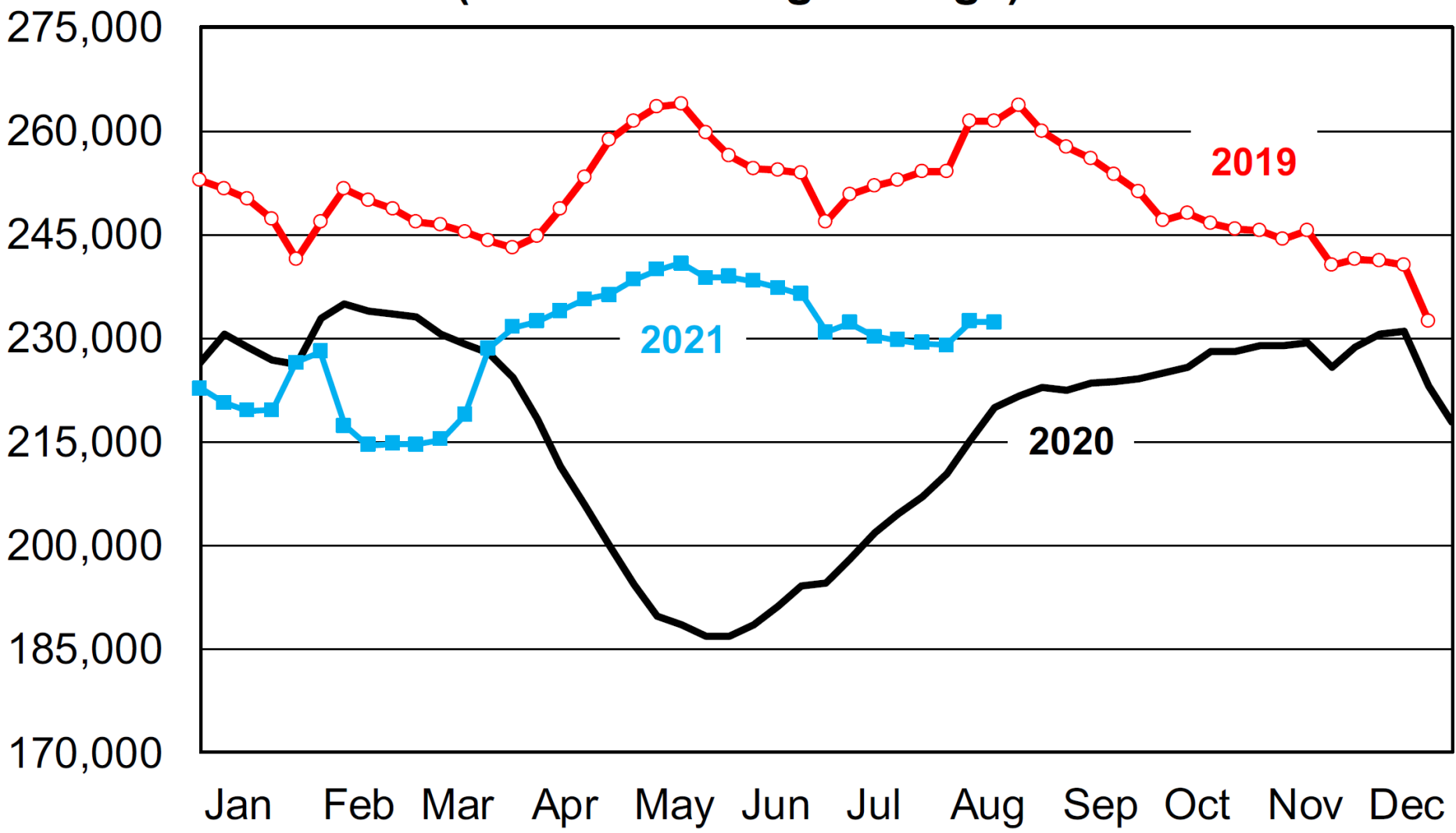
Moody's/CNN Recovery Index - Midwest

(Pre-Pandemic = 100) As of 9/3/2021



Nation is at 93% (92% last month)

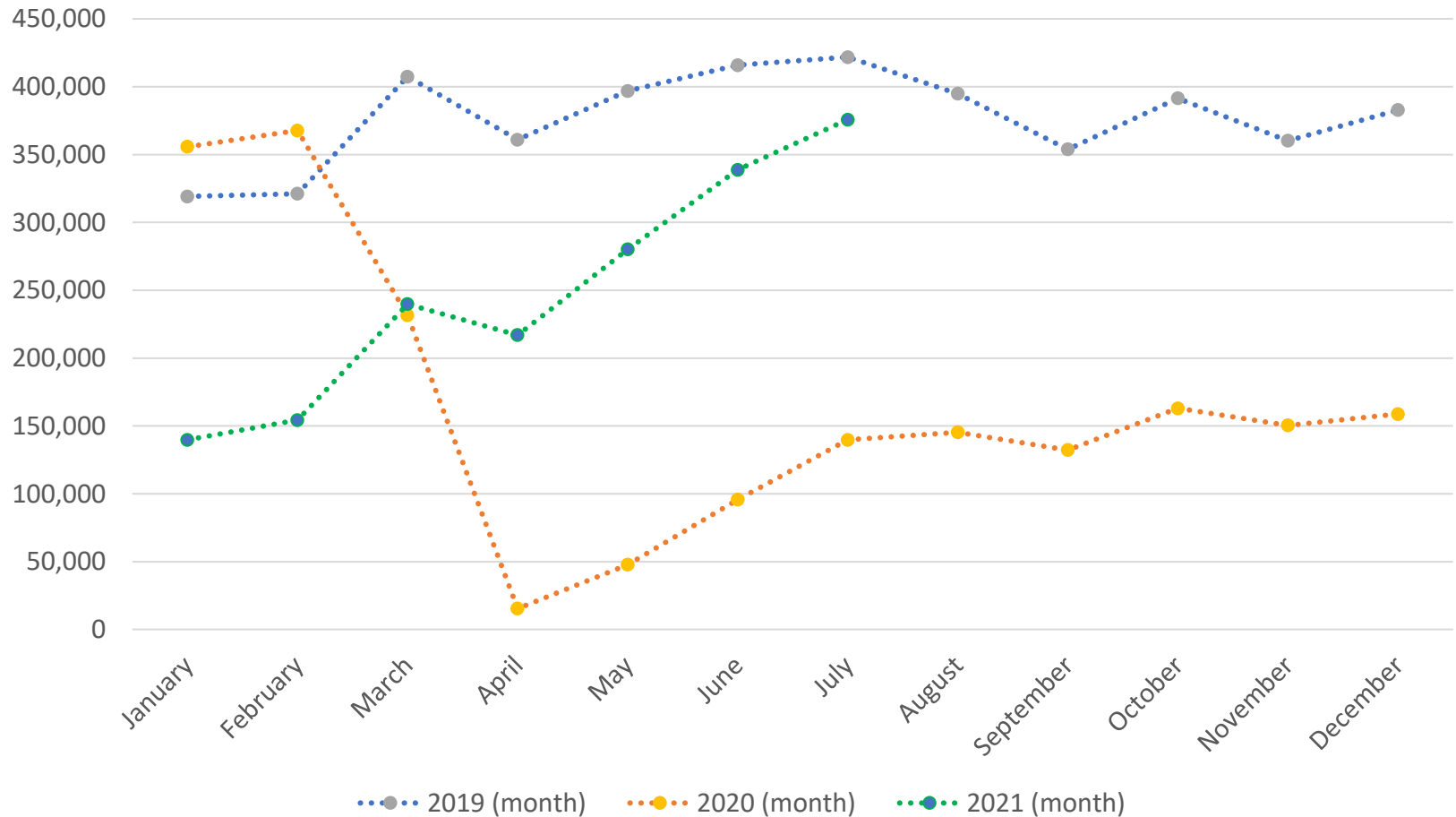
Total U.S. Rail Carloads (6-week moving average)



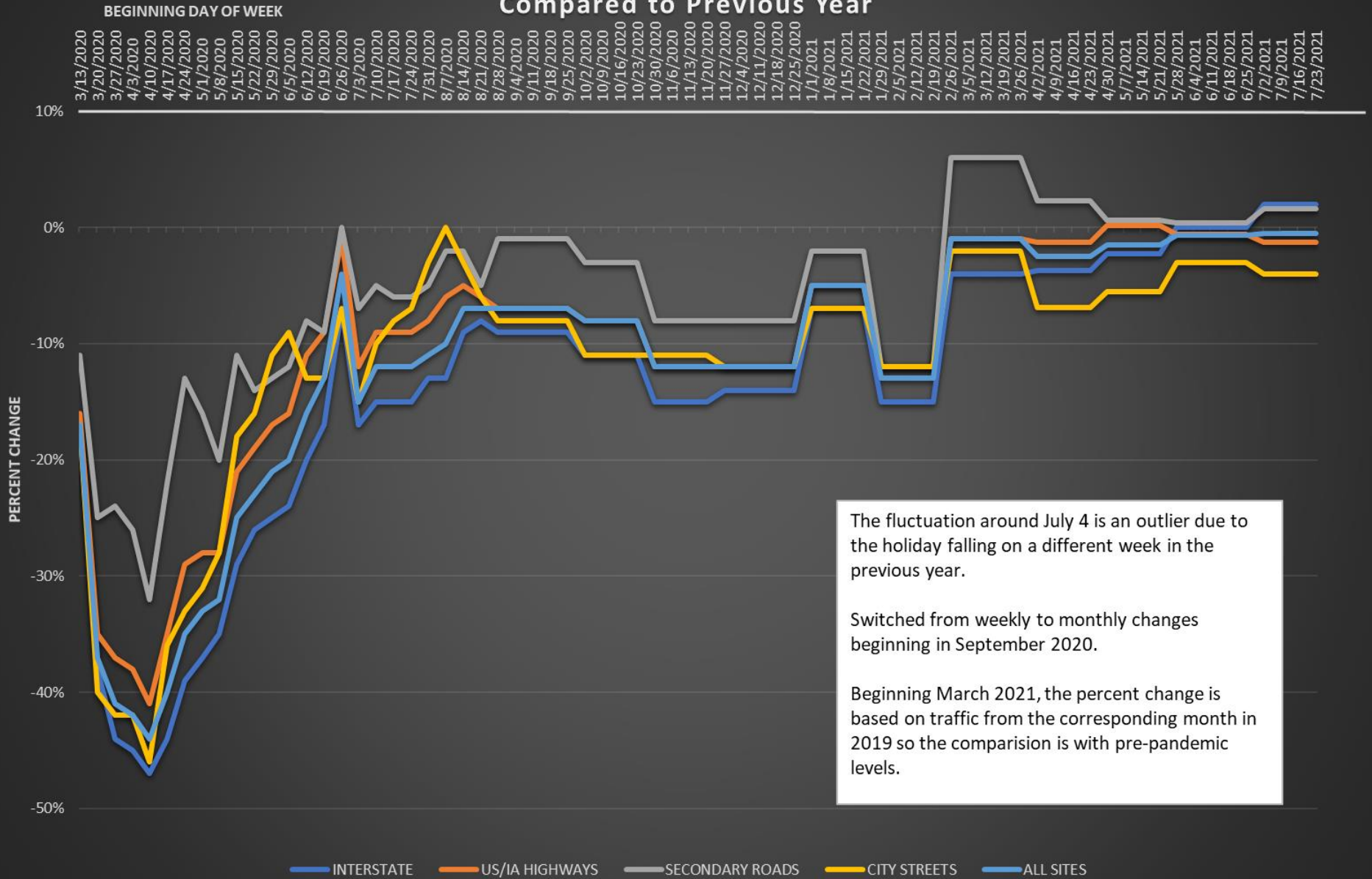
Data are 6-week moving average originations, do not include intermodal, and do not include the U.S. operations of CN, CP, and GMXT. Source: AAR *Rail Time Indicators*

Monthly Passenger Counts at Iowa's Eight Commercial Service Airports

(through July 2021)



Percentage Change in Traffic Compared to Previous Year



The fluctuation around July 4 is an outlier due to the holiday falling on a different week in the previous year.

Switched from weekly to monthly changes beginning in September 2020.

Beginning March 2021, the percent change is based on traffic from the corresponding month in 2019 so the comparison is with pre-pandemic levels.

Transportation Funding Impacts – COVID

HIGHWAY

- Fuel tax receipts are down due to travel impacts
- Vehicle registration revenue is steady to growing (despite early drop in vehicle sales)
- Estimated lost RUTF through June 2021
- \$50M

TRANSIT

- Initial drop in State Transit Assistance revenue but that has rebounded
- FY 2021 state vertical infrastructure appropriation lower due to reduced RIIF revenue
- Dramatic drop in local revenue due to reduced ridership

AVIATION

- State aviation fund revenue down about **40 percent** due to lower aviation fuel tax
- FY 2021 state vertical infrastructure appropriation lower due to reduced RIIF revenue
- Dramatic drop in local revenue due to reduced passengers

TRAILS

- FY 2021 state vertical infrastructure appropriations lower due to reduced RIIF revenue

Federal Support – COVID

FEDERAL APPROPRIATIONS

CARES Act - March 2020
Coronavirus Aid, Relief, and
Economic Security Act

CRRSAA - Dec. 2020
Coronavirus Response and
Relief Supplemental
Appropriations Act of 2021

ARP - March 2021
American Rescue Plan Act of
2021

HIGHWAYS/BRIDGES IN IOWA

- CARES Act: None
- CRRSAA: \$121.9 million
- ARP Act: No dedicated funding

TRANSIT AGENCIES IN IOWA

- CARES Act: \$107 million
- CRRSAA: \$26.5 million
- ARP Act: \$61.1 million

AIRPORTS IN IOWA

- CARES Act: \$70.5 million
- CRRSAA: \$13.4 million
- ARP Act: \$26.9 million

Questions?

Stu Anderson

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515-239-1661



FEDERAL UPDATE – Freight Advisory Council

Revised Sept. 29, 2021



Infrastructure Investment and Jobs Act (HR 3684) aka “Bipartisan Infrastructure Bill”

- Status and overview
- Examples of changes to policy
- Examples of new or significantly altered programs of interest

HR 3684 status and overview

- Senate passed 8/10, 69-30
- House plans to vote 10/27 – could be impacted by progress on the “reconciliation bill”
- Transp.; Energy; Drinking Water/ Wastewater; Broadband; Climate-related; Cybersecurity; etc.
- For transportation:
 - Five-year surface transportation reauthorization (\$383.3 billion HTF and some GF)
 - Core highway programs would remain, with two proposed additions
 - HTF bailout: \$118 billion
 - Additional investment in “Division J” of the bill (\$184.1 billion mostly GF)

Policy: overview

Included:

- Reversal of program consolidation
- Emphasis on greenhouse gas reduction, automated vehicles, multimodalism, equity, innovation, planning, etc.

Not included:

- EV charging at rest areas
- Specific High Speed Rail program

Policy: changes to State Freight Advisory Committee

- Adds to recommended representatives: MPOs, state environmental protection department, economic development agencies, not-for-profit or community groups
- Adds to their role: provide advice in the development of the freight investment plan
- Adds a new section on qualifications, requiring that members have experience in at least one of several areas

Policy: Office of Multimodal Infrastructure and Freight

- Within OST
- Facilitate sharing of information between public and private sectors re. freight issues
- Assist cities and states in developing supply chains
- Develop the national freight strategic plan and the national multimodal freight network
- Oversee the development and updating of state freight plans
- Administers five programs:

Programs admin. by the Office of Multimodal and Freight Infrastructure

- National Infrastructure Project Assistance
- INFRA
- RAISE
- SMART grants (technology)
- National Culvert Removal (anadromous fish passage)

Proposed new program: National Infrastructure Project Assistance

Administered by Office of Multimodal and Freight Infrastructure

5/yr funding	\$5 billion
Distribution	competitive
For	“mega projects” costing at least \$100M / \$500M
Eligible	states, MPOs, Indian tribes, local gov, partnerships with Amtrak, etc.
Examples	highway, freight intermodal or freight rail with public benefits, grade separation, intercity passenger rail, transit if related to an eligible project
Other	can be a multi-year grant agreement

Proposed changes and plus-up to existing program: INFRA

Admin by	Office of Multimodal and Freight Infrastructure
5/yr. funding	\$8 billion
Distribution	competitive
For	“Nationally Significant <i>Multimodal</i> Freight and Highway Projects”
Eligible	states, MPOs, Indian tribes, local gov, etc.
Examples	Highway or freight, grade crossings, freight intermodal or freight rail
other	Adds “multimodal” to the official title and throughout; 30 percent for non-highway (instead of an aggregate amount)

Proposed codification and plus-up of existing program: RAISE

Admin by	Office of Multimodal and Freight Infrastructure
5/yr. funding	\$7.5 billion
Distribution	competitive
For	capital investments with a significant local or regional impact
Eligible	states, tribal gov, local gov, transit agencies, etc.
Examples	highways/bridges, transit, freight or passenger rail, ports (including inland), the surface components of an airport, stormwater runoff projects, “any other project that advances the program goals”
other	text leaves rural/urban split at 50/50

Proposed new **core** program: PROTECT

Admin by	FHWA
Funding	\$7.3 billion / \$1.4 billion
Distribution	formula to states / competitive for states, MPOs, local gov, etc.
For	improved resilience: materials, structural on non-structural techniques
Examples	<u>formula</u> : highways and Title 49 projects such as additional flood storage, culvert upgrades, best management practices, etc. <u>competitive</u> : planning, resilience of existing assets, protection of evacuation routes

Proposed new core program: Carbon Reduction

Admin by	FHWA
5/yr. funding	\$6.42 billion
Distribution	formula
For	wide range of projects to reduce transportation carbon emissions
Eligible	states, with suballocations
Examples	traffic monitoring, public transit, trails, congestion mgmt., reduce impacts of freight mvmt., support for EV charging and purchase of zero emission construction equipment, etc.

Proposed new program: Grants for Charging and Fueling Infrastructure

Admin by	FHWA
5/yr. funding	\$2.5 billion
For	strategic deployment of publicly accessible infrastructure for EV charging, propane and natural gas, along designated corridors and certain other locations accessible to all drivers.
Distribution	appears to be application-based
Eligible	states, MPOs, local government, Indian tribes, etc.
Projects	planning, acquisition (including real property), installation
Other	applicants must consider a wide range of factors, including height and fueling capacity requirements for heavy trucks

Proposed new program: National Electric Vehicle Formula Program

Admin by	FHWA
5/yr. funding	\$5 billion
For	strategic deployment of EV charging infrastructure and establishing an interconnected network for data collection, access and reliability
Distribution	formula, based on share of apportionment
Eligible	states (must submit a plan for use of the funds)
Examples	acquisition and installation, operation and maintenance, data sharing
other	if no state plan submitted, local govts may apply for the funds

Proposed new program: Bridge Investment

Admin by	FHWA
5/yr. funding	\$12.5 billion
Distribution	competitive
For	replacement, rehab, preservation or protection of bridges on the National Bridge Inventory – public only
Eligible	states, MPOs with pop. over 200K, local govts, Tribal govts, etc.
Examples	highway bridges on public roads, over waterways and other barriers, including railroads. Replacement, rehab of culverts.
other	option for multi-year grant agreements

Proposed new program: Bridge Replacement, Rehabilitation, Preservation, Protection and Construction

Admin by	FHWA
5/yr. funding	\$27.5 billion
Distribution	formula (75% based on share of cost of replacing all bridges classified as “poor”, and 25% based on share of cost of rehabbing all bridges classified as “fair”)
For	replacement, rehabilitation, preservation, protection and construction of qualifying bridges on public roads
Eligible	states (15% set aside for off-system bridges)

Proposed new program: Railroad Crossing Elimination Program

Admin by	FRA
5/yr. funding	\$3 billion
Distribution	competitive
For	highway/rail or pathway/rail grade crossing improvements that focus on improving the safety and mobility of people and goods
Eligible	states, MPOs, local govns, Indian tribes, etc.
Examples	grade separation or closure, track relocation, protective devices, signals, etc., other means such as technological
other	requires approval of rail carrier or property owner 20% of funds for rural areas or Indian tribes, 25% for planning

Plus-up of existing program: CRISI

Admin by	FRA
5/yr. funding	\$5 billion
Distribution	competitive
For	leveraging private, state and local investments to support safety enhancements and general improvements for intercity and freight
Eligible	states, public agencies, Amtrak, Class II or III railroads, etc.
Examples	adds as eligible: capital projects for <u>safety</u> (not just congestion); for locomotives: rehabilitation, etc., provided it reduces emissions; and prep of emergency plans for haz mat transported by rail

Codification and change to existing program: RRIF

Admin by	FRA
5/yr. funding	\$250 million
For	financing
	Clarifies that loan proceeds may be used as non-federal share for grants 50% per year set aside for shortlines

Changes and plus-up to existing program: Port Infrastructure Development

Admin by	MARAD
5/yr. funding	\$2.25 billion
For	improved safety, efficiency, or reliability of the movement of goods through ports and intermodal connections to ports
Eligible	state, local gov, tribal gov, lead entity with a private entity, etc.
Examples	new eligibilities: resilience to extreme weather, reduce pollutants or greenhouse gas reduction incl. EV charging.



Des Moines Industrial

General Overview

August 2021

Executive Summary












- Des Moines Industrial (DSMI) is a private company established in April 2019 to develop, own and operate this rail-based logistics terminal for 3rd party clients
- DSMI's goal is to be operational in Q4 2021
- \$28M Public/Private Partnership
 - U.S. Department of Transportation BUILD Grant of \$11.2M was approved for distribution in August 2020
 - Iowa Department of Transportation loan of \$1.7M awarded
 - City of Des Moines tax abatement support
- The terminal's footprint is approximately 40 acres
- Interstates 35 & 80 are roughly 1 mile from the terminal on 2 designated truck routes
- Direct railroad connectivity to Burlington Northern Santa Fe (BNSF), Iowa Interstate Railroad (IAIS) and Norfolk Southern (NS)
- Union Pacific (UP) connected via an agreement with IAIS
- Phase 1 logistics capabilities:
 - 115,000 square foot warehouse
 - ≈ 15,500 feet of track infrastructure
 - 350,000 square feet of outdoor storage capabilities
- Phase 2 warehousing potential
 - 115,000 square foot warehouse expansion
 - 100,000+ square feet of incremental cold storage

Project Team & Partners



Aerial Map of Property With Infrastructure Defined

LEGEND

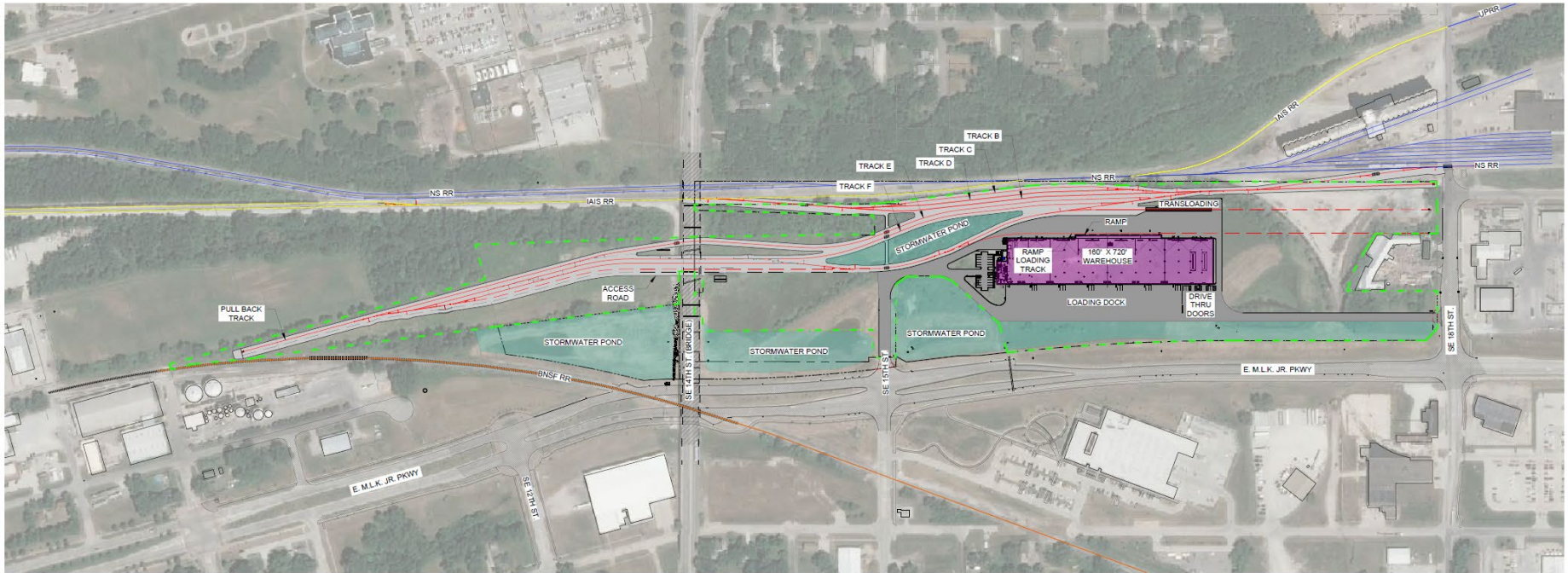
	EXISTING PROPERTY LINE
	EXISTING LOT LINES
	DSMI PROPERTY LINE
	EXISTING NS AND UP TRACK
	EXISTING BNSF TRACK
	EXISTING IAISRR TRACK
	INDUSTRY TRACK
	FUTURE TRACK
	PAVEMENT
	EXISTING CONCRETE PAVEMENT
	PROPOSED DRAINAGE BASIN

RAIL

- DIRECT INTERCONNECTS TO:
 - IOWA INTERSTATE RAILROAD
 - BNSF RAILWAY
 - NORFOLK SOUTHERN
- 15,515 FEET OF TRACK
- 12 INTRA-TERMINAL SWITCHES
- MULTIPLE TRANSLOADING CAPABILITIES AVAILABLE
- 350,000+ SQUARE FEET OF OUTDOOR STORAGE
- DROP TRACK CLEAR LENGTH AVAILABLE:
 - TRACK B - 731 TF
 - TRACK C - 591 TF
 - TRACK D - 561 TF
 - TRACK E - 2,548 TF
 - TRACK F - 2,280 TF

WAREHOUSE

- PRECAST CONC. = 160'x720'
- 115,200 SF
- MINIMUM CLEAR HEIGHT = 30'-10"
- 12 LOADING DOCK DOORS (SOUTH - PRIMARY TRUCK LOADING AREA)
- 2 DRIVE THROUGH TRUCK BAYS
- 7 LOADING DOCK DOORS (NORTH - RAIL TRANSLOADING)
- RAILROAD RAMP DIRECTLY CONNECTED
- ESFR SPRINKLER SYSTEM
- OFFICE = 2,800 SF



Warehouse Highlights



 Des Moines
Industrial


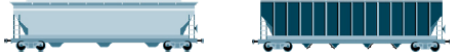










- 115,000 square foot warehouse
- 31'-10" minimum clear height
- 50' x 40' column spacing
- ESFR sprinkler system
- 12 heavy-duty loading dock doors (self-leveling)
- 2 drive through truck bays
- All truck doors are automatic and insulated
- Parking and trailer drop lot
- Ample electric, municipal water and sewer
- High speed fiber onsite
- Tenant improvements available
- 350,000 plus square feet of outdoor storage

Railroad Highlights



- IAIS Interconnection
- NS Interconnection
- BNSF Interconnection (via NS)
- UP Interconnection (via IAIS)
- Mobile railcar mover onsite
- 15,500 linear feet of track
- 12 intra-terminal switches
- 2,500' maximum clear track
- Covered railroad ramp connected to warehouse
- Multiple transloading options
- Multiple areas for transloading
- 7 drive through truck doors on North side of warehouse
- 350,000 plus square feet of outdoor storage

DSMI Transloading Capabilities

Product Type(s)	Transloading Equipment	Railcar Type(s)
<p>Dry Bulk</p> <ul style="list-style-type: none"> Aggregates, minerals, cement, agricultural... 		 <p>covered hopper open top hopper</p>
<p>Building Materials</p> <ul style="list-style-type: none"> Lumber, wallboard, shingles, steel beams, pipe, rebar... 		 <p>flatcar boxcar centerbeam flatcar</p>
<p>Intermodal</p> <ul style="list-style-type: none"> International, food, e-commerce, temperature controlled... 		 <p>well car</p>
<p>Waste/Recyclable</p> <ul style="list-style-type: none"> Metals, paper, plastics... 		 <p>standard gondola open top hopper</p>
<p>Heavy Equipment</p> <ul style="list-style-type: none"> Military, agriculture, construction, wind energy... 		 <p>flatcar</p>
<p>Consumer</p> <ul style="list-style-type: none"> Food, paper, beverages, temperature controlled, IP agricultural... 		 <p>refrigerated boxcar boxcar</p>

DSMI – Benefits of Flexible Freight

- Des Moines is centrally located in the U.S. at the intersection of I-35 & I-80
- Des Moines Industrial offers unparalleled railroad carrier optionality with direct connectivity to the East, West & Gulf Coast markets:
 - Direct: BNSF, Iowa Interstate, Norfolk Southern
 - Reciprocal Switch: Union Pacific
- Railroading benefits:
 - Rail is generally less expensive versus long-haul trucking on heavy and/or bulky commodities shipped over 250 miles 1-way
 - 2018 – American Trucking Association said shipping by rail is 45% less expensive per ton than by long-haul truck
 - Rail produces 75% less greenhouse emissions than long-haul trucks moving the same tonnage of freight
 - One railcar holds the equivalent tonnage as four tractor trailers, thus reducing road traffic and damage
 - Rail costs are more stable because capacity and pricing are less susceptible to short term market fundamentals
 - The Federal Highway Administration forecasts the total U.S. freight shipments will increase from 18.6B tons in 2018 to 24.1B tons in 2040 (30% increase)
 - The trucking industry is currently 1,000,000 drivers short of their needs, thus costs are up and long-term fundamentals are bearish on reversing these trends
- Des Moines Industrial's flexible freight enables clients to enhance their traditional trucking solutions with the added value of railroad logistics

Burlington Northern Santa Fe (BNSF)



Norfolk Southern (NS)



Iowa Interstate Railroad (IAIS)



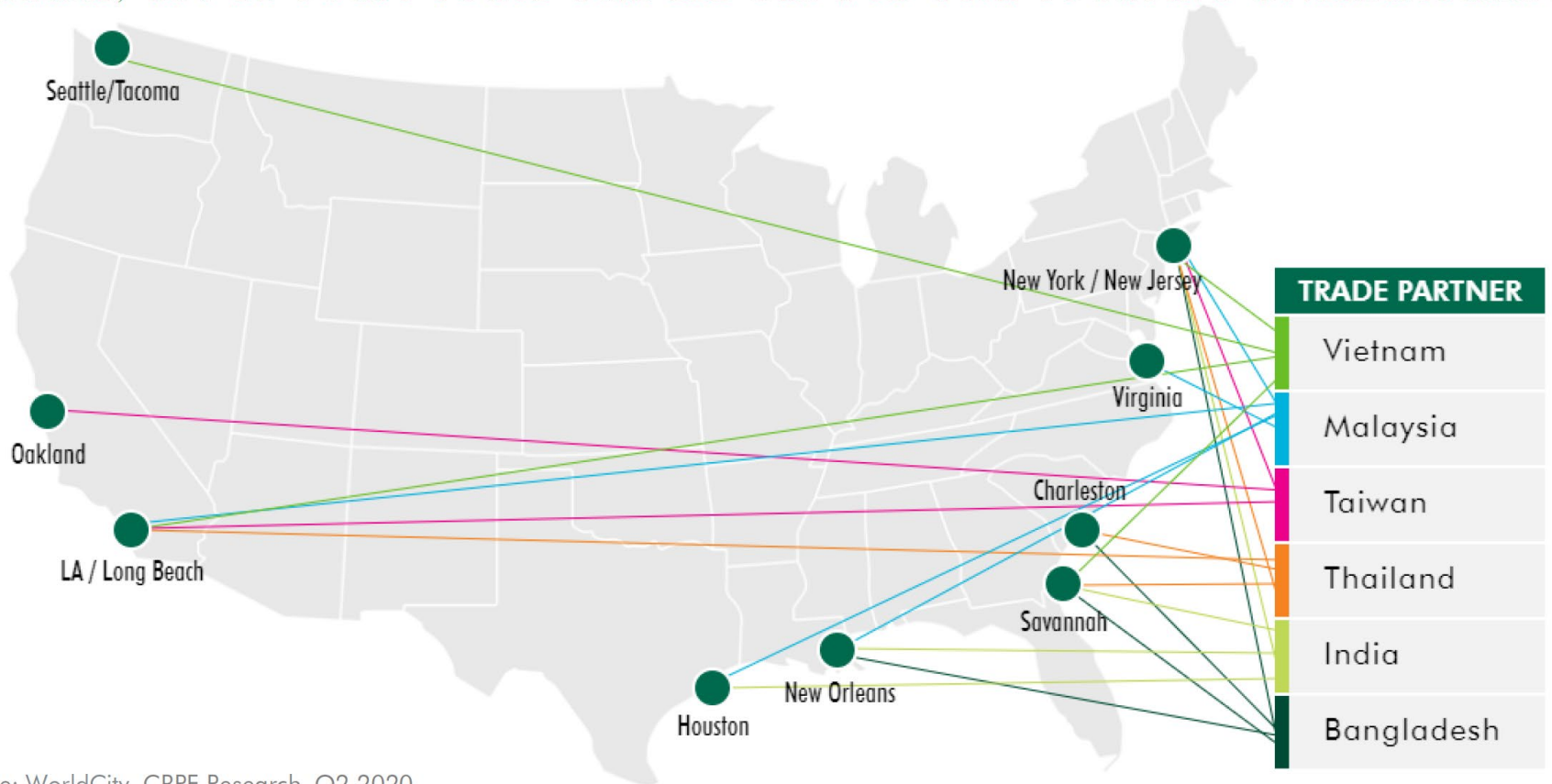
Union Pacific (UP)



International Shipping Ports – China + 1

TOP U.S. PORTS BY DESTINATION COUNTRY

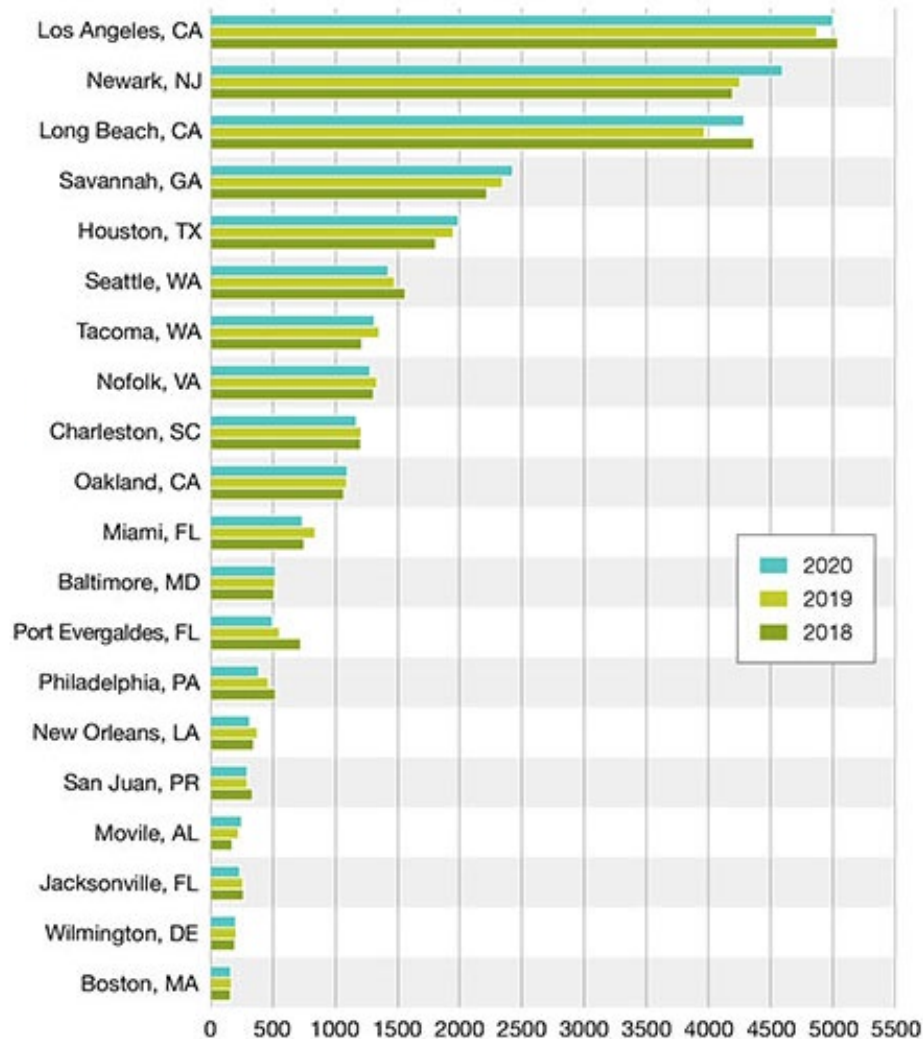
WHO BENEFITS FROM CHINA PLUS ONE? WEST COAST PORTS WILL CONTINUE TO DOMINATE, BUT SE COAST PORTS WILL SEE GROWTH WITH SOURCING DIVERSIFICATION



Source: WorldCity, CBRE Research, Q2 2020.

L.A., Newark-New York lead import growth in 2020

Change in U.S. seaborne imports by industry (thousand TEUs)



Site Construction Photos – August 2021



View from Martin Luther King Jr. Parkway looking NW

View from SE 14th bridge looking SE



Contact Information

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Gabe Claypool – President & COO

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Site Address: 357 SE 15th Street Des Moines, IA 50317

www.dsmindustrial.com

Upper Mississippi Inland Waterway Infrastructure Mooring Cell Pilot Project



Freight Advisory Council
September 10, 2021

Alternative Financing Evaluation



- 2019 Iowa DOT study
 - Objective: Develop range of viable investment alternatives to enhance Upper Mississippi inland waterway infrastructure
 - Examined three upgrade scenarios of various scales
- Recommendation #1
 - Use State-Federal contributed funds agreement to implement the Micro Efficiency Upgrade scenario of a mooring cell at L&D 14 (LeClaire, IA).

Micro Efficiency Upgrade



- What is a mooring cell?
 - Facility for tows approaching a L&D to moor (tie off) while waiting for the lock to be available
 - Typically located adjacent to main navigation channel
 - Constructed of sheet-piling driven into a circular cell and filled with earth and/or concrete
 - Without mooring facility, towboats must ground barges, tie off to bankline trees, or maintain engine power
- Benefits
 - Improved lock approach times
 - Reduced environmental impacts
 - Improved operational safety
 - Replicability (i.e., other state DOTs)

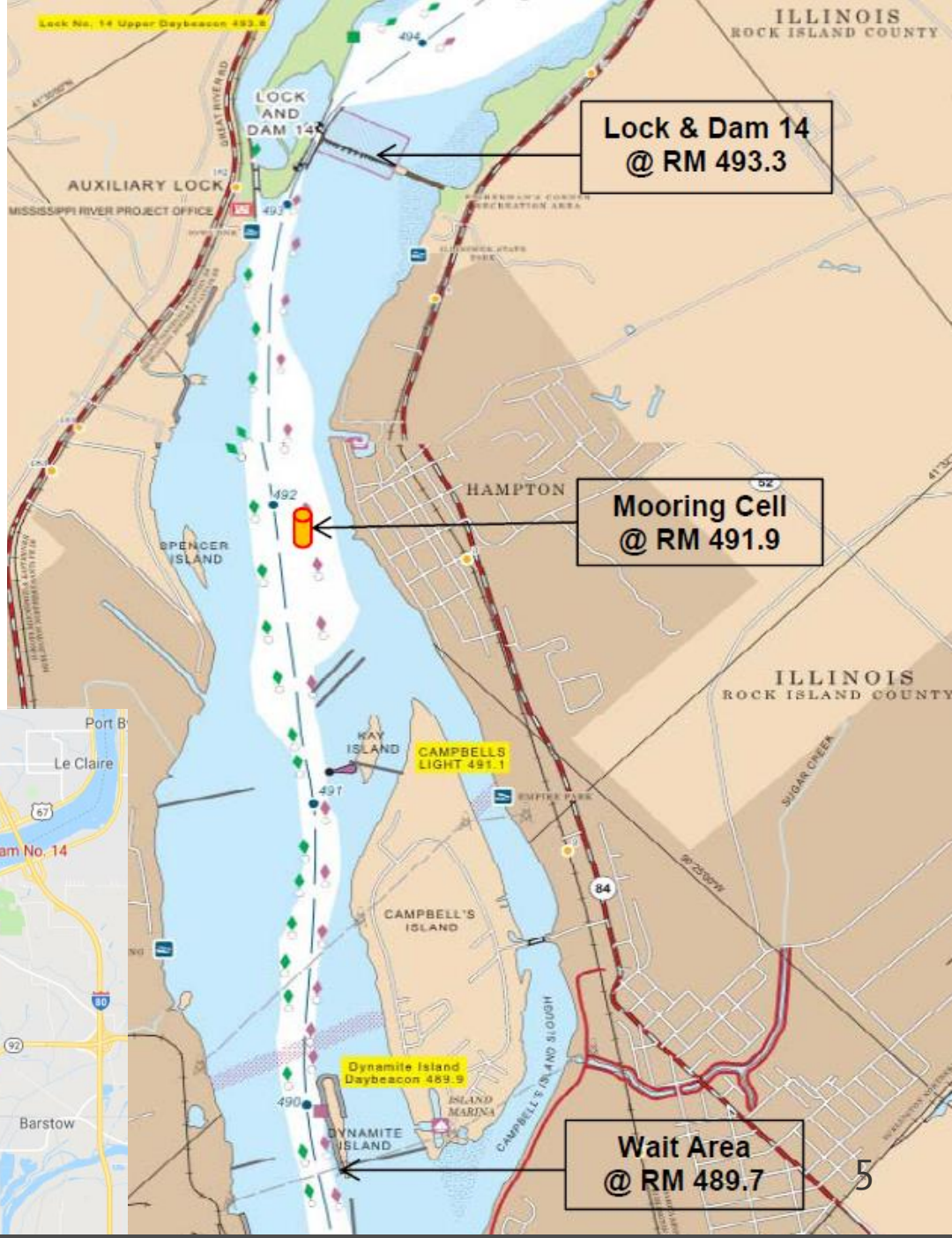
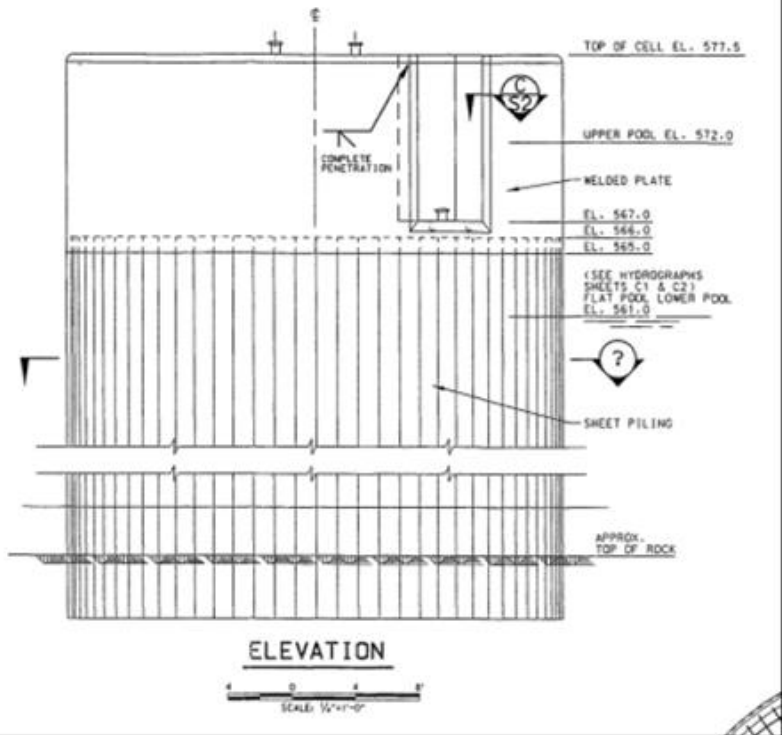


Economic Benefits



- USACE Mooring Cell Working Group identified top priority locations: L&D 14 lower pool was #1
 - Waiting area currently 3.6 miles downstream
 - Proposed mooring cell location would be only 1.4 miles downstream (2.2 mile difference)
- 2.2 mile difference = estimated 217 hours (9 days) time savings per navigation year
- Micro Upgrade scenario yielded benefit-cost ratio (3.52)





Source: USACE



Funding



- Cost and funding proposal
 - \$2 million for L&D 14 lower pool site
 - Iowa DOT contributed funds agreement with USACE
- Status
 - As of August, agreement language has been reviewed by USACE and Iowa DOT legal staff
- Next steps
 - Confirm payment approach and finalize agreement

Questions?



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State Freight Plan Freight Improvements

Iowa Freight Advisory Council | September 10, 2021



2022 State Freight Plan

- Required by FAST Act
- Immediate and long-range freight planning activities and investments
- Consultation with FAC
- Due July 2022



State Freight Plan document outline

Introduction &
Purpose

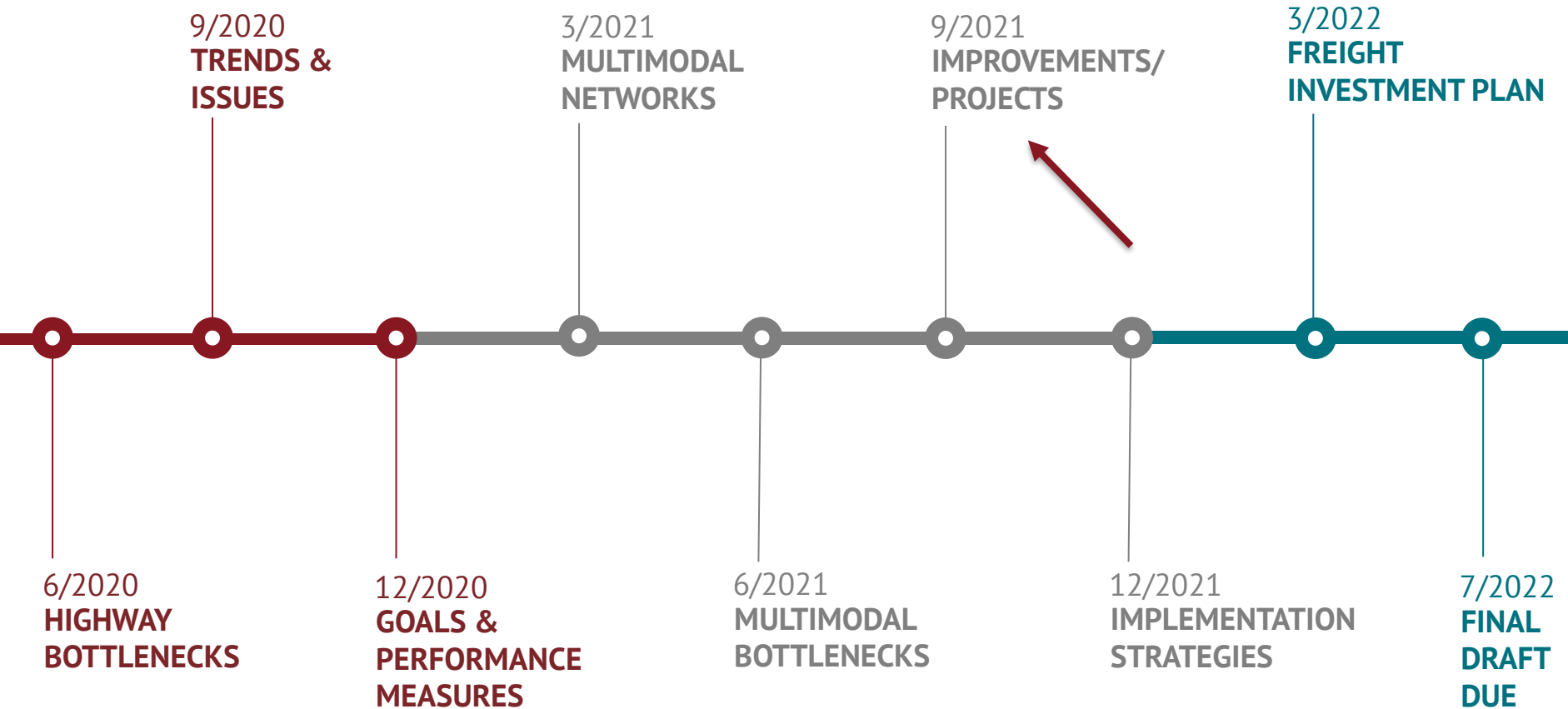
System Inventory &
Performance

Industries &
Commodities

Planning
Considerations

Action Plan

Input opportunities



Priority trends & issues

1	Funding	4.58	6	Safety	4.21
2	Agriculture	4.42	7	Resiliency	4.16
3	Lock & Dams	4.32	8	Truck Cargo	4.16
4	Trade	4.26	9	Highway Design	4.16
5	Multimodal	4.26	10	Regulations	4.11

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Other priorities

High priority (4.00)	Medium priority (3.99-3.50)	Lower priority (3.49-2.11)	Suggested items to consider
Intermodalism	Human trafficking	Land use	Rural infrastructure
Trucking issues	Mississippi River cargo	Energy	Interstate System
Industry	Manufacturing	Sourcing	Rail crossing safety
	Rail network	Automated trucking	Sustainable investment
	E-commerce	Economics	Container availability
	Rail cargo	Panama Canal	Pipelines
	First mile/last mile	Missouri River cargo	
	Automation	Fuel	
	Oversize/overweight	Aviation trends	
	Bio renewables	Air cargo	
		Coal decline	

Goals & performance measures



SAFETY

Improve the **safety, security, and resilience** of the national freight system.

INFRASTRUCTURE

Modernize **freight infrastructure and operations** to grow the economy, increase competitiveness, and improve quality of life.

INNOVATION

Prepare for the future by supporting the development of **data, technologies, and workforce capabilities** that improve freight system performance.

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Industry perspective

SAFETY	INFRASTRUCTURE	INNOVATION	OTHER
<p>Accidents (totals, severity, causes, claims)</p> <p>Safety scores</p> <p>Labor force (training, adherence to requirements)</p> <p>Investment (totals, cost, upgrades)</p> <p>Operations (mitigating impacts)</p>	<p>Condition (roads, tracks, locks)</p> <p>Maintenance (inspections, plans)</p> <p>Operations (mitigating impacts, congestion reporting, connections)</p> <p>Investment (totals, cost)</p> <p>Performance (total assets, costs of shipping, reliability)</p>	<p>Efficiency (time, fuel, reliability)</p> <p>Productivity & profitability (automation, costs, competitiveness)</p> <p>Labor force (training, satisfaction, jobs added)</p> <p>Technologies (tracking, electronic HOS, PTC, automation)</p>	<p>Economics (jobs, global competitiveness, value of shipments)</p> <p>Sustainability (funding, environmental)</p> <p>Intermodal & multimodal (connections)</p>

Multimodal networks

- Objective:
 - Designate freight network locations to protect and enhance for improved freight mobility.
- Methodology:
 - **Air:** major cargo airports
 - **Highway:** 30% truck traffic or 1000 truck AADT or 1000 OSOW permits annually
 - **Rail:** 5 million tons per mile
 - **Water:** marine highways

State Freight Plan document outline

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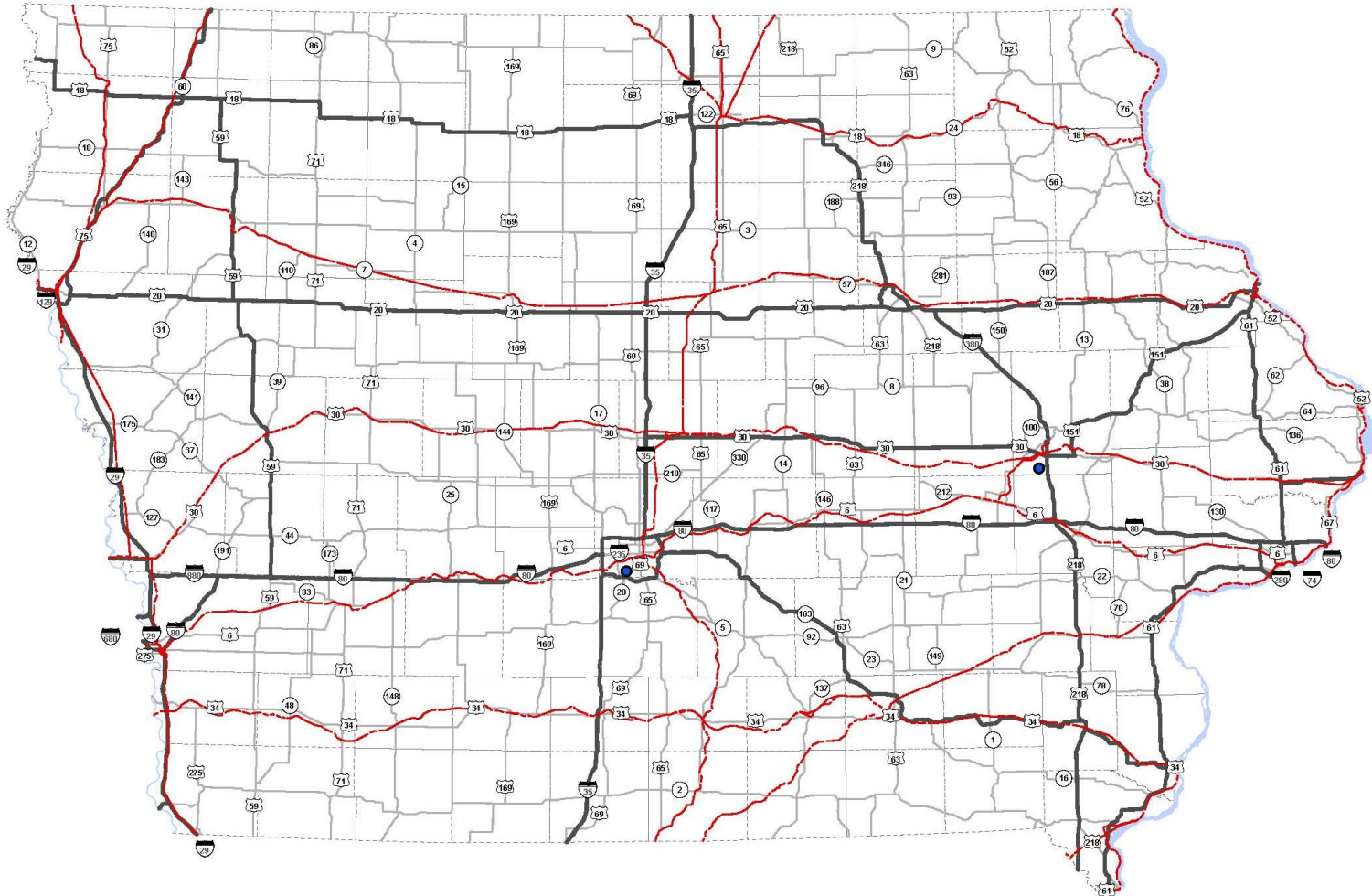
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Iowa Multimodal Freight Network



Multimodal bottlenecks

- Objective
 - Identify freight bottleneck locations to mitigate for improved freight mobility
- Identification and prioritization
 - **Air:** N/A
 - **Highway:** 28 locations identified using INRIX and truck traffic analysis
 - **Railroad:** 38 locations provided by railroads
 - **Inland waterway:** 19 locations on M-35 marine highway

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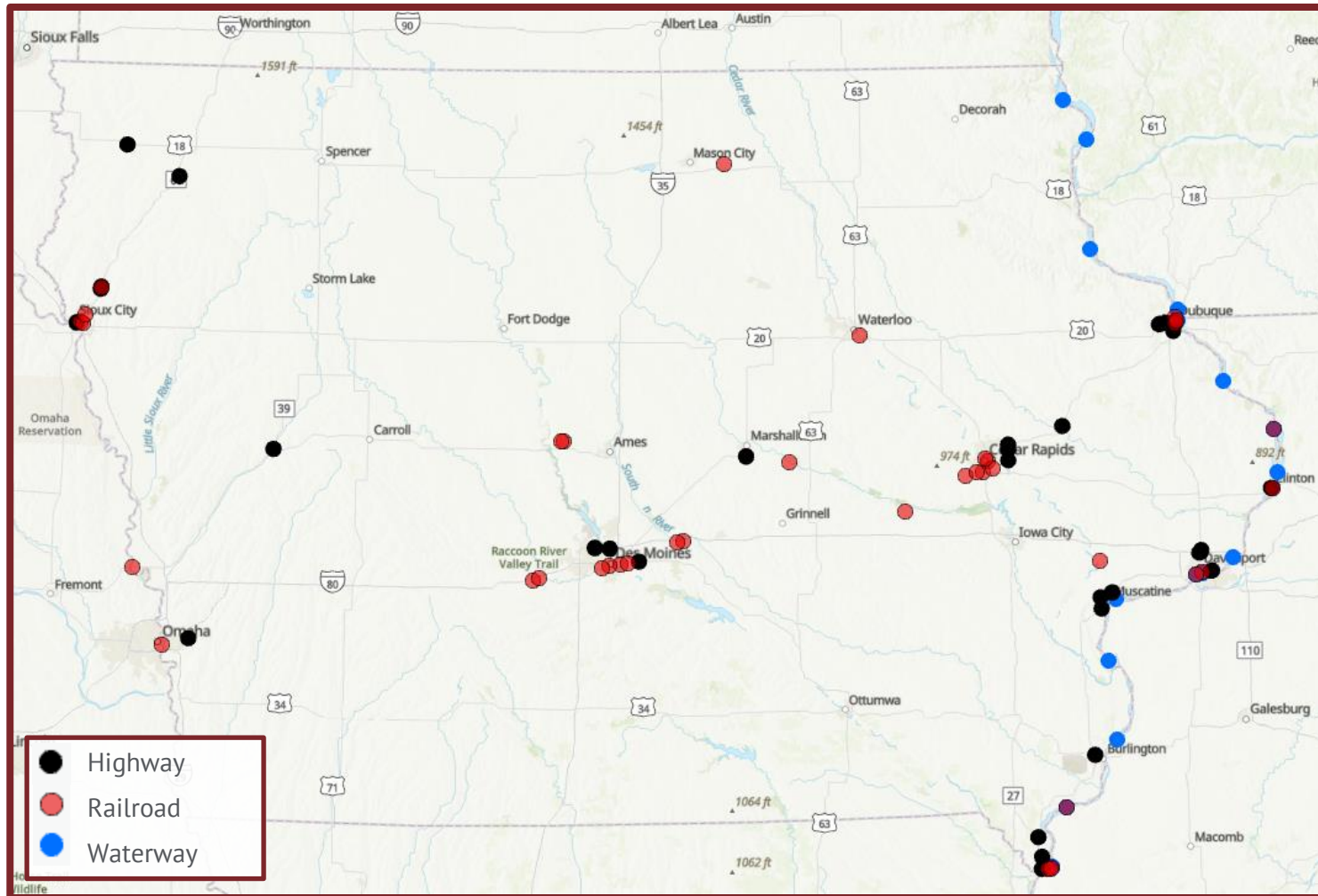
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Multimodal bottlenecks



Freight improvements

- Objective
 - Identify priority locations to target for improved freight mobility
- Source of identification and prioritization
 - **Air:** DSM and CID
 - **Highway:** VCAP matrix
 - **Railroad:** Companies operating in Iowa
 - **Inland waterway:** U.S. Army Corps of Engineers

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Air

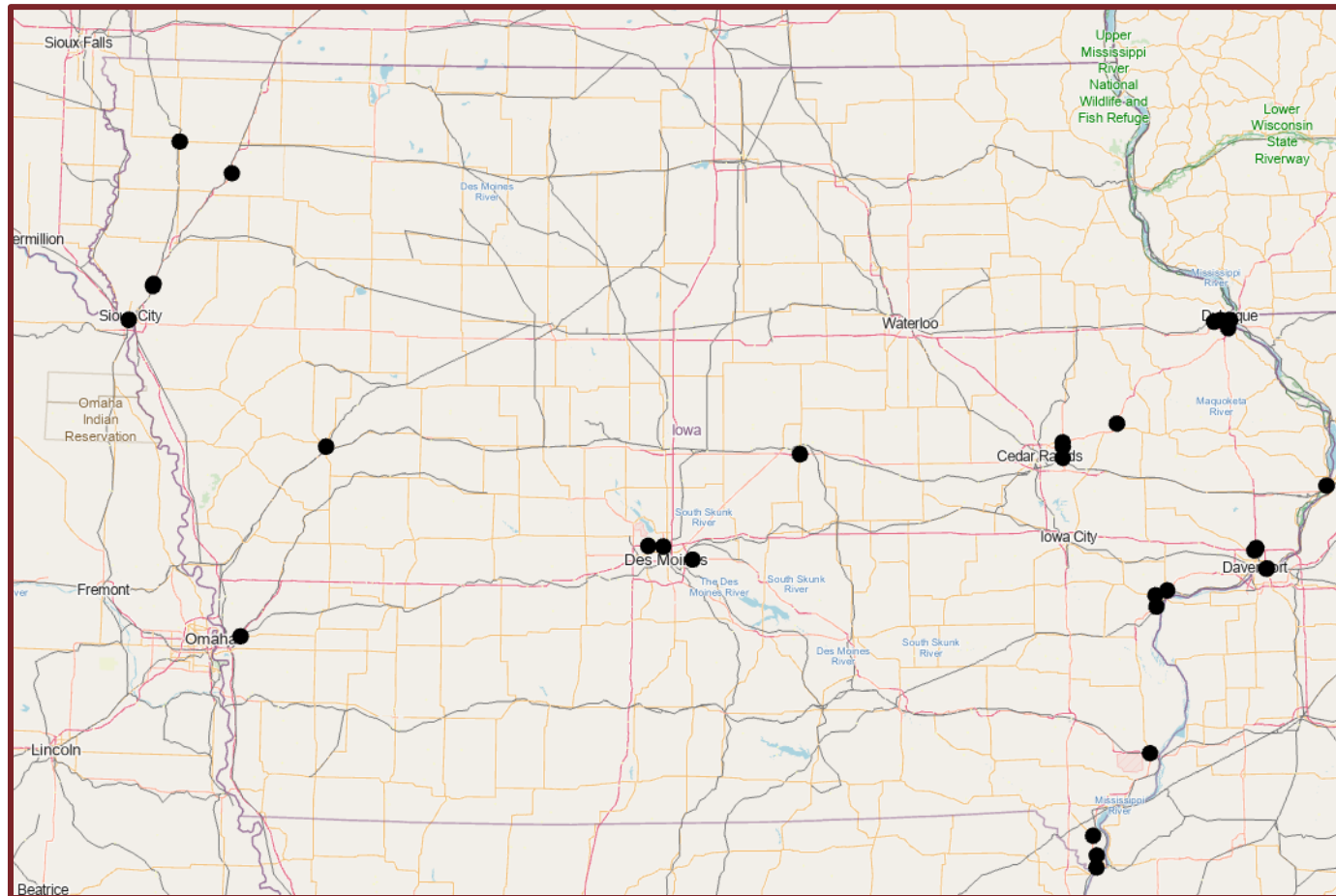
- Des Moines International Airport
 - Completed new FedEx facility and runway reconstruction
 - Development plan includes cargo-related development as demand increases
- Eastern Iowa Airport
 - Three cargo ramps and cargo buildings are 90% utilized
 - 2021 Master Plan update underway to help guide development of 76 acres set aside for cargo handling



Highway

- Value, Condition, and Performance (VCAP)
- Prioritize highway bottleneck locations by:
 - value (iTRAM)
 - condition (ICE)
 - performance (INRIX)
- Includes:
 - 28 priority locations on the state freight network

Highway improvements



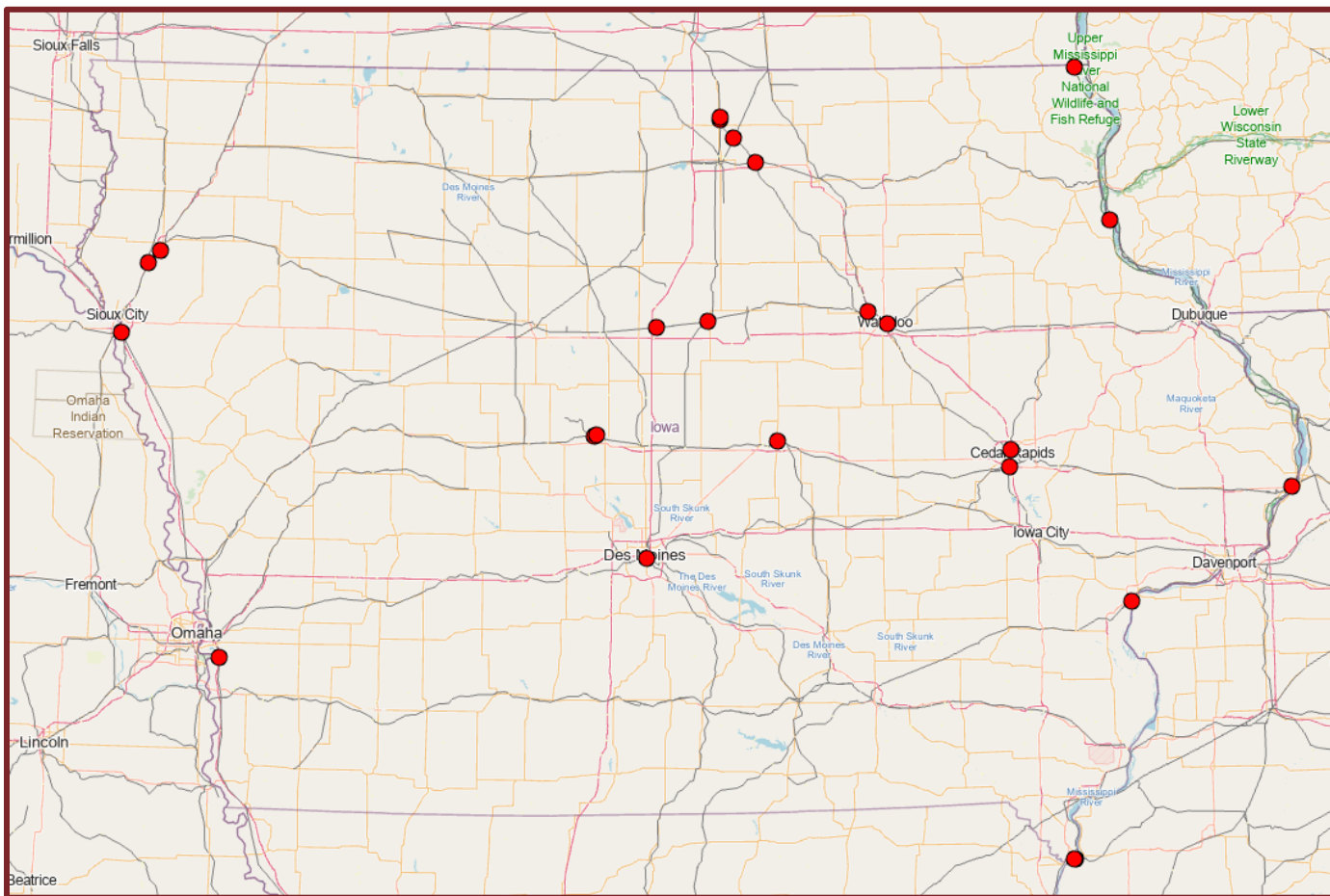
VCAP – Top 10

1. US 52 at US 61/US 151 (Dubuque)
2. NE 70th Street at Iowa 163 (Altoona)
3. US 61 at Grandview Ave (Muscatine)
4. US 151/Iowa 13 at Mt Vernon Rd (Cedar Rapids)
5. US 20 at US 61/US 151 (Dubuque)
6. US 218 at US 61 (Keokuk)
7. Iowa 22 at US 61 (Muscatine)
8. US 61 at Iowa 38 (Muscatine)
9. US 59 at Iowa 39 (Denison)
10. US 75 at C60 (Hinton)

Railroad

- Projects provided by:
 - Railroads operating in Iowa
- Compiled in 2017; updated 2020 & 2021
- Includes:
 - 42 short-range projects (1-5 years)
 - 64 long-range (5+ years)
 - Of the above, 31 short-range and 55 long-range on the state freight network

Railroad improvements



Map includes short-range freight railroad improvements on the state freight network

Map does not include any statewide grade crossing improvement and upgrade projects

Full project list is included in the Iowa State Rail Plan

Waterway

- Projects provided by:
 - U.S. Army Corps of Engineers
 - St. Paul District (LD 9 & 10)
 - Rock Island District (LD 11-19)
- Includes:
 - 31 priority maintenance projects on the state freight network
 - Deferred/backlog major rehab, repairs, and maintenance by lock



Inland waterways deferred maintenance cost estimate

Lock and Dam 9	\$40,033,696
Lock and Dam 10	\$41,762,096
Lock and Dam 11	\$67,500,000
Lock and Dam 12	\$55,000,000
Lock and Dam 13	\$72,500,000
Lock and Dam 14	\$92,500,000
Lock and Dam 15	\$76,500,000
Lock and Dam 16	\$117,500,000
Lock and Dam 17	\$107,500,000
Lock and Dam 18	\$132,500,000
Lock 19	\$145,000,000

Prioritized maintenance – Top 10 projects

1. Lock 18 Miter Gate Anchorage Replacement
2. Lock 17 Miter Gate Anchorage Replacement
3. Lock 19 PLC System Replacement
4. Lock 17 Upstream Guide wall Sheet pile Transition Wall Repair
5. Lock 13 Filling and Emptying System Replacement
6. Lock 19 Hydraulic Cylinder Rod Replacement
7. Dam 13 Spillway Seepage Cutoff Wall Repairs
8. Lock 14 - Auxiliary Lock/MRPO Guide wall
9. Lock 18 Access Road Repairs
10. 6 Sites Dam Gate Trunnion Repairs



THANK YOU FOR YOUR TIME AND ATTENTION



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