

APPENDIX A

Passenger Rail Stations





Table A.1 provides key characteristics of the six Iowa passenger rail stations served by Amtrak. These stations vary in size, location, and level of services offered, and are important in connecting Iowa residents to the regional and national rail networks.

Table A.1: Characteristics of Iowa Amtrak stations

Characteristics	Fort Madison	Burlington	Mount Pleasant	Ottumwa	Osceola	Creston
Address	1601 20th St	300 S Main St	418 N Adams St	210 W Main St	143 E Webster St	100 W Adams St
Ownership	BNSF	BNSF owns platform and track; City of Burlington owns facility and parking lot	BNSF	BNSF owns platform and track; Wapello County owns facility and parking lot	BNSF owns platform and track; City of Osceola owns facility and parking lot	BNSF
Served by	<i>Southwest Chief</i>	<i>California Zephyr</i>	<i>California Zephyr</i>	<i>California Zephyr</i>	<i>California Zephyr</i>	<i>California Zephyr</i>
Service Frequency	Twice Daily (EB AM; WB PM)	Twice Daily (EB AM; WB PM)	Twice Daily (EB AM; WB PM)	Twice Daily (EB AM; WB PM)	Twice Daily (EB AM; WB PM)	Twice Daily (EB AM; WB PM)
Depot Hours	10:00 AM – 1:00 PM and 5:00 PM – 6:30 PM M-F; closed weekends and holidays; lobby open daily	8:00 AM – 6:00 PM Daily	9:30 AM - 1:30 PM and 2:30 PM - 6:15 PM MTuWF; 9:30 AM – 3:45 PM and 4:45 PM – 6:15 PM Th; closed weekends and holidays	8:30 AM – 11:30 AM and 5:30 PM – 8:00 PM	7:00 AM – 10:00 AM and 7:00 PM – 9:00 PM daily	No Station Hours
Station Location Type	Urban	Urban	Urban	Urban	Urban	Urban
Parking	49 spaces (2 ADA)	40 spaces (2 ADA)	100 spaces (2 ADA)	30 spaces (3 ADA)	63 spaces (3 ADA)	19 spaces (2 ADA)
Shared Use	BNSF Facility	No	No	Wapello County Historical Museum	No	BNSF Facility
Intermodal and Non-Motorized Transportation Access	SEIRPC dial-a-ride service	SEIBUS local fixed route bus service and SEIRPC dial-a-ride service and bike racks	SEIRPC dial-a-ride service	Ottumwa transit fixed route local service	Southern Iowa Trolley dial-a-ride service	Southern Iowa Trolley dial-a-ride service
ADA Parking	2 spaces	2 spaces	2 spaces	3 spaces	3 spaces	2 spaces
Platform Type	Double	Double	Double	Double	Double	Double

Table A.1 (continued): Characteristics of Iowa Amtrak stations

Characteristics	Fort Madison	Burlington	Mount Pleasant	Ottumwa	Osceola	Creston
Lighting	Fully lit	Fully lit	Fully lit	Fully lit	Fully lit	Lighting along covering
Platform Construction	Concrete	Asphalt	Concrete/Brick/Asphalt	Asphalt	Concrete	Concrete
Wi-Fi Availability	No	No	No	No	No	No
Shelter	Enclosed waiting area; covered platform	Enclosed waiting area	Enclosed waiting area	Enclosed waiting area	Enclosed waiting area	Enclosed waiting area; covered platform
Platform Amenities	Benches under covering	Canopy and benches	Benches	Topless Canopy	Benches	Benches under covering
Passenger Safety	Yellow safety stripe	Unmarked	Yellow safety stripe; yellow safety bumpy pads on concrete ADA boarding area	Yellow safety strip	Yellow safety stripe; red safety bumpy pads	Yellow safety stripe
ADA	Station wheelchair accessible, not all facilities are accessible	Station wheelchair accessible, not all facilities are accessible	Station wheelchair accessible, not all facilities are accessible	Station wheelchair accessible, not all facilities are accessible	Station wheelchair accessible, not all facilities are accessible	Station wheelchair accessible, not all facilities are accessible
Inside Seating Capacity	23 seats	14 seats	34 seats	40 seats	25 seats	19 seats
Water Fountain	Yes	No	Yes	Yes	No	No
Restrooms	Yes	Yes	Yes	Yes	Yes	Yes
ATM	No	No	No	No	No	No
Ticketing	Staffed counter with checked baggage; help with baggage	Unstaffed station; a caretaker opens and closes the station	Staffed counter with checked baggage; help with baggage; checked baggage service available on weekends	Staffed counter; help with baggage	Unstaffed station; Quik-Trak self-service ticketing kiosk	Unstaffed station
Payphone	No	No	Yes	No	No	No

Source: Amtrak



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APPENDIX B

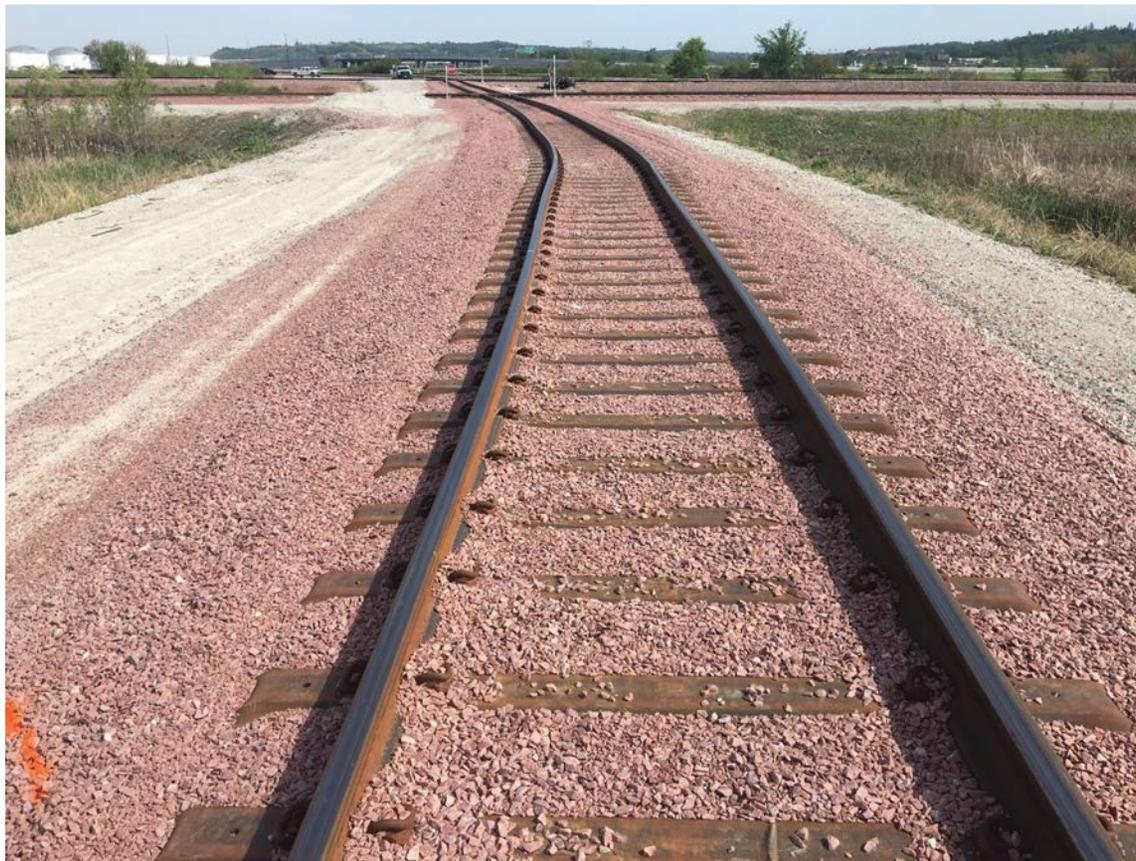
Freight Railroad Profiles





The railroad profiles included in this appendix have been developed using annual reports and direct input from Iowa railroads.

Please contact the respective companies directly for detailed information on specific services and available resources.



BNSF Railway (BNSF)

www.bnsf.com

Emergency number: 800-832-5452

Corporate HQ: 2650 Lou Menk Dr., Fort Worth, TX 76131

General offices: Sioux City Iowa

BNSF in Iowa

Miles of track owned/leased/served in Iowa	624
Miles operated under trackage rights in Iowa	35
Employees in Iowa	701

Transloading

Altoona, IA	Council Bluffs, IA	Ottumwa, IA
Burlington, IA	Des Moines, IA	Sioux City, IA
Camanche, IA	Hawarden, IA	Savanna, IL
Clinton, IA	Mount Pleasant, IA	

Intermodal

Omaha, NE: Omaha Intermodal Facility

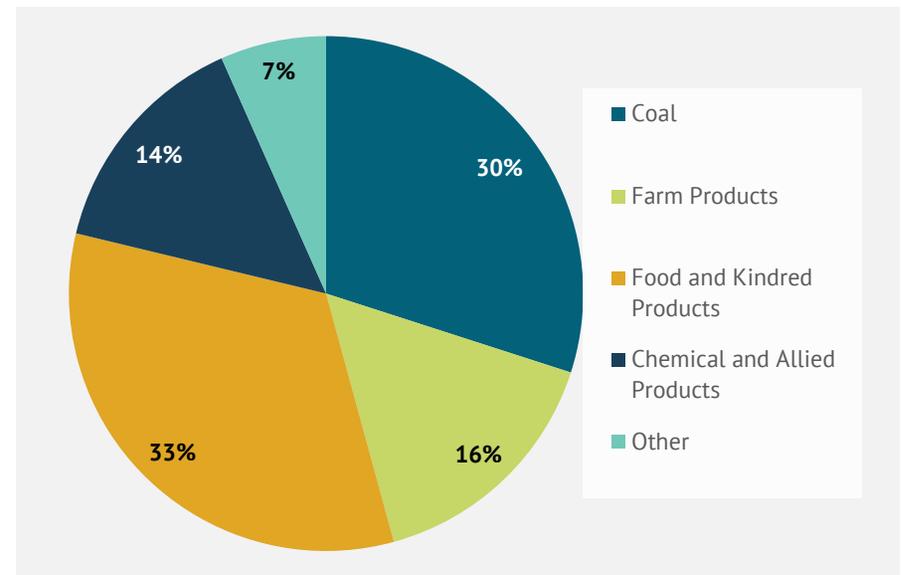
Railroad Interchanges

Albia	APNC	Keokuk	KJRY
Burlington	BJRY	Mount Pleasant	BJRY
Clinton	CPKC	Ottumwa	BJRY, IAIS, CPKC
Council Bluffs	CN	Quad Cities	CPKC
Davenport	IAIS	Sioux City	CN, DAIR
Des Moines	IAIS		

Overview

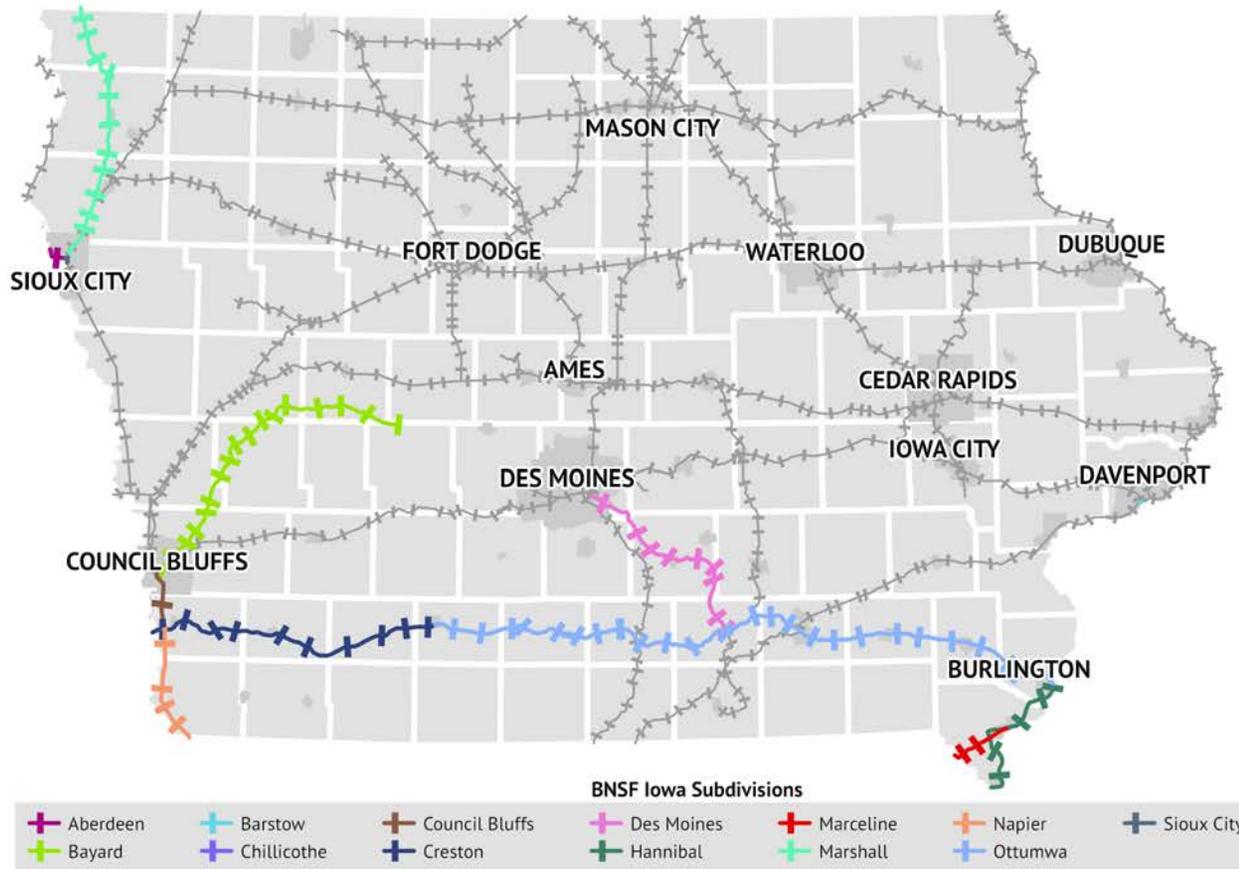
BNSF is a major U.S. railroad with over 32,000 miles across 28 states and three Canadian provinces. It covers the western two-thirds of the United States connecting Pacific ports to the Midwest, Southeast, and Southwest, and from Canada to Mexico. In Iowa, BNSF operates 659 miles, primarily from Burlington to Glenwood. Operations are on mainline tracks in the east, south, and west parts of the state as well as several branch lines.

Commodities

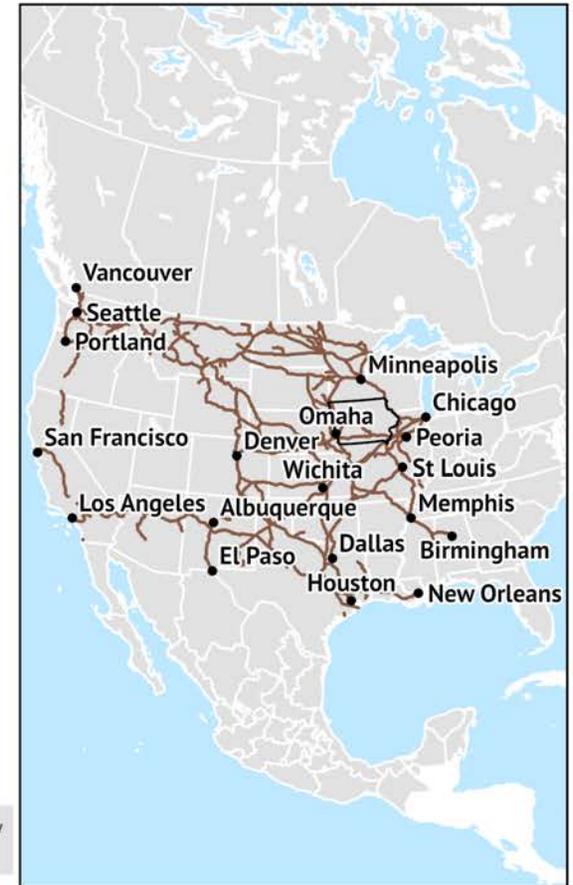




BNSF Service



Urban Area Rail Line



BNSF Subdivisions in Iowa (section 1 of 2)

Subdivision	Division	Railroad Owner	Railroad operator	FRA Track Class	Track Configuration	Signal Type	Method of Operation	Maximum Allowable Weight	Clearances
Ottumwa	Chicago	BNSF	BNSF	Class 4	Two main tracks	A mixture of Centralized Traffic Control (CTC) and Automatic Block Signals (ABS)	A mixture of Centralized Traffic Control (CTC), Track Warrant Control (TWC), and Yard Limits (YL)	286,000 lbs.	Cleared for trailers (TOFC), double-stacks (COFC), hi-trilevel, and auto-max equipment
Creston	Nebraska	BNSF	BNSF	Class 4	A combination of two main tracks and one main track	Centralized Traffic Control (CTC)	Centralized Traffic Control (CTC)	286,000 lbs.	Cleared for trailers (TOFC), double-stacks (COFC), hi-trilevel, and auto-max equipment
Napier	Nebraska	BNSF	BNSF	Class 4	One main track with passing sidings	None	<ul style="list-style-type: none"> • Restricted Limits (RL) at Pacific Junction, IA • Track Warrant Control (TWC) Pacific Junction, IA-IA/ MO state line near Hamburg, IA 	286,000 lbs.	Cleared for trailers (TOFC), double-stacks (COFC), hi-trilevel, and auto-max equipment
Sioux City	Nebraska	BNSF	BNSF	Class 3	One main track with passing sidings	None	Track Warrant Control (TWC)	286,000 lbs.	Not cleared for double-stacks, hi-trilevel, and auto-max equipment
Council Bluffs	Nebraska	BNSF	BNSF	Class 2	One main track with passing sidings	None	<ul style="list-style-type: none"> • Restricted Limits (RL) at Pacific Junction, IA • Track Warrant Control (TWC) Pacific Junction, IA-Council Bluffs, IA • Yard Limits (YL) at Council Bluffs, IA 	286,000 lbs.	Cleared for trailers (TOFC), double-stacks (COFC), hi-trilevel, and auto-max equipment
Barstow	Chicago	BNSF	BNSF	Class1	One main track	None	GCOR Rule 6.28	263,000 lbs.	18' 6" Above Top of Rail; can accommodate TOFC equipment and COFC equipment only one container high



BNSF Subdivisions in Iowa (section 2 of 2)

Subdivision	Division	Railroad Owner	Railroad operator	FRA Track Class	Track Configuration	Signal Type	Method of Operation	Maximum Allowable Weight	Clearances
Aberdeen	Twin Cities	BNSF	BNSF	Class 2/ Class 3	One main track with passing sidings	None	Restricted Limits (RL)	286,000 lbs.	Unknown
Des Moines	Chicago	BNSF	BNSF	Class 3	One main track with passing sidings	None	<ul style="list-style-type: none"> • Restricted Limits (RL) at Albia, IA • Track Warrant Control (TWC) Albia, IA-Des Moines, IA • Restricted Limits (RL) at Des Moines, IA • Yard Limits (YL) at Des Moines, IA 	286,000 lbs.	Unknown
Bayard	Nebraska	BNSF	BNSF	Class 2	One main track with passing sidings	None	<ul style="list-style-type: none"> • Yard Limits (YL) at Council Bluffs, IA • Track Warrant Control (TWC) Council Bluffs, IA-Bayard, IA 	286,000 lbs.	Unknown
Chillicothe	Chicago	BNSF	BNSF	Class 4	Two main tracks	Centralized Traffic Control (CTC)	Centralized Traffic Control (CTC)	286,000 lbs.	Cleared for trailers (TOFC), double-stacks (COFC), hi-trilevel, and auto-max equipment
Marceline	Chicago	BNSF	BNSF	Class 5	Two main tracks	Centralized Traffic Control (CTC) and Automatic Train Stop (ATS)	Centralized Traffic Control (CTC)	286,000 lbs.	Cleared for trailers (TOFC), double-stacks (COFC), hi-trilevel, and auto-max equipment
Marshall	Twin Cities	BNSF	BNSF	Class 4	One main track with passing sidings	None	Track Warrant Control (TWC)	286,000 Lbs.	Cleared For Trailer (TOFC) And Double-Stack (COFC) Equipment
Hannibal	Heartland	BNSF	BNSF	Class 3	One main track with passing sidings	None	Track Warrant Control (TWC)	286,000 lbs.	Clearance Above Top of Rail unknown; not cleared for double-stacks, hi-trilevel, and auto max equipment

Boone & Scenic Valley Railroad (BSV)

www.bsvrr.com

Emergency number: 515-433-0524

Corporate HQ: 225 10th St, P.O. Box 603, Boone, IA 50036

BSV in Iowa

Miles of track owned/leased/serviced in Iowa	1.7
Miles operated under trackage rights in Iowa	0
Employees in Iowa	4

Transloading

Boone, IA

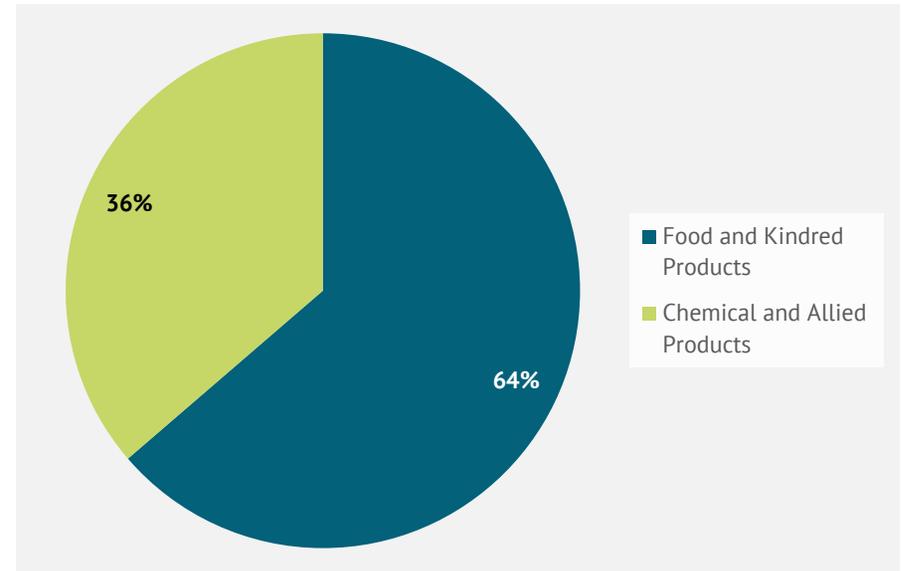
Railroad Interchanges

Boone UP

Overview

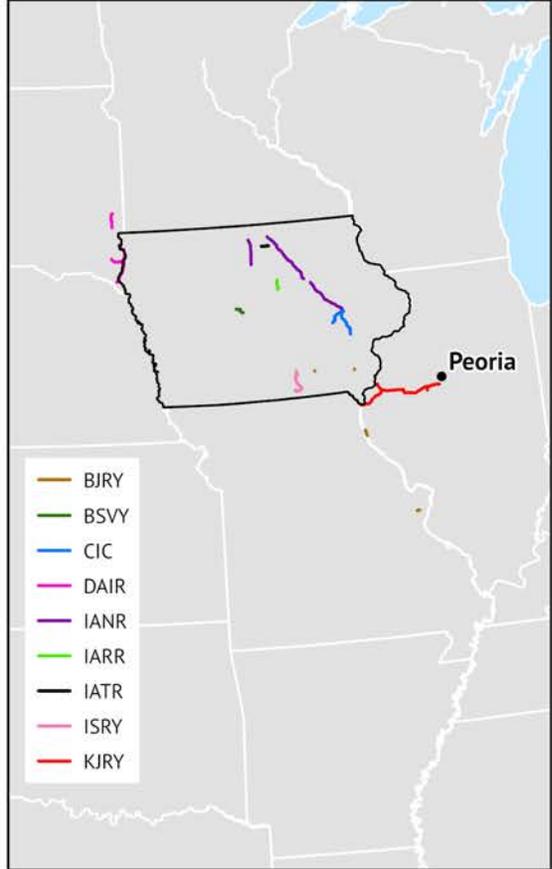
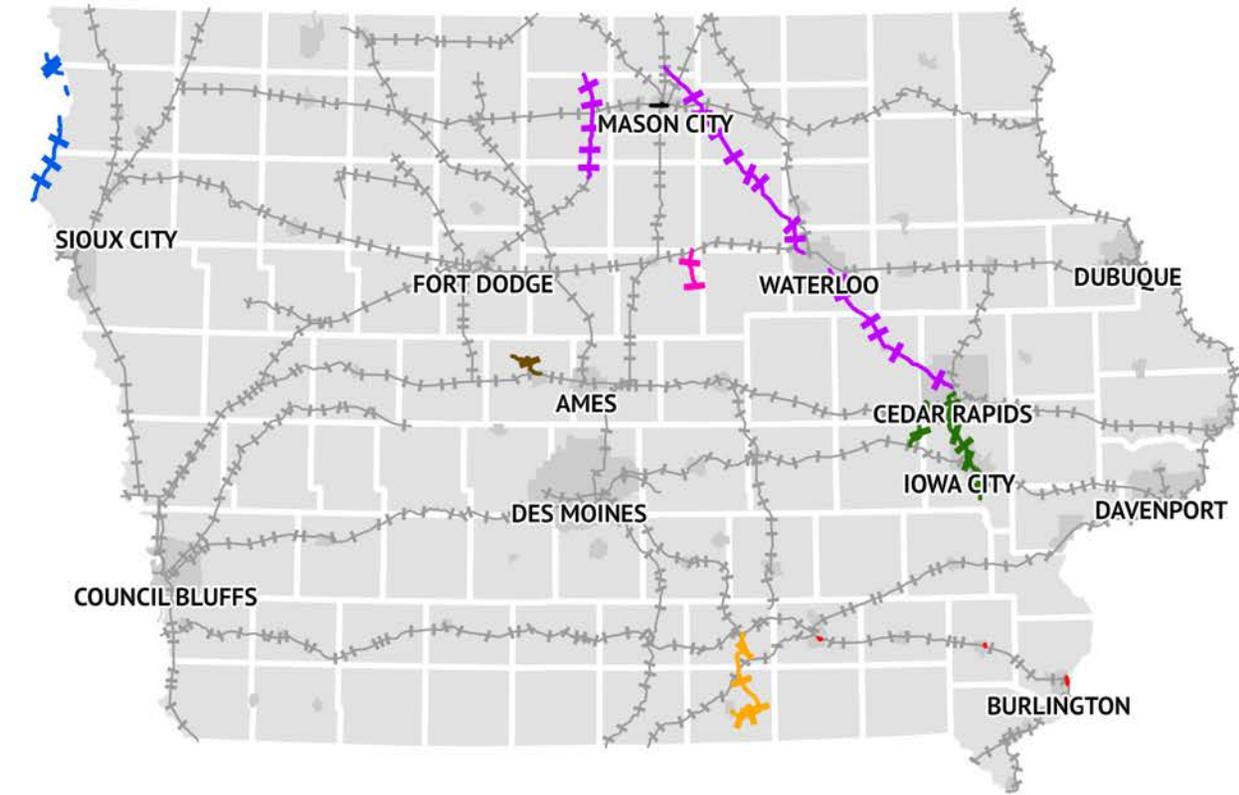
BSV, a nonprofit museum based in Boone, Iowa, was established in 1983 after acquiring 12 miles of track slated for abandonment by the Chicago and North Western Railway. That same year, a historical society was formed, and BSV began operating passenger excursion trains between Boone and Wolf. In February 2001, BSV expanded its operations by acquiring an additional 1.7 miles of right-of-way from Union Pacific Railroad, connecting downtown Boone to the Boone Industrial Park to support local industries. Currently, freight service is provided exclusively on this 1.7-mile section. BSV employs four individuals, all based in Iowa.

Commodities





Class III Service in Iowa and BSV Subdivisions



Subdivision	Railroad Owner	Railroad operator	FRA Track Class	Signal Type	Maximum Allowable Weight	Clearances
Boone	BSV	BSV	Class 1	None	268,000 lbs.	Unknown

Burlington Junction Railway (BJRY)

www.bjryrail.com

Emergency number: 888-753-6157

Corporate HQ: 200 Jefferson St., Burlington, IA 52601

Phone: 319-754-5000

General offices: 1510 Bluff Rd., P.O. Box 37, Burlington, IA 52601

Phone: 319-753-6157

BJRY in Iowa

Miles of track owned/leased/serviced in Iowa	5.8
Miles operated under trackage rights in Iowa	2.3
Employees in Iowa	26

Overview

BJRY is a shortline railroad that was established in 1985 and is headquartered in Burlington, Iowa. BJRY provides rail switching and commodity transloading services in Burlington, Mount Pleasant, Le Mars, and Ottumwa, Iowa, and locations across Illinois and Missouri.

Transloading

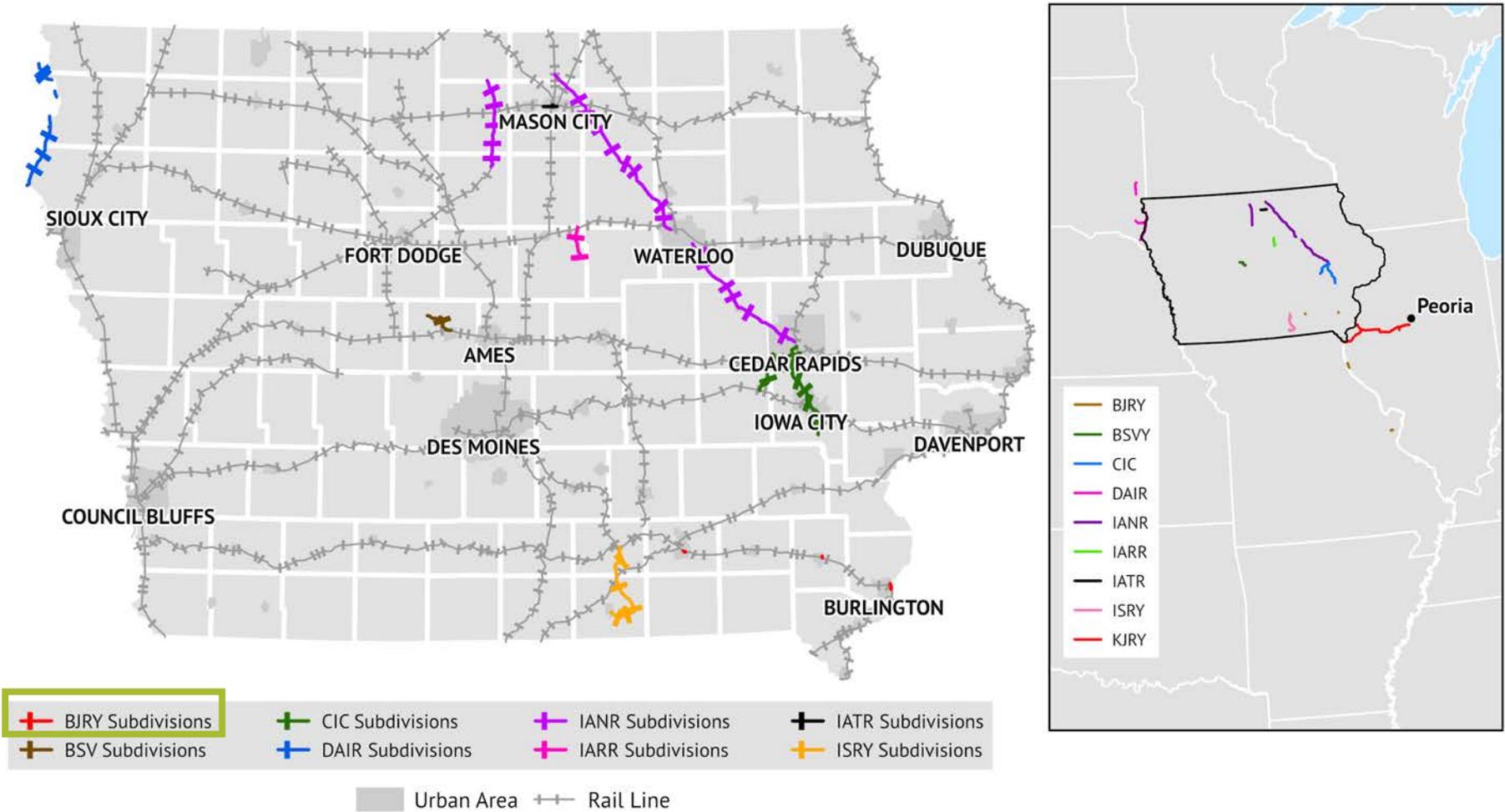
Burlington, IA
 Le Mars, IA
 Mount Pleasant, IA
 Ottumwa, IA

Railroad Interchanges

Burlington	BNSF
Le Mars	CN
Mount Pleasant	BNSF
Ottumwa	BNSF



Class III Service in Iowa and BJRY Subdivisions



Subdivision	Railroad Owner	Railroad operator	FRA Track Class	Signal Type	Maximum Allowable Weight	Clearances
Burlington; Le Mars; Mount Pleasant; Ottumwa	BJRY	BJRY	Class 1	None	286,000 lbs.	Unknown

CPKC Railway (CPKC)

Operates in Iowa as the Dakota, Minnesota, and Eastern Railroad (DME)

www.cpkcr.com/en

Emergency number: 800-716-9132

Corporate HQ: 7550 Ogden Dale Rd. SE, Calgary, AB T2C 4X9

General offices: 120 S Sixth St., Minneapolis, MN 55402

CPKC in Iowa

Miles of track owned/leased/served in Iowa	649.8
Miles operated under trackage rights in Iowa	38.9
Employees in Iowa	582

Transloading

Camanche, IA	Mason City, IA
Clayton, IA	Muscatine, IA
Clinton, IA	New Hampton, IA
Davenport, IA	Ottumwa, IA

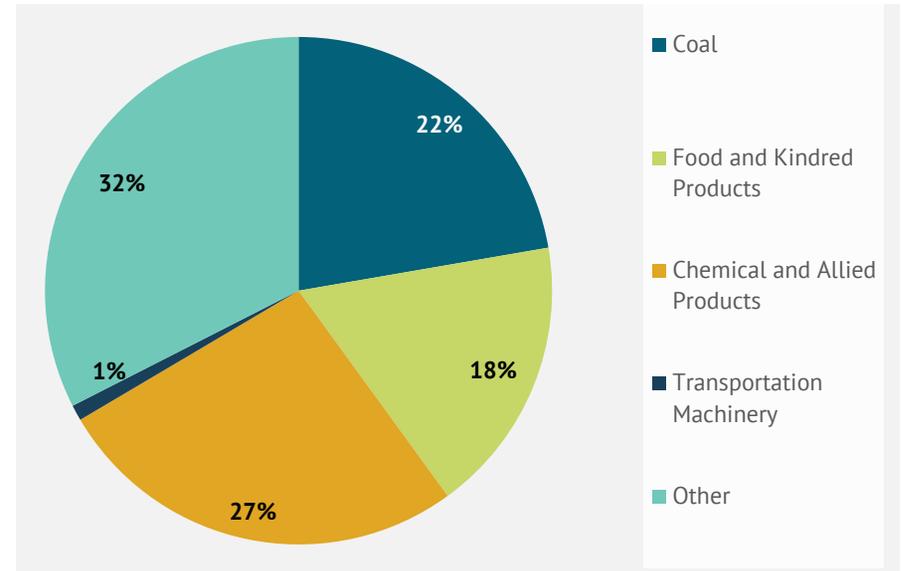
Railroad Interchanges

Clinton	UP, BNSF	Nora Spring	IANR
Dubuque	CN	Ottumwa	BNSF, NS
Mason City	UP	Quad Cities	IAIS, BNSF
Moravia	ISRY	Sheldon	UP

Overview

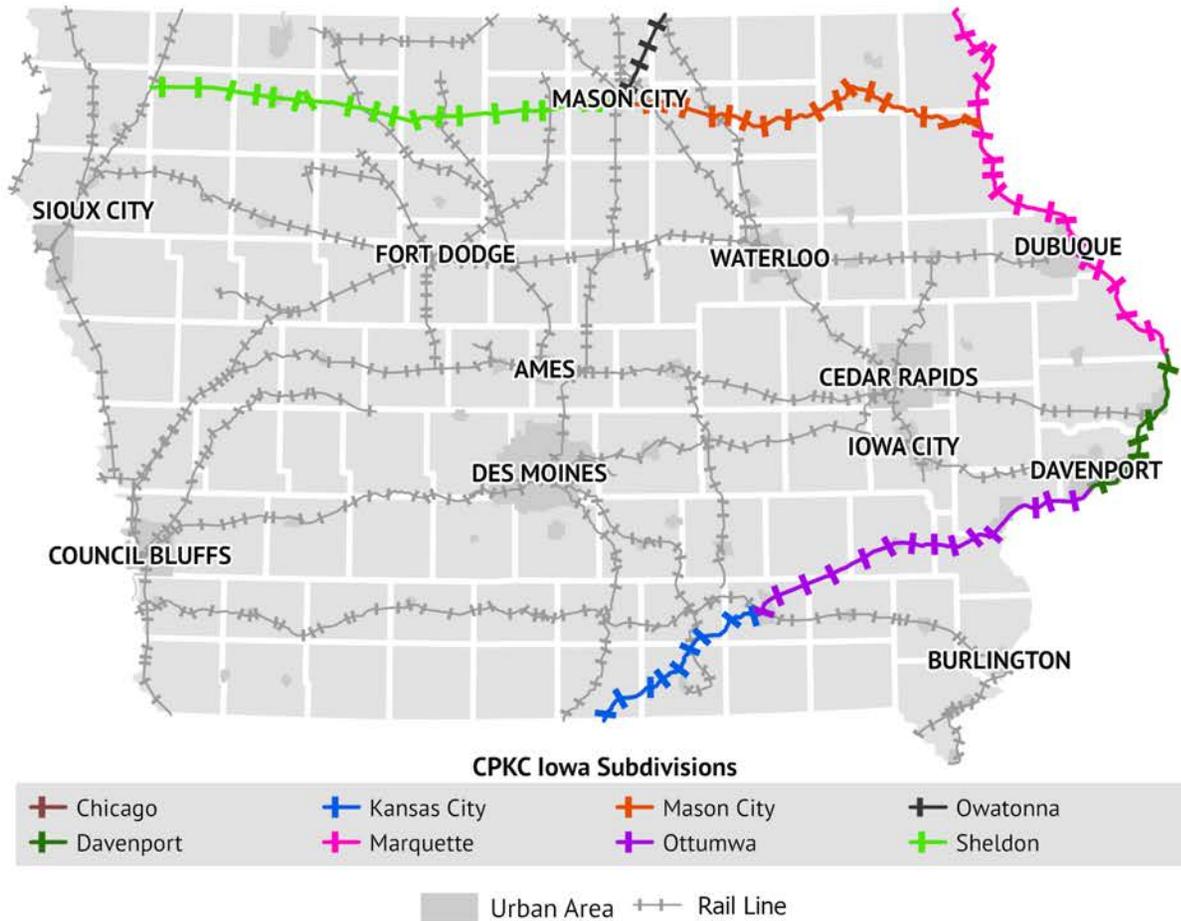
CPKC was born following the 2023 merger of two railroads – Canadian Pacific and Kansas City Southern. CPKC operates in Iowa through the DME. CPKC’s 20,000-mile transcontinental network spans the U.S., Canada, and Mexico connecting ports like Montreal and Vancouver to key U.S. cities such as Chicago and Kansas City. Headquartered in Calgary, Alberta, with U.S. operations in Minneapolis, CPKC’s Iowa routes run along the Mississippi River from the Minnesota border to Muscatine, crossing at Sabula toward Chicago, and extending to Ottumwa and on to the Missouri border, plus routes operating from Mason City west to Sheldon, east to Marquette, and north into Minnesota.

Commodities





CPKC Service



CPKC Subdivisions in Iowa (section 1 of 2)

Subdivision	Division	Railroad Owner	Railroad operator	FRA Track Class	Track Configuration	Signal Type	Method of Operation	Maximum Allowable Weight	Clearances
Davenport	U.S. Southern Region	CPKC (DME)	CPKC	Class 3	One main track with passing sidings	<ul style="list-style-type: none"> Centralized Traffic Control (CTC) Sabula Junction, IA-Deer Creek, IA Automatic Block Signals (ABS) North Wye Switch (Davenport), IA-Nahant, IA 	<ul style="list-style-type: none"> Centralized Traffic Control (CTC) Sabula Junction, IA-Deer Creek, IA Track Warrant Control (TWC) Deer Creek, IA-North Wye Switch (Davenport), IA Yard Limits (YL) North Wye Switch (Davenport), IA-Nahant, IA 	The Davenport Industrial Railroad is limited by a bridge that can't support 286k, hindering major rail traffic interchanging with CPKC's transcontinental network.	Supports multi-level intermodal and automotive rail equipment up to 19' 1" above the rail.
Ottumwa	U.S. Southern Region	CPKC (DME)	CPKC	Class 3	One main track with passing sidings	<ul style="list-style-type: none"> Centralized Traffic Control (CTC) Montpelier, Iowa-Heinz, IA; Fruitland, IA-Cotter, IA; Rutledge, IA-Ottumwa, IA Automatic Block System (ABS) Nahant, IA-Montpelier, IA; Heinz, IA-Fruitland, IA 	<ul style="list-style-type: none"> Yard Limits (YL) at Nahant, IA Centralized Traffic Control (CTC) Montpelier, IA-Heinz, IA; Fruitland, IA-Cotter, IA; Rutledge, Iowa-Ottumwa, IA Track Warrant Control (TWC) Nahant, IA-Montpelier, IA; Heinz, IA-Fruitland, IA; Cotter, IA-Rutledge, IA Yard Limits (YL) at Ottumwa, IA 	286,000 lbs.	Supports multi-level intermodal and automotive rail equipment up to 19' 1" above the rail.
Sheldon	U.S. Southern Region	CPKC (DME)	CPKC	Class 2	One main track	None	<ul style="list-style-type: none"> Yard Limits (YL) at Mason City, IA Track Warrant Control (TWC) Mason City, IA-Sheldon, IA Yard Limits (YL) at Sheldon, IA 	286,000 lbs.	Accommodates trailer (TOFC) equipment not exceeding 17' 6" Above Top of the Rail



CPKC Subdivisions in Iowa (section 2 of 2)

Subdivision	Division	Railroad Owner	Railroad operator	FRA Track Class	Track Configuration	Signal Type	Method of Operation	Maximum Allowable Weight	Clearances
Chicago	U.S. Southern Region	CPKC (DME)	CPKC	Class 3	One main track	Centralized Traffic Control (CTC) IL/IA state line at Sabula, IA- Sabula Junction, IA	Centralized Traffic Control (CTC)	286,000 lbs.	Supports multi-level intermodal and automotive rail equipment up to 19' 1" above the rail.
Mason City	U.S. Southern Region	CPKC (DME)	CPKC	Class 3	One main track with passing sidings	None	<ul style="list-style-type: none"> • Yard Limits (YL) at Marquette, IA • Track Warrant Control (TWC) Marquette, IA- Mason City, IA • Yard Limits (YL) at Mason City, IA 	286,000 lbs.	Accommodates trailer (TOFC) equipment not exceeding 17' 6" Above Top of the Rail
Marquette	U.S. Southern Region	CPKC (DME)	CPKC	Class 3	One main track with passing sidings	Centralized Traffic Control (CTC) Sabula Junction, IA-Lake, IA	<ul style="list-style-type: none"> • Centralized Traffic Control (CTC) Sabula Junction, IA-Lake, IA • Track Warrant Control (TWC) Lake, IA-Wood (Dubuque), IA; Dubuque Junction, IA-IA/MN state line at New Albin, IA 	286,000 lbs.	Supports multi-level intermodal and automotive rail equipment up to 19' 1" above the rail.
Kansas City-Ottumwa	U.S. Southern Region	CPKC (DME)	CPKC	Class 3	One main track with passing sidings	None	<ul style="list-style-type: none"> • Yard Limits (YL) at Ottumwa, IA • Track Warrant Control (TWC) Ottumwa, IA- IA/MN state line near Sewal, IA 	286,000 lbs.	Supports multi-level intermodal and automotive rail equipment up to 19' 1" above the rail.
Owatonna	U.S. Southern Region	CPKC (DME)	CPKC	Class 3	One main track with passing sidings	None	<ul style="list-style-type: none"> • Yard Limits (YL) at Mason City, IA • Track Warrant Control (TWC) Mason City, IA- IA/MN state line at Lyle, MN 	286,000 lbs.	Accommodates trailer (TOFC) equipment not exceeding 17' 6" Above Top of the Rail

Cedar Rapids and Iowa City Railway Company (CRANDIC; CIC)

www.travero.com

Emergency number: 319-786-3645

Corporate HQ: 2020 Lefebure Rd SW, Fairfax, IA 52228
Phone 319-786-3686

CRANDIC in Iowa

Miles of track owned/leased/served in Iowa	100
Miles operated under trackage rights in Iowa	22.7
Employees in Iowa	90

Transloading

Cedar Rapids, IA

Fairfax, IA

Major Existing Customers

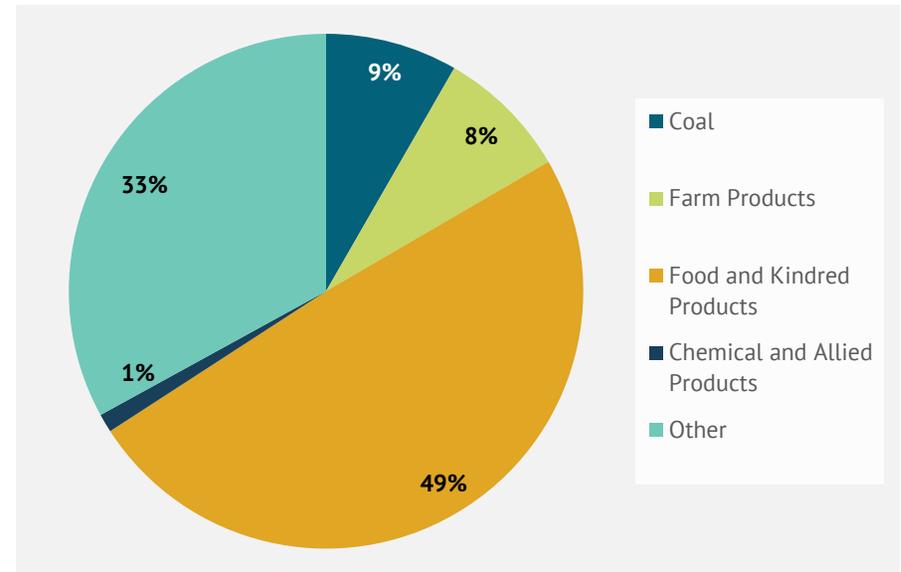
Alliant Energy
Archer Daniels Midland Co.
Cargill

Ingredion
International Paper

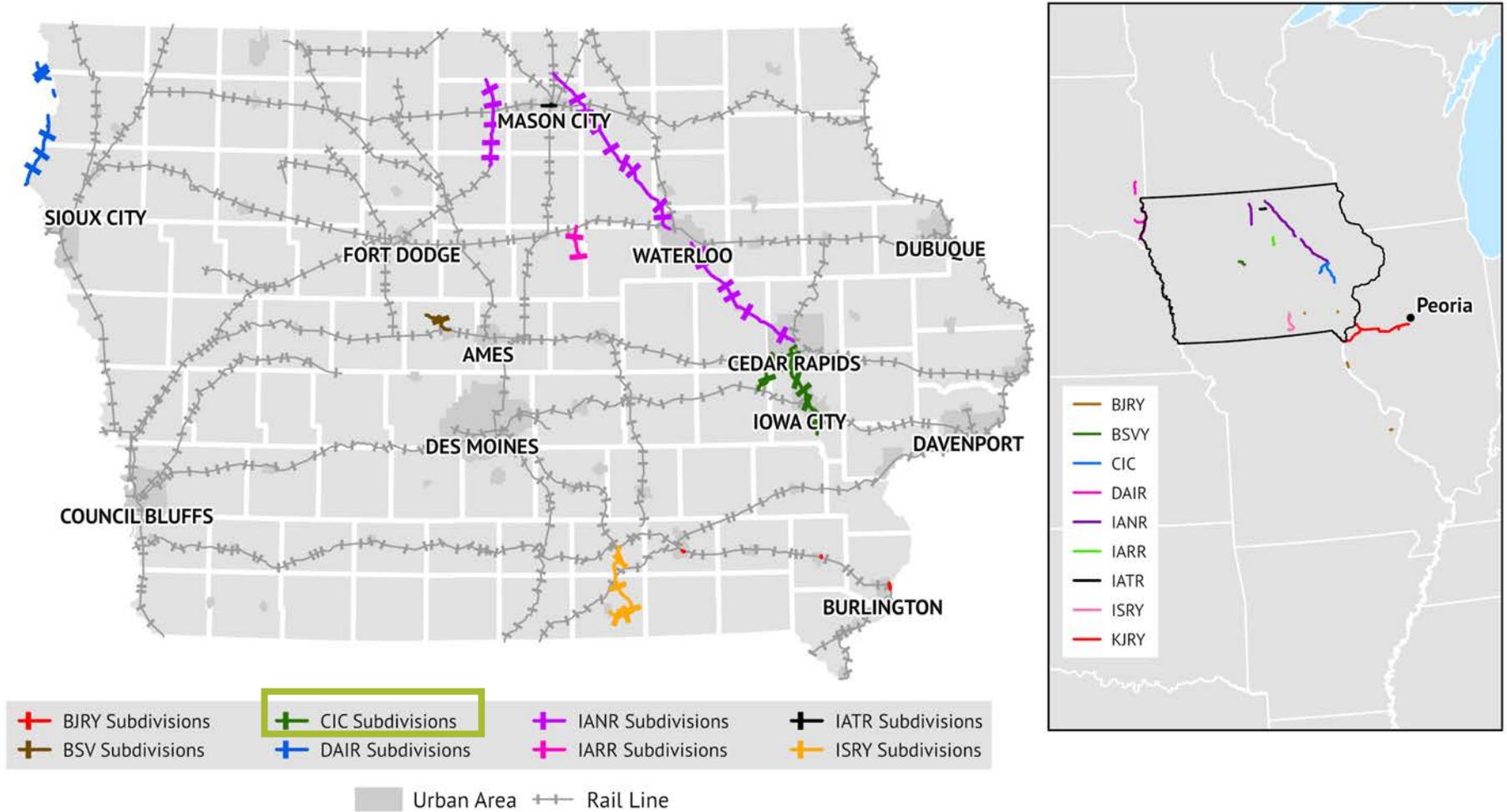
Overview

CRANDIC, owned by Travero, is a shortline railroad providing freight service between Cedar Rapids and Iowa City. It connects with Class I railroads UP and CN, as well as shortlines IANR and IAIS. Known for customer service and flexibility, CRANDIC plays a vital role in economic growth and industrial development in eastern Iowa.

Commodities



Class III Service in Iowa and CRANDIC/CIC Subdivisions



CRANDIC/CIC Subdivisions in Iowa

Subdivision	Railroad Owner	Railroad operator	FRA Track Class	Signal Type	Maximum Allowable Weight
Cedar Rapids-Hills	CIC	CIC	Class 1 / Class 2 (varies by segment)	None	286,000 lbs. (Cedar Rapids to Iowa City), 263,000 lbs. (Iowa City to Hills)
Cedar Rapids-Yocum	CIC	IAIS	Class 1 / Class 2 (varies by segment)	None	286,000 lbs.
Other main tracks in Cedar Rapids	CIC	CIC	Class 1 / Class 2 (varies by segment)	None	286,000 lbs.



Canadian National Railway (CN)

Operates in Iowa as Chicago Central & Pacific (CCP) and Cedar River Railroad (CEDR). CN is in the process of acquiring IANR.

www.cn.ca/en

Emergency number: 800-465-9239

Corporate HQ: 935 de La Gauchetiere St. W, Montreal PQ H3B 2M9

General offices: 17641 S. Ashland Ave., Homewood, IL 60430

CN in Iowa

Miles of track owned/leased/served in Iowa	596.3
Miles operated under trackage rights in Iowa	19.3
Employees in Iowa	182

Transloading

Cedar Falls, IA	Le Mars, IA
Cedar Rapids, IA	Sioux City, IA
Cherokee, IA	Williams, IA
Dubuque, IA	

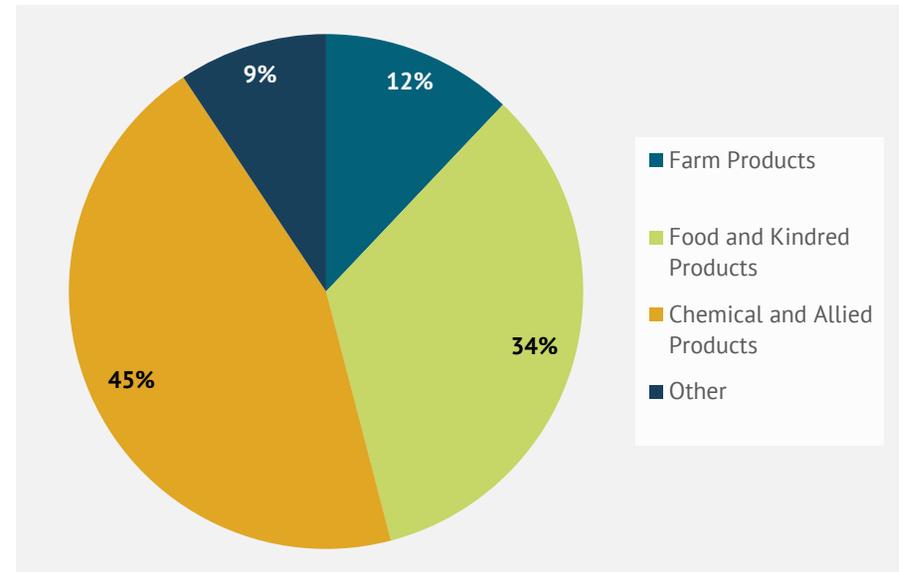
Railroad Interchanges

Cedar Rapids	UP, CIC, IAIS, IANR	Iowa Falls	UP
Council Bluffs	IAIS, UP, BNSF	Sioux City	DAIR, UP, BNSF
Dubuque	CPKC	Waterloo	IANR, UP

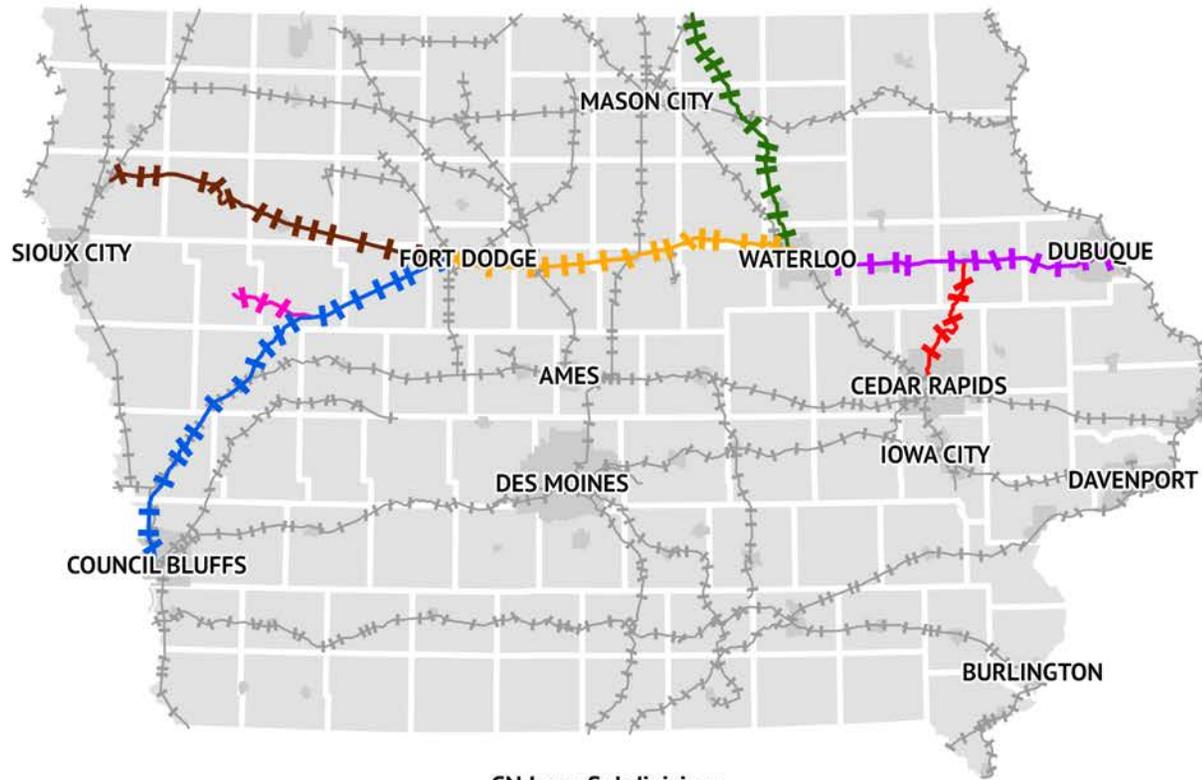
Overview

Through its subsidiaries CCP and CEDR, CN operates a vital rail network across Iowa from the Missouri River to the Mississippi River. CN transports a wide range of products, including food, machinery, chemicals, and primary metals, while also supporting a strong ethanol franchise with plants along the routes between Dubuque and Sioux City and Council Bluffs corridor. The largest rail yard in CN's Iowa network is in Waterloo.

Commodities



CN Service



CN Iowa Subdivisions

- + Cedar Rapids
- + Cherokee
- + Dubuque
- + Ida Grove
- + Omaha
- + Osage
- + Waterloo

Urban Area Rail Line



CN Subdivisions in Iowa (section 1 of 2)

Subdivision	Division	Railroad Owner	Railroad operator	FRA Track Class	Track Configuration	Signal Type	Method of Operation	Maximum Allowable Weight	Clearances
Dubuque	North Division - Iowa Zone	CN (CCP)	CN	Class 4	One main track with passing sidings	Centralized Traffic Control (CTC)	Centralized Traffic Control (CTC)	286,000 lbs.	Height above top of rail unknown; subdivision can accommodate Trailer on Flat Car (TOFC) equipment.
Waterloo	North Division - Iowa Zone	CN (CCP)	CN	Class 4	One main track with passing sidings and sections of two main tracks	<ul style="list-style-type: none"> • Centralized Traffic Control (CTC) Hilltop, Iowa-Waterloo, Iowa • Automatic Block Signals (ABS) at Waterloo, Iowa • Centralized Traffic Control (CTC) Waterloo, Iowa-Tara, Iowa 	<ul style="list-style-type: none"> • Centralized Traffic Control (CTC) Hilltop, IA-Waterloo, IA • Yard Limits (YL) at Waterloo, IA • Centralized Traffic Control (CTC) Waterloo, IA-Tara, IA 	286,000 lbs.	Height above top of rail unknown; subdivision can accommodate Trailer on Flat Car (TOFC) equipment.
Cherokee	North Division - Iowa Zone	CN (CCP)	CN	<ul style="list-style-type: none"> • Class 3 (Tara-Le Mars) • Class 4 (Le Mars-Sioux City) 	One main track with passing sidings	Automatic Block Signals (ABS) Le Mars, Iowa-Sioux City, Iowa	<ul style="list-style-type: none"> • Yard Limits (YL) at Tara, IA • Track Authority (TA) Tara, Iowa-Le Mars, IA • Track Warrant Control (TWC) Le Mars, IA-Sioux City, IA • Rule 520 (Non-Main Track) at Sioux City, IA 	286,000 lbs.	Height above top of rail unknown; subdivision can accommodate Trailer on Flat Car (TOFC) equipment.

CN Subdivisions in Iowa (section 2 of 2)

Subdivision	Division	Railroad Owner	Railroad operator	FRA Track Class	Track Configuration	Signal Type	Method of Operation	Maximum Allowable Weight	Clearances
Ida Grove	North Division - Iowa Zone	CN (CCP)	CN	Class 2	One main track with passing sidings	Centralized Traffic Control (CTC) at Ida, Iowa	Track Authority (TA)	286,000 lbs.	Unknown
Omaha	North Division - Iowa Zone	CN (CCP)	CN	Class 2	One main track with passing sidings	<ul style="list-style-type: none"> Centralized Traffic Control (CTC) at Tara, IA Centralized Traffic Control (CTC) at Ida, IA 	<ul style="list-style-type: none"> Track Authority (TA) Tara, IA-Council Bluffs, IA Rule 520 (Non-Main Track) at Council Bluffs, IA 	286,000 lbs.	Height above top of rail unknown; subdivision can accommodate Trailer on Flat Car (TOFC) equipment.
Cedar Rapids	North Division - Iowa Zone	CN (CCP)	CN	Class 3 / Class 2 (varies by segment)	One main track	None	<ul style="list-style-type: none"> Rule 520 (Non-Main Track) at Manchester, IA Track Authority (TA) Manchester, IA-Cedar Rapids, IA Rule 520 (Non-Main Track) at Cedar Rapids, IA 	286,000 lbs.	Height above top of rail unknown; subdivision can accommodate Trailer on Flat Car (TOFC) equipment.
Osage	North Division - Iowa Zone	CN (CEDR)	CN	Class 3	One main track	None	Track Authority (TA)	286,000 lbs.	Unknown



D & I Railroad (DAIR)

www.lgeverist.com/dirailroad.php

Emergency number: 800-843-7992

Corporate HQ: 350 S. Main Ave. Suite 400, Sioux Falls, SD 57104

Phone: 605-334-5000

DAIR in Iowa

Miles of track owned/leased/served in Iowa	0
Miles operated under trackage rights in Iowa	42
Employees in Iowa	0

Transloading

Hawarden, IA

Sioux City, IA

Various locations, CO

Railroad Interchanges

Sioux City, IA	BNSF, CN, UP
Sioux Falls, SD	BNSF

Major Existing Customers

L.G. Everist Inc.

Poet Biorefining - Hudson

Siouxland Energy Transload

GCC Dacotah Cement

Poet Nutrition

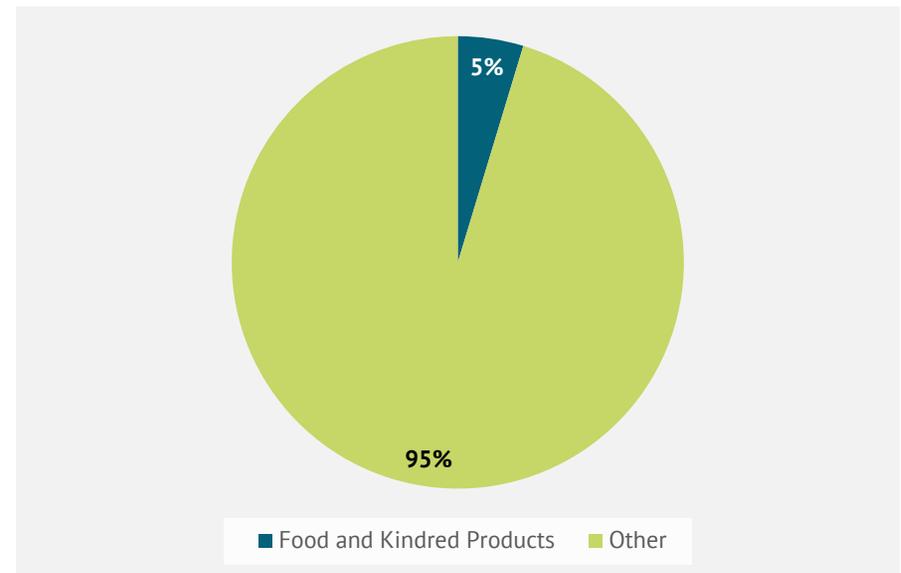
Prinsco Inc.

BX Civil & Construction Inc.

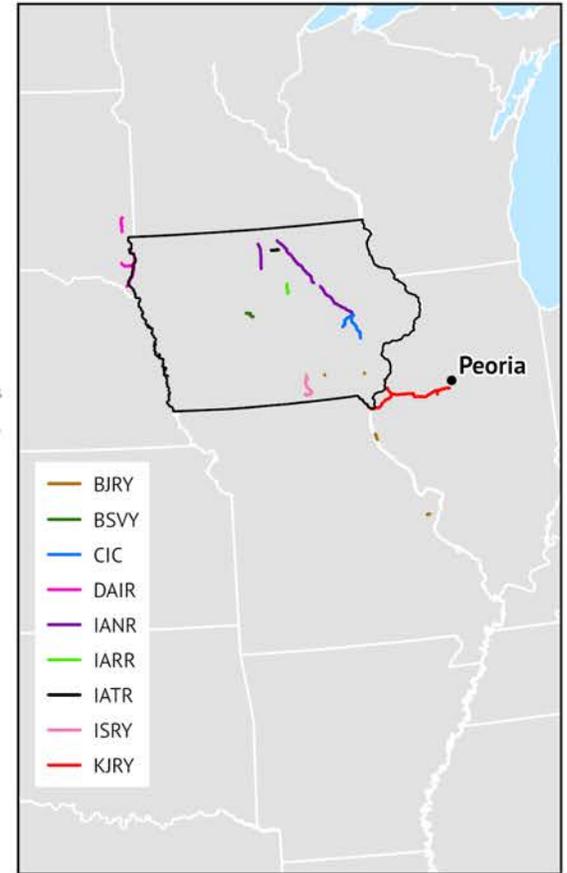
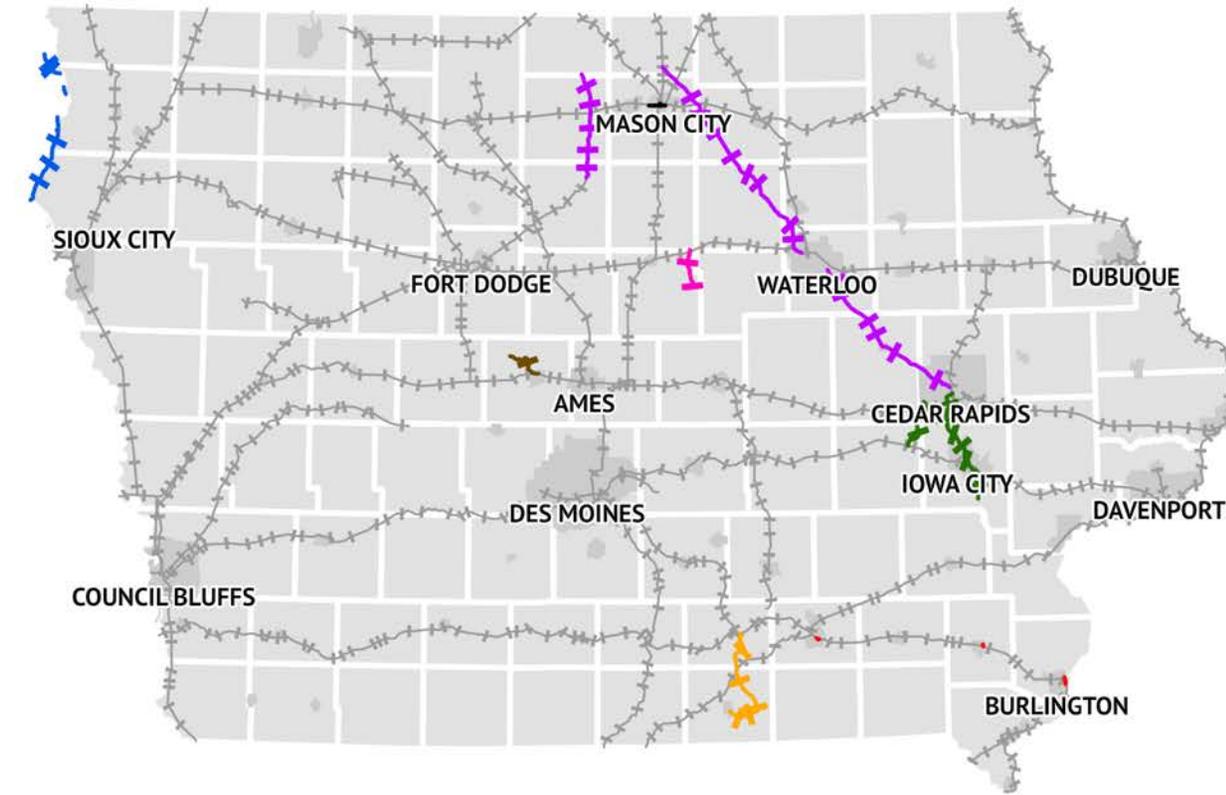
Overview

DAIR was established in 1981 following the bankruptcy of the Milwaukee Road. The State of South Dakota acquired most of the rail lines within the state, as well as a portion of the track miles extending into Iowa. Owned by L.G. Everist, Inc., DAIR plays a vital role in regional transportation, providing freight services and interchanging with major railroads—BNSF, CN, and UP—in Sioux City, Iowa. This strategic positioning enhances DAIR's ability to support local industries and facilitate broader national connectivity.

Commodities



Class III Service in Iowa and DAIR Subdivisions





DAIR Subdivisions in Iowa

Subdivision	Railroad Owner	Railroad operator	FRA Track Class	Signal Type	Maximum Allowable Weight	Clearances
Sioux City-Iowa/South Dakota state line	BNSF	DAIR	Class 1	None	286,000 lbs.	Unknown
DAIR Hawarden Subdivision State of South Dakota Sioux Valley Line	State of South Dakota	DAIR	Class 2	None	286,000 lbs.	Unknown
DAIR Beresford Subdivision – State of South Dakota Sioux Valley Line	State of South Dakota	DAIR	Class 2	None	286,000 lbs.	Unknown

Iowa Interstate Railroad (IAIS)

Also operates CBED Railway (CBRX) trackage (5 miles total) in Iowa.

www.iaisrr.com

Emergency number: 800-321-3891

Corporate HQ: 203 2nd St. SE, Suite 500, Cedar Rapids, IA 52404

Phone: 319-298-5400

IAIS in Iowa

Miles of track owned/leased/served in Iowa	305.3
Miles operated under trackage rights in Iowa	27.3
Employees in Iowa	210

Transloading

Altoona, IA	Dexter, IA	West Liberty, IA
Atlantic, IA	De Soto, IA	Wilton, IA
Council Bluffs, IA	Newton, IA	Wiota, IA
Des Moines, IA		

Intermodal

Council Bluffs, IA	Blue Island, IL
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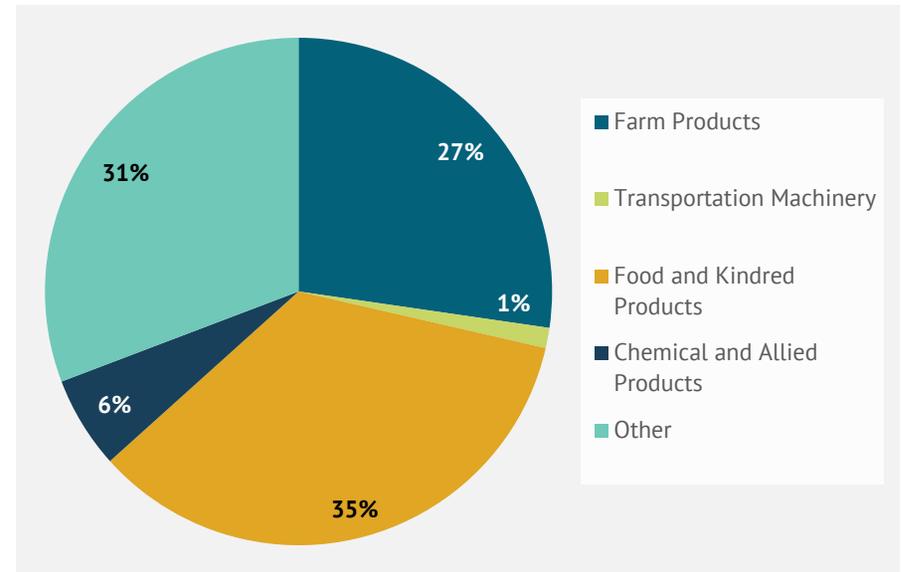
Railroad Interchanges

Blue Island, IL	IHB, CSXT, NS, CPRS, CN, UP, CFE, BNSF
Cedar Rapids, IA	CIC
Council Bluffs, IA	BNSF, UP, CN, CPKC
Davenport, IA/ Rock Island, IL	BNSF, CPRS
Des Moines, IA	BNSF, NS, UP

Overview

IAIS is one of the few regional railroads that connect with the entire Class I railroad network, including BNSF, UP, CN, CPKC, CSXT, and NS, at multiple interchange locations. The IAIS main line runs from Council Bluffs through Des Moines, Iowa City, and Davenport, Iowa, extending to Chicago and Peoria, Illinois. This extensive connectivity enhances IAIS's ability to serve regional industries.

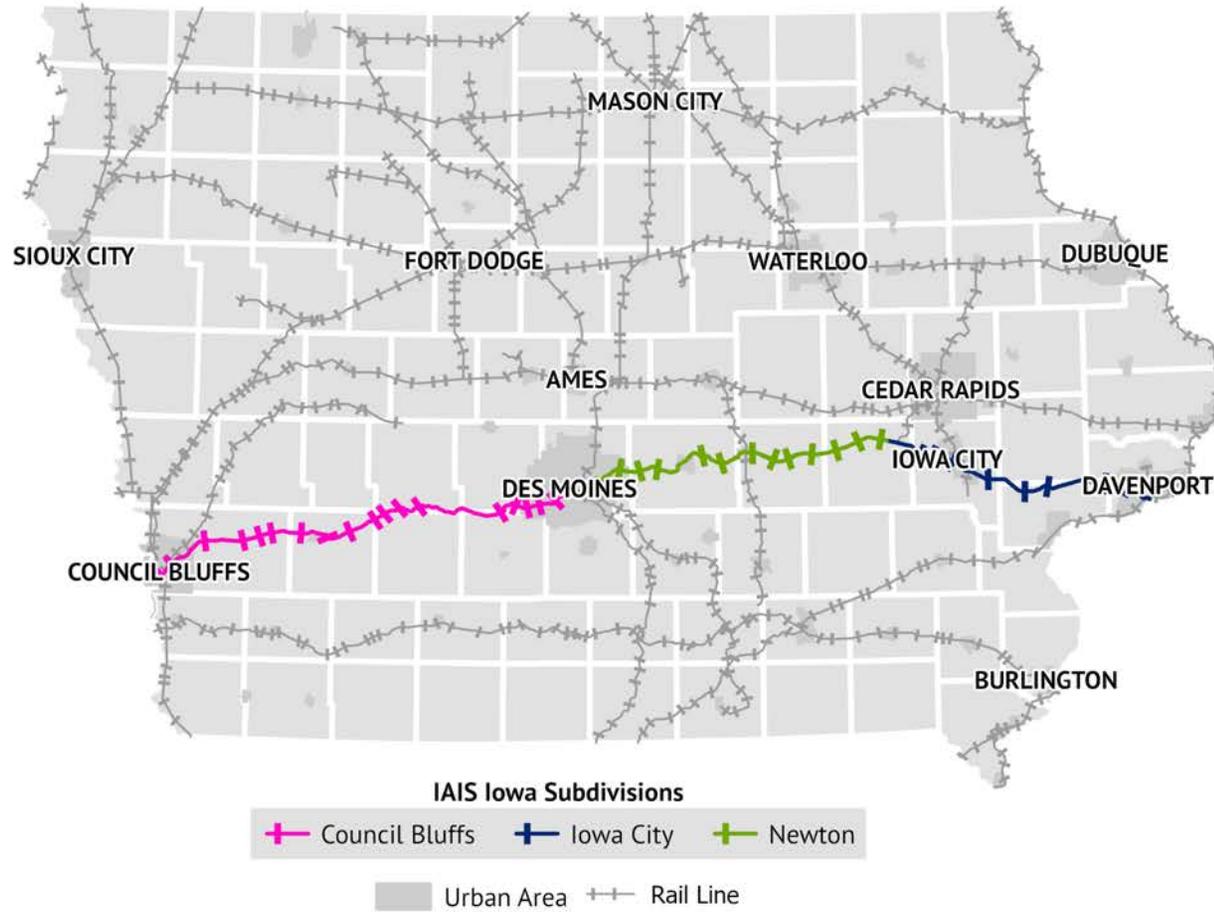
Commodities



Iowa City, IA	CIC
Peoria, IL	TZPR, TPW, IMRR, NS, UP, BNSF, CN, KJRY
Utica, IL	CSXT



IAIS Service



IAIS Subdivisions in Iowa

Subdivision	Division	Railroad Owner	Railroad operator	FRA Track Class	Track Configuration	Signal Type	Method of Operation	Maximum Allowable Weight	Clearances
Iowa City	IAIS	IAIS	IAIS	Class 3	One main track with passing sidings	None	Track Warrant Control (TWC)	286,000 lbs.	Double stack capable (20' 2" above the top of the rail)
Newton	IAIS	IAIS	IAIS	Class 3	One main track with passing sidings	None	Track Warrant Control (TWC)	286,000 lbs.	Double stack capable (20' 2" above the top of the rail)
Council Bluffs	IAIS	IAIS	IAIS	Class 3	One main track with passing sidings	None	Track Warrant Control (TWC)	286,000 lbs.	Double stack capable (20' 2" above the top of the rail)
Cedar Rapids	IAIS Cedar Rapids subdivision (CIC subdivision 3)	CIC	IAIS	Class 2	One main track	None	Track Warrant Control (TWC)	286,000 lbs.	Double stack capable (21' 3" above the top of the rail)



Iowa Northern Railway (IANR)

IANR is in the process of being acquired by CN.

www.iowanorthern.com

Emergency number: 800-383-5810

Corporate HQ: 201 Tower Park Dr., Suite 300, Waterloo, IA 50701

Phone: 319-297-6000

IANR in Iowa

Miles of track owned/leased/served in Iowa	174.3
Miles operated under trackage rights in Iowa	43
Employees in Iowa	113

Transloading

Manly, IA
Shell Rock, IA
Waterloo, IA

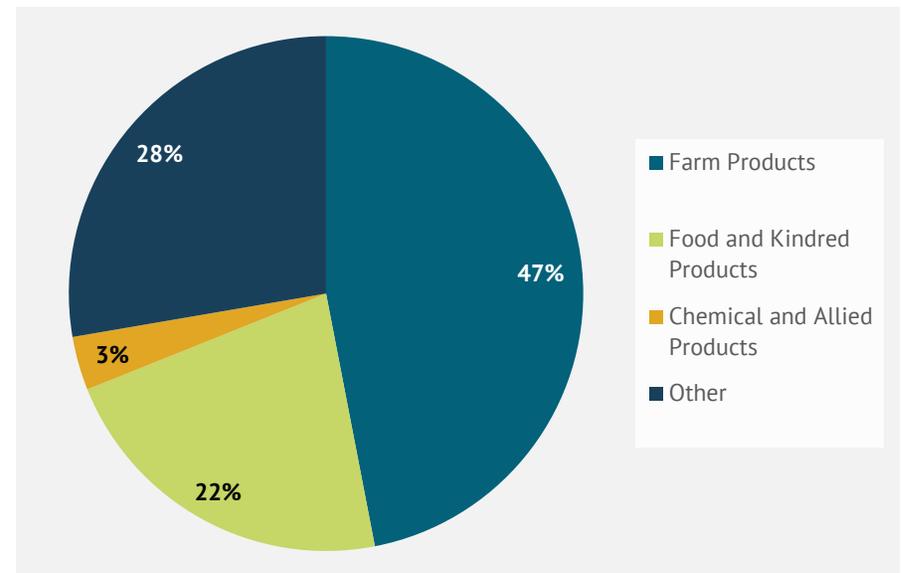
Railroad Interchanges

Cedar Rapids	UP, CN, CIC to IAIS
Manly	UP
Nora Spring	CPKC to CSXT, and NS
Waterloo	CN to BNSF, CSXT, and NS

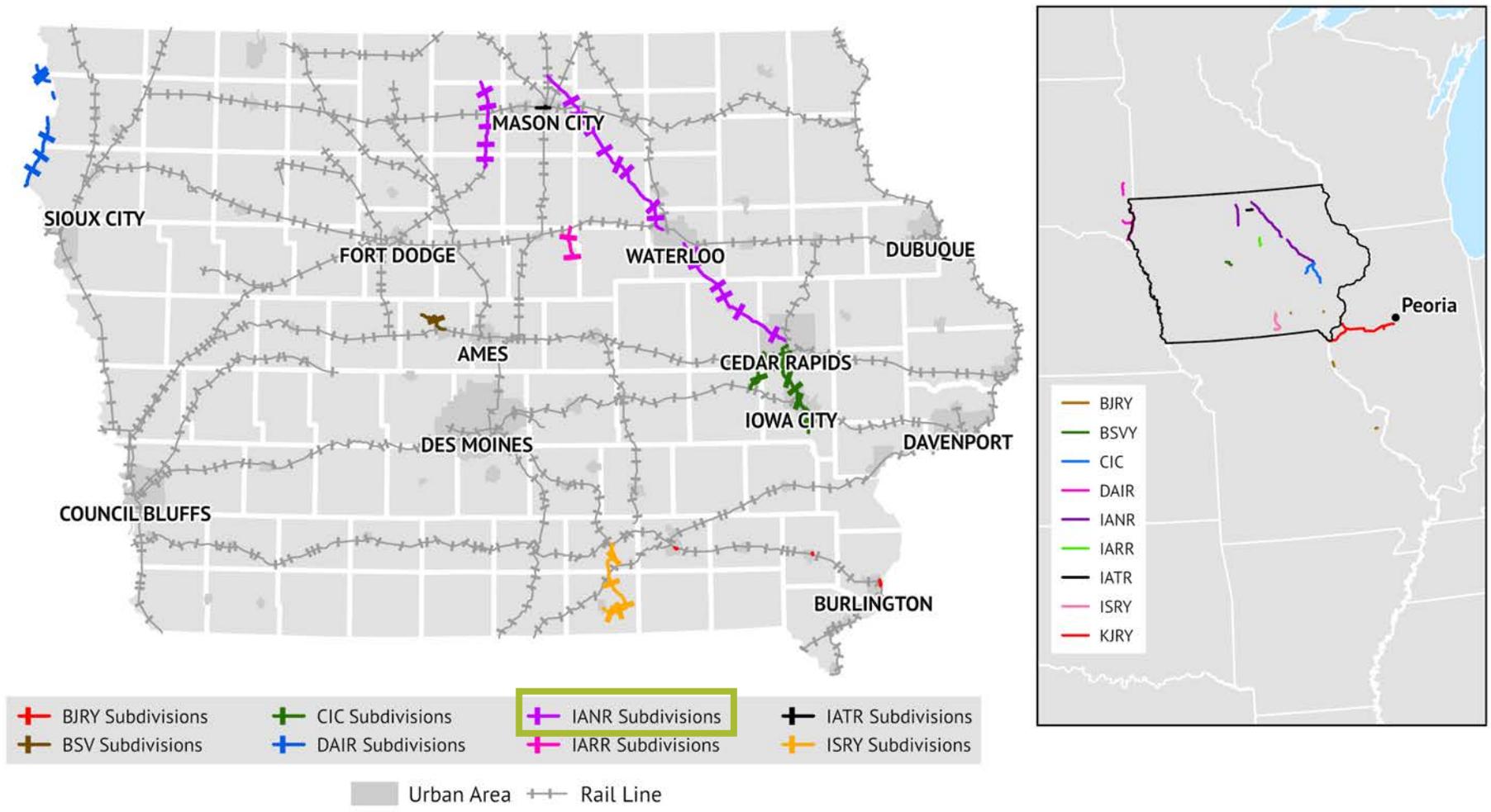
Overview

IANR operates 217.3 miles of track in northeast Iowa running diagonally from Manly to Cedar Rapids, passing through key cities such as Mason City, Waterloo, and Cedar Rapids. IANR also maintains two branch lines: one connecting Waterloo to Oelwein and another running from Forest City south to Belmond. This network provides essential freight service to industries across the region, contributing to the economic vitality of northeast Iowa.

Commodities



Class III Service in Iowa and IANR Subdivisions





IANR Subdivisions in Iowa

Subdivision	Railroad Owner	Railroad operator	FRA Track Class	Track Configuration	Signal Type	Method of Operation	Maximum Allowable Weight	Clearances
Manly	IANR	IANR	Class 2	One main track with passing sidings	None	<ul style="list-style-type: none"> • Yard Limits (YL) Manly, IA-Reindl, IA • Track Warrant Control (TWC) Reindl, IA-Cedar Falls Junction, IA 	286,000 lbs.	Double-stack capable; Clears Plate H 20'-9" (Manly, IA-Cedar Falls Junction, IA)
Cedar Rapids	IANR	IANR	Class 2	One main track with passing sidings	None	Track Warrant Control (TWC)	286,000 lbs.	Double-stack capable; Clears Plate H 20'-9" (Waterloo, IA-Cedar Rapids, IA)
Oelwein	D&W	IANR	Class 1	One main track with passing sidings	None	<ul style="list-style-type: none"> • Track Warrant Control (TWC) Dewar, IA-Oelwein, IA • Yard Limits (YL) at Oelwein, IA • Yard Limit (YL) Waterloo, IA-Dewar, IA 	286,000 lbs.	Clears Plate H 20' 9" Above Top of Rail (Dewar, IA-Oelwein, IA)
Garner	NCIRC	IANR	Class 1	One main track with passing sidings	None	<ul style="list-style-type: none"> • Track Warrant Control (TWC) Belmont, IA-Garner, IA • Yard Limits (YL) Garner, IA • Track Warrant Control (TWC) Garner, IA-Forest City, IA 	263,000 lbs.	21' 0" Above Top of Rail (Belmond, IA-Forest City, IA)

Iowa River Railroad (IARR)

Emergency number: 641-858-0656; 641-751-5105 after hours
Corporate HQ: 33371 170th St., Steamboat Rock, IA 50627
 Phone: 641-868-2676

IARR in Iowa

Miles of track owned/leased/served in Iowa	11
Miles operated under trackage rights in Iowa	0
Employees in Iowa	5

Railroad Interchanges

Ackley	CN
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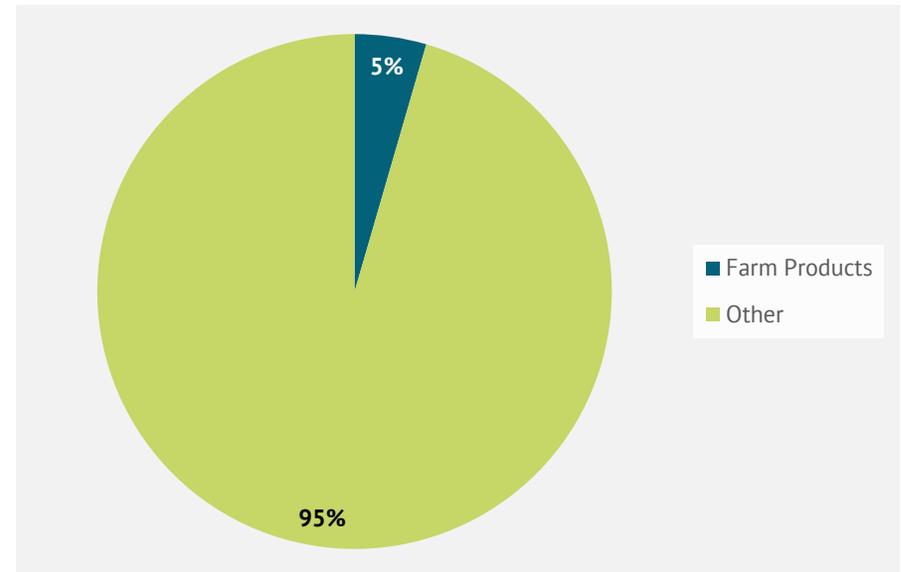
Major Existing Customers

Pine Lake Corn Processors LLC Steamboat Rock, IA

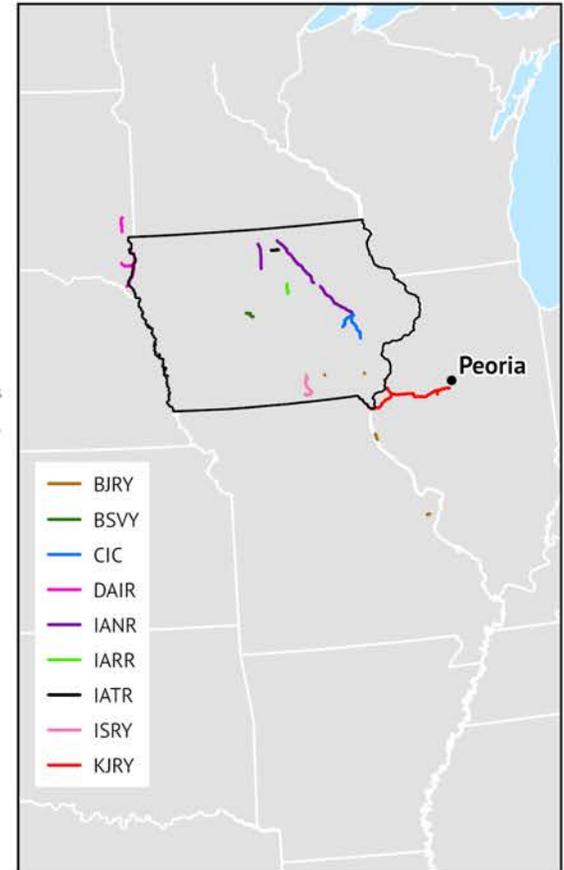
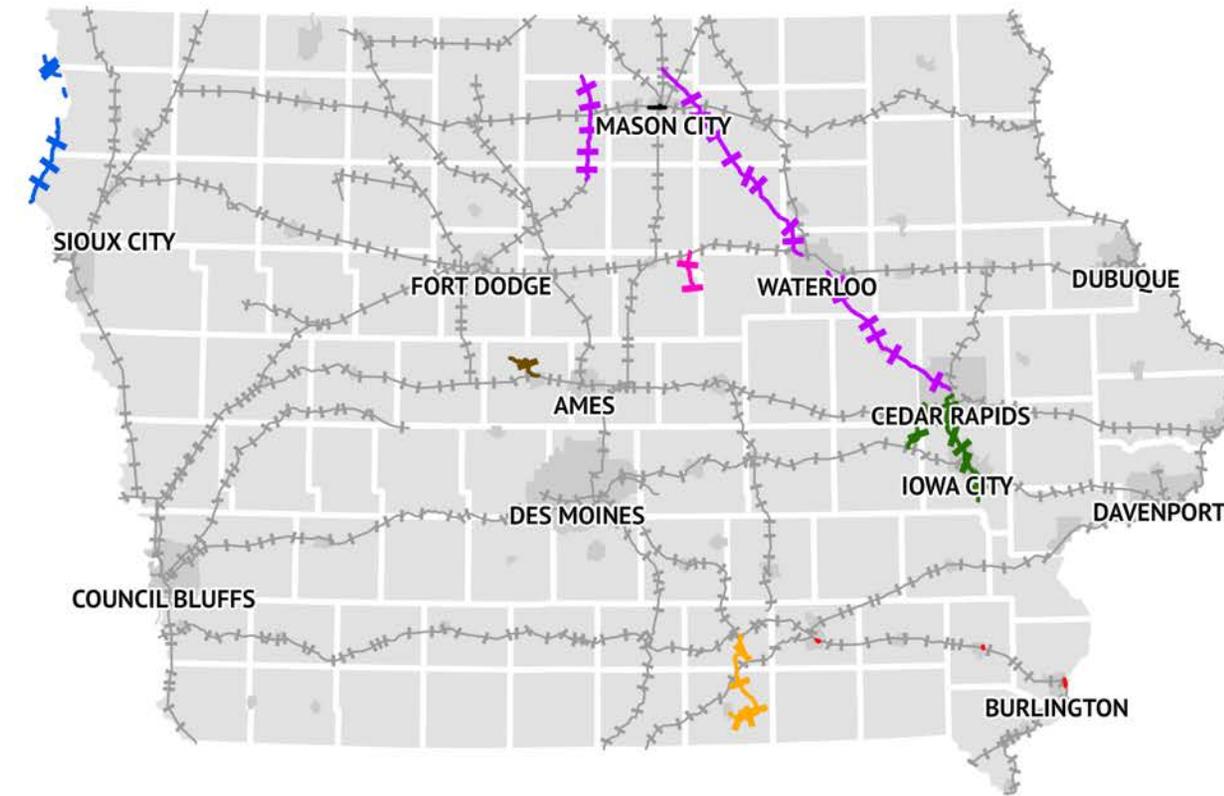
Overview

IARR, headquartered in Steamboat Rock, Iowa, operates a rail line between Steamboat Rock and Ackley, Iowa. The railroad primarily transports corn byproducts and ethanol produced by Pine Lake Corn Processors, facilitating the transfer of goods to the CN at their interchange point.

Commodities



Class III Service in Iowa and IARR Subdivisions



Subdivision	Railroad Owner	Railroad operator	FRA Track Class	Signal Type	Maximum Allowable Weight	Clearances
Ackley-Steamboat Rock	IARR	IARR	Class 1	None	265,000 lbs.	Unknown

Iowa Southern Railway (ISRY)

www.progressiverail.com/rrisry/isry.html

Emergency number: 641-437-7029; 641-529-0061 after hours

Corporate HQ: 1303 S. 21st St., P.O. Box 321, Centerville, IA 52544

ISRY in Iowa

Miles of track owned/leased/serviced in Iowa	35
Employees in Iowa	7

Transloading

Centerville, IA

Railroad Interchanges

Albia	BNSF, NS
Moravia	CPKC

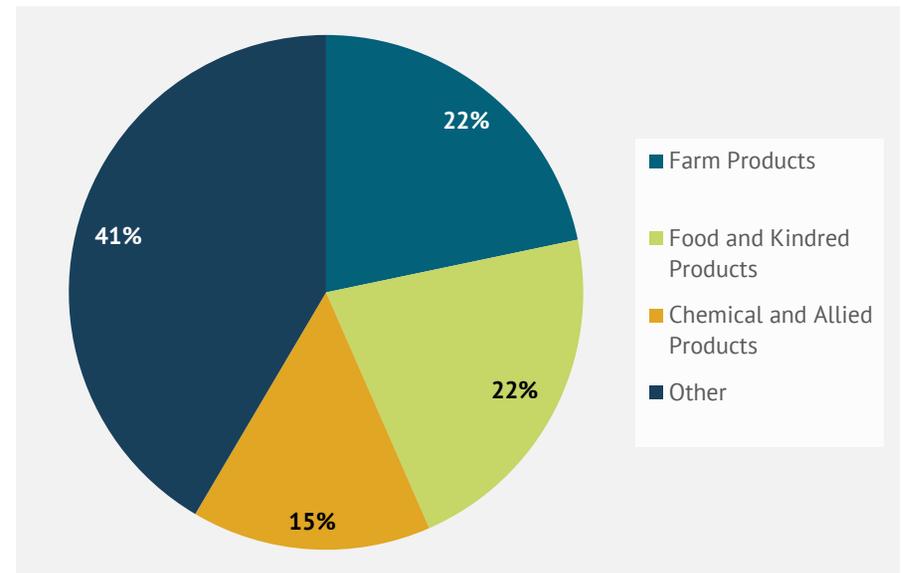
Major Existing Customers

RELCO, Inc.	Albia
Lee Container, Inc.	Centerville
Bemis Corporation	Centerville
Centerville Iron & Metals	Centerville
Rio Tinto Aluminum	Centerville
Iowa Steel & Wire	Centerville
World Foods Processing, Inc.	Centerville
Growmark, Inc.	Moravia
Performance Pipe, Inc.	Centerville

Overview

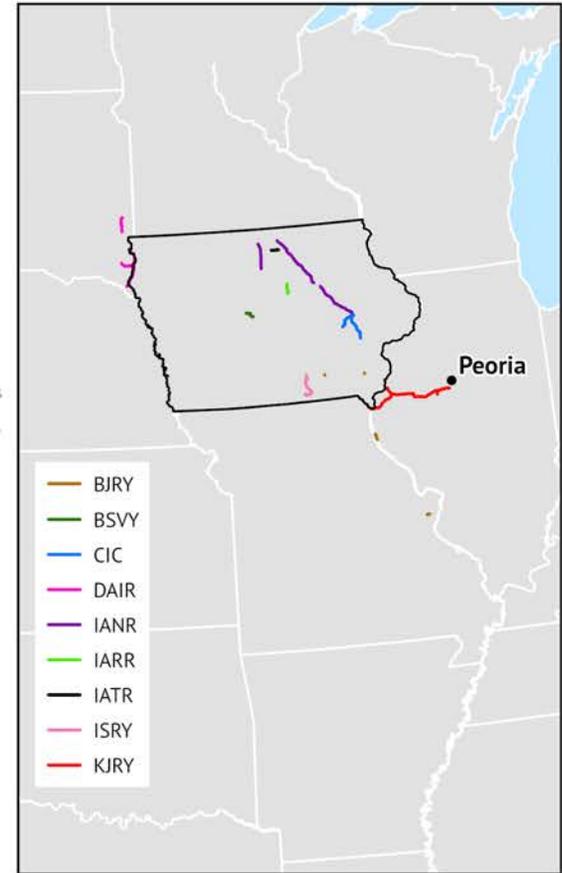
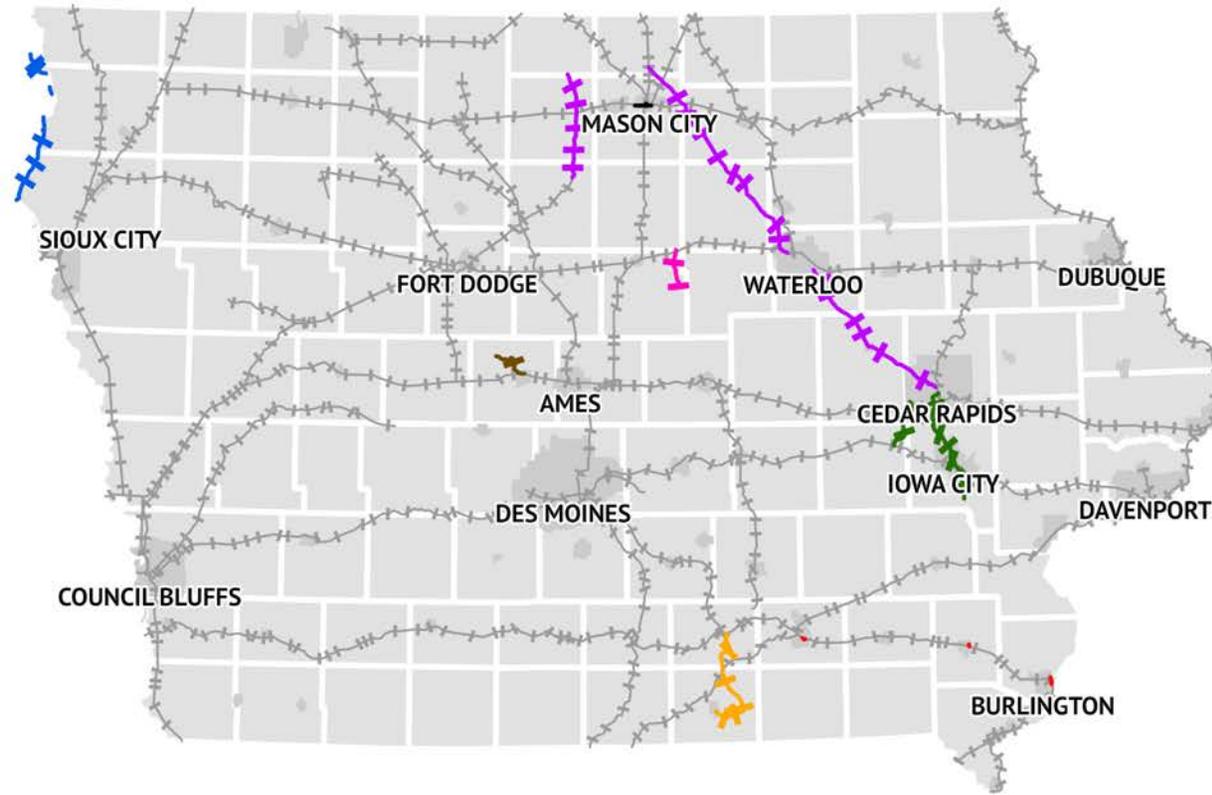
ISRY became part of the Progressive Rail family of shortline railroads in 2016. The ISRY operates 35 miles of track in Monroe and Appanoose counties, Iowa. This track was previously operated by major railroads such as BNSF, the Wabash Railroad, and the Rock Island Line.

Commodities





Class III Service in Iowa and ISRY Subdivisions



- + BIRY Subdivisions
- + BSV Subdivisions
- + CIC Subdivisions
- + DAIR Subdivisions
- + IANR Subdivisions
- + IARR Subdivisions
- + IATR Subdivisions
- + ISRY Subdivisions

Urban Area + Rail Line

Subdivision	Railroad Owner	Railroad operator	FRA Track Class	Signal Type	Maximum Allowable Weight	Clearances
Centerville-Albia	ISRY	PGR	Class 1	None	268,000 lbs.	Unknown

Iowa Traction Railway (IATR)

www.progressiverail.com/rriatr/iatr.html

Emergency number: 641-424-4600

Corporate HQ: 21778 Highview Ave., Lakeville, MN 55044

Phone: 612-791-1190

General offices: 12045 W. State St., P.O. Box 309, Mason City, IA 50401

Phone: 641-424-2600

IATR in Iowa

Miles of track owned/leased/served in Iowa	10.4
Miles operated under trackage rights in Iowa	0
Employees in Iowa	9

Transloading

Mason City, IA

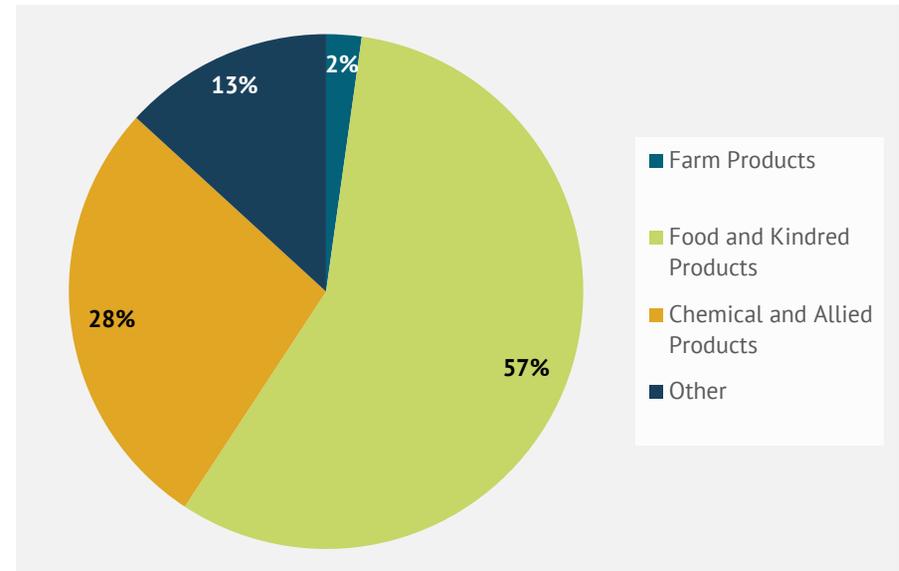
Railroad Interchanges

Mason City UP, CPKC

Overview

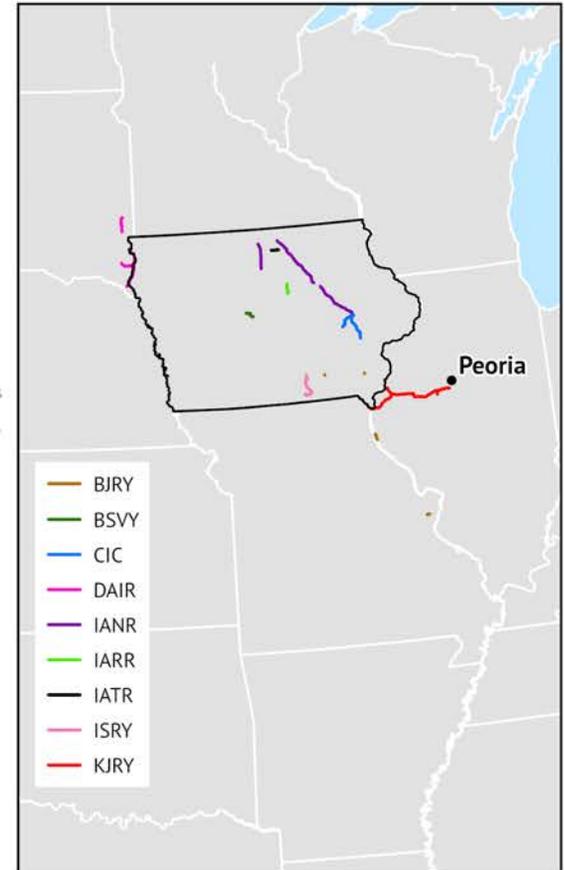
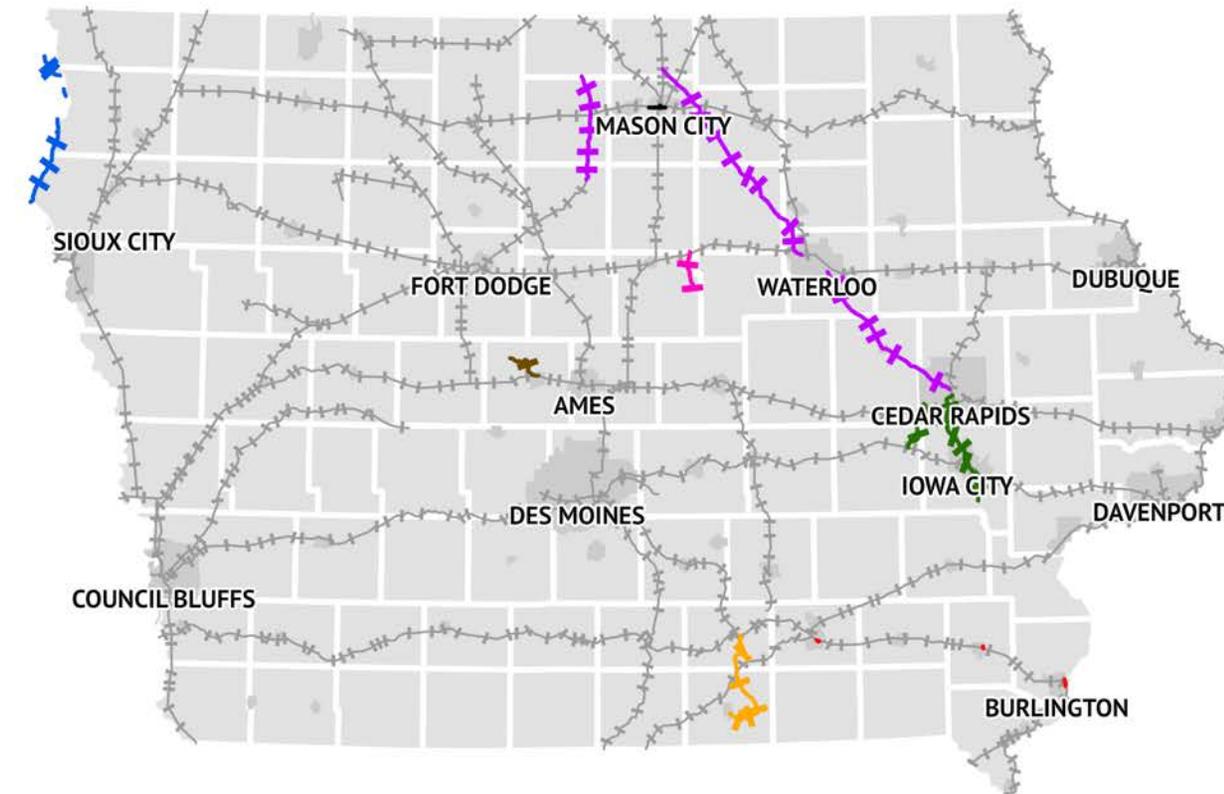
IATR is one of seven railroads owned and operated by Progressive Rail Inc., headquartered in Lakeville, Minnesota. As an electric railway, IATR operates on 10.4 miles of track between Mason City and Clear Lake, Iowa, supporting agribusiness and industrial operations in northern Iowa and southern Minnesota. Its facility in Emery, Iowa, offers direct switching of railcars and provides transloading services, facilitating efficient transfer between trucks and trains.

Commodities





Class III Service in Iowa and IATR Subdivisions



Subdivision	Railroad Owner	Railroad operator	FRA Track Class	Signal Type	Maximum Allowable Weight	Clearances
Mason City-Clear Lake	IATR	IATR	Class 1	None	286,000 lbs.	19' 6" Above Top of Rail

Keokuk Junction Railway (KJRY)

www.patriotrail.com/rail/keokuk-junction-railway-co-kjry

Emergency number: 855-258-4514

Corporate HQ: 10752 Deerwood Park Blvd. #300, Jacksonville, FL 32256

Phone: 904-423-2540

Site Contact: KJRY, 300 Main St. Suite 490, Keokuk, IA 52632

KJRY in Iowa

Miles of track owned/leased/served in Iowa	1
Miles operated under trackage rights in Iowa	0
Employees in Iowa	12

Transloading

Keokuk, IA

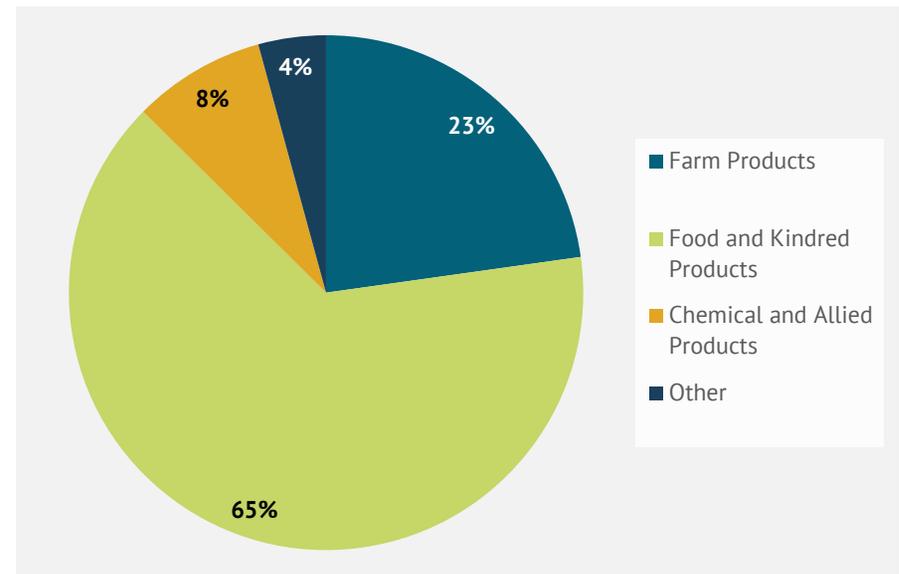
Railroad Interchanges

Fort Madison, IA	UP
Keokuk, IA	BNSF
Peoria, IL	BNSF, CN, NS, UP
Sommer, IL	UP

Overview

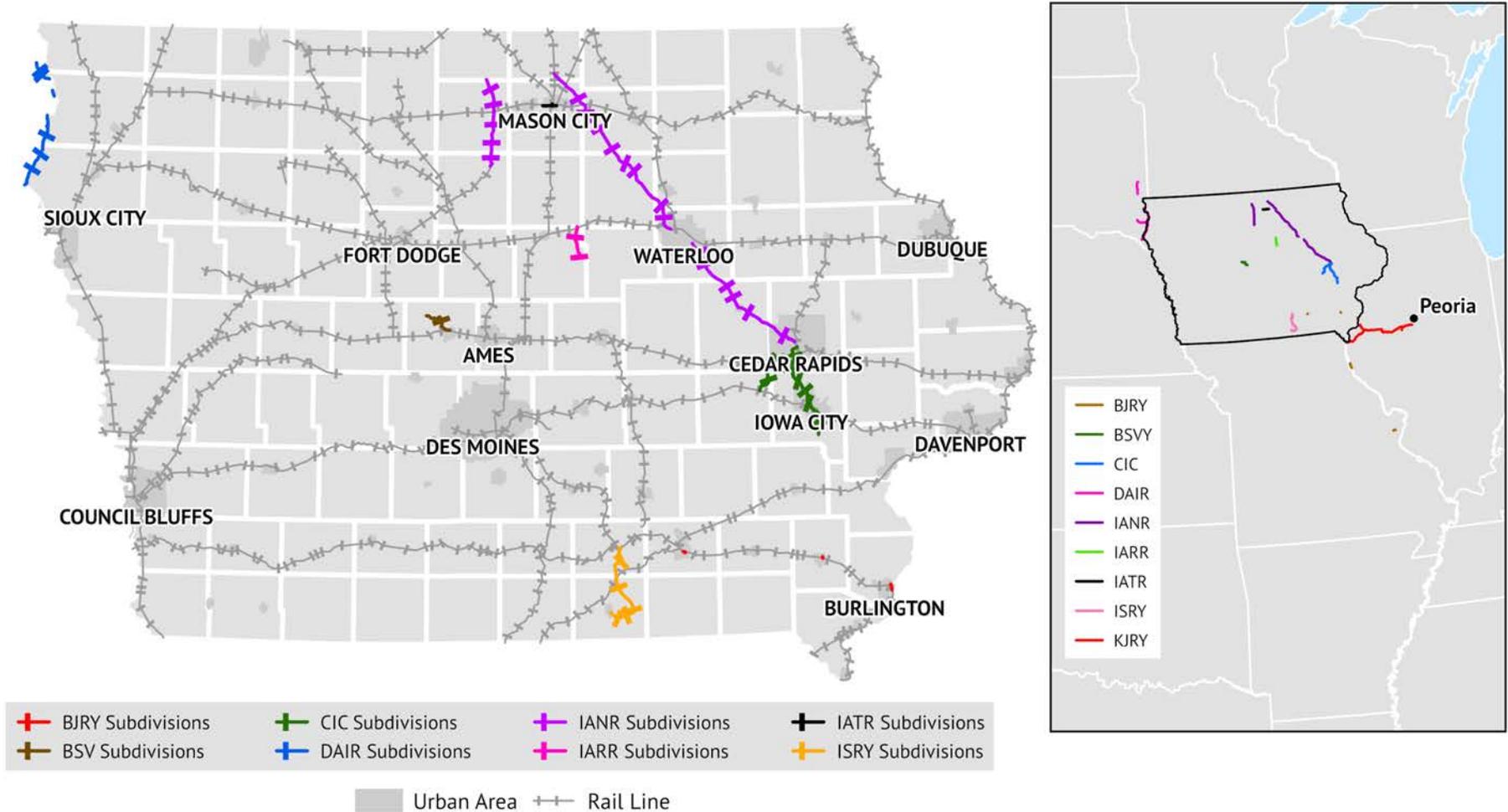
KJRY, a wholly owned subsidiary of Patriot Rail, operates a 114-mile rail line from Peoria, Illinois, to Keokuk, Iowa, along with an additional 12-mile section between La Harpe and Lomax, Illinois. KJRY also holds trackage rights over a 15.5-mile segment of BNSF Railway from Lomax, Illinois, to Fort Madison, Iowa, enabling seamless interchange with UP. In addition to these routes, KJRY provides local shippers in Keokuk with services like reciprocal switching and transloading. The railway primarily transports agricultural and industrial products, including corn syrup, fertilizer, grain, minerals, scrap iron, and steel.

Commodities





Class III Service in Iowa and KJRY Subdivisions (see inset)



Subdivision	Railroad Owner	Railroad operator	FRA Track Class	Signal Type	Maximum Allowable Weight	Clearances
KJRY Iowa Subdivision	KJRY	KJRY	Class 1	None	263,000 lbs	Unknown
IA/IL state line at Fort Madison	BNSF	KJRY	Class 1	None	260,000 lbs	Unknown

Norfolk Southern (NS)

www.norfolksouthern.com

Emergency number: 800-453-2530

Corporate HQ: 650 W. Peachtree St. NW, Atlanta, GA 30308

NS in Iowa

Miles of track owned/leased/served in Iowa	5.1
Miles operated under trackage rights in Iowa	36.9
Employees in Iowa	0

Transloading

Altoona, IA
Des Moines, IA

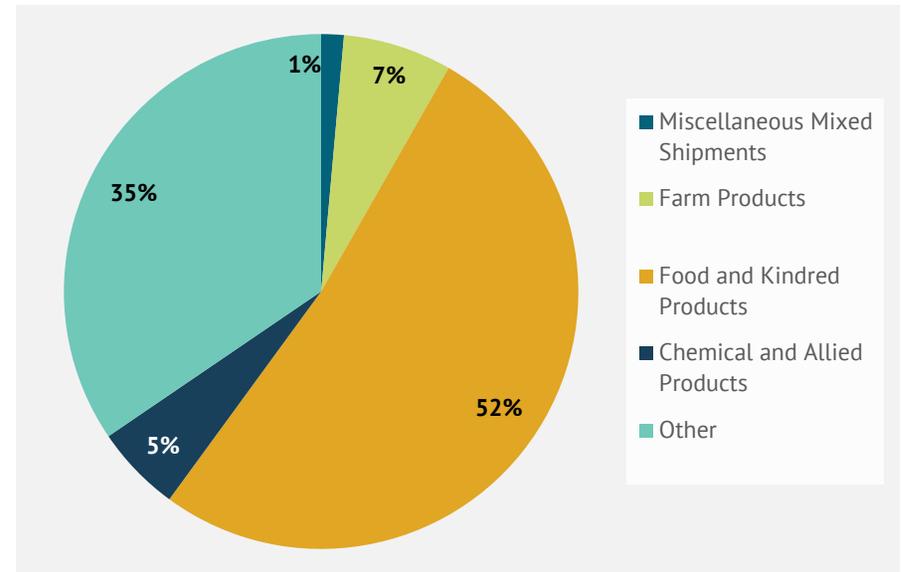
Railroad Interchanges

Des Moines	UP, IAIS
Ottumwa	CPKC

Overview

NS operates a vast rail network spanning 20,000 miles across 22 states and Washington, D.C. The company plays a critical role in international trade, providing rail service to all major eastern seaports, along with 10 river ports and nine lake ports. In Iowa, NS has operating agreements with BNSF, allowing it to run on tracks from Keokuk through Burlington and into Des Moines, expanding its reach in the Midwest.

Commodities





NS Subdivisions in Iowa

Subdivision	Division	Railroad Owner	Railroad operator	FRA Track Class	Track Configuration	Signal Type	Method of Operation	Maximum Allowable Weight	Clearances
Des Moines Terminal	Illinois	NS	Total miles of NS-owned trackage in Iowa: Approximately 44.0 miles, as follows: <ul style="list-style-type: none"> Tracy, IA-Hamilton, IA; operated by BNSF as part of the BNSF Des Moines Subdivision (approximately 11.0 miles) Swan, IA-Des Moines, IA; operated by BNSF as part of the BNSF Des Moines Subdivision (approximately 16.0 miles) Des Moines, IA; operated by NS as the NS Des Moines Terminal (approximately 5.0 miles) 	<ul style="list-style-type: none"> Class 2 (Tracy-Hamilton) Class 2 (Swan-Des Moines) 	One main track	None	<ul style="list-style-type: none"> Track Warrant Control (TWC) Tracy, IA-Hamilton, IA; dispatched by BNSF Track Warrant Control (TWC) Tracy, IA-Des Moines, IA; dispatched by BNSF Restricted Speed (RS) at Des Moines, IA Yard Limits (YL) at Des Moines, IA 	286,000 lbs.	<ul style="list-style-type: none"> 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.

Union Pacific Railroad (UP)

www.up.com/index.htm

Emergency number: 888-877-7267

Corporate HQ: 1400 Douglas St., Omaha, NE 68179

Phone: 402-544-5000

UP in Iowa

Miles of track owned/leased/served in Iowa	1,278
Miles operated under trackage rights in Iowa	275
Employees in Iowa	1,528

Transloading

Altoona, IA	Des Moines, IA	Mason City, IA
Camanche, IA	Emery, IA	Shell Rock, IA
Cedar Rapids, IA	Fairfax, IA	Sioux City, IA
Clinton, IA	Hawarden, IA	Waterloo, IA
Council Bluffs, IA	Manly, IA	Omaha, NE

Intermodal

Council Bluffs, IA

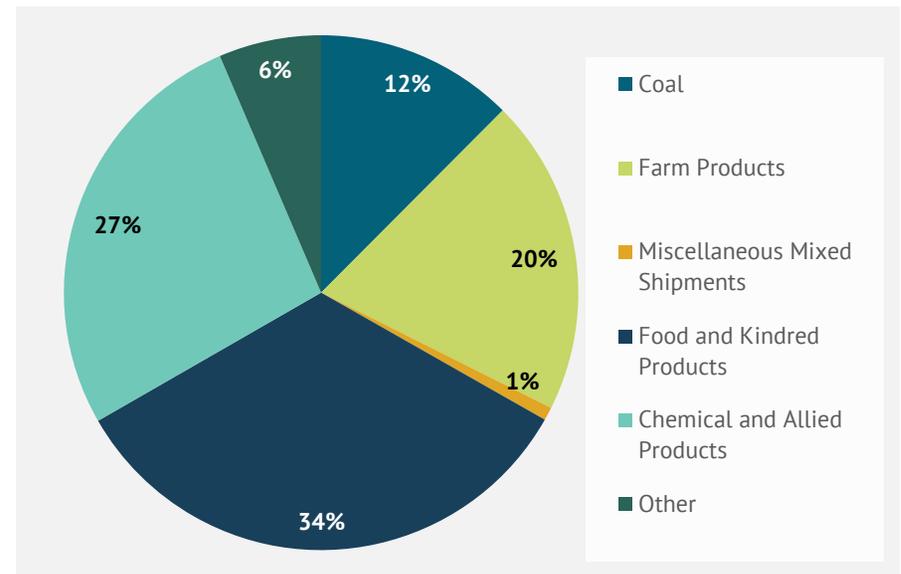
Railroad Interchanges

Boone	BSV	Iowa Falls	CN
Cedar Rapids	CIC, CN, IANR	Manly	IANR
Clinton	CPKC	Mason City	CPKC, IATR
Council Bluffs	CN, IAIS	Sheldon	CPKC
Des Moines	IAIS, NS	Sioux City	CN
Emmetsburg	KJRY	Waterloo	CN, DAIR
Fort Madison	KJRY		

Overview

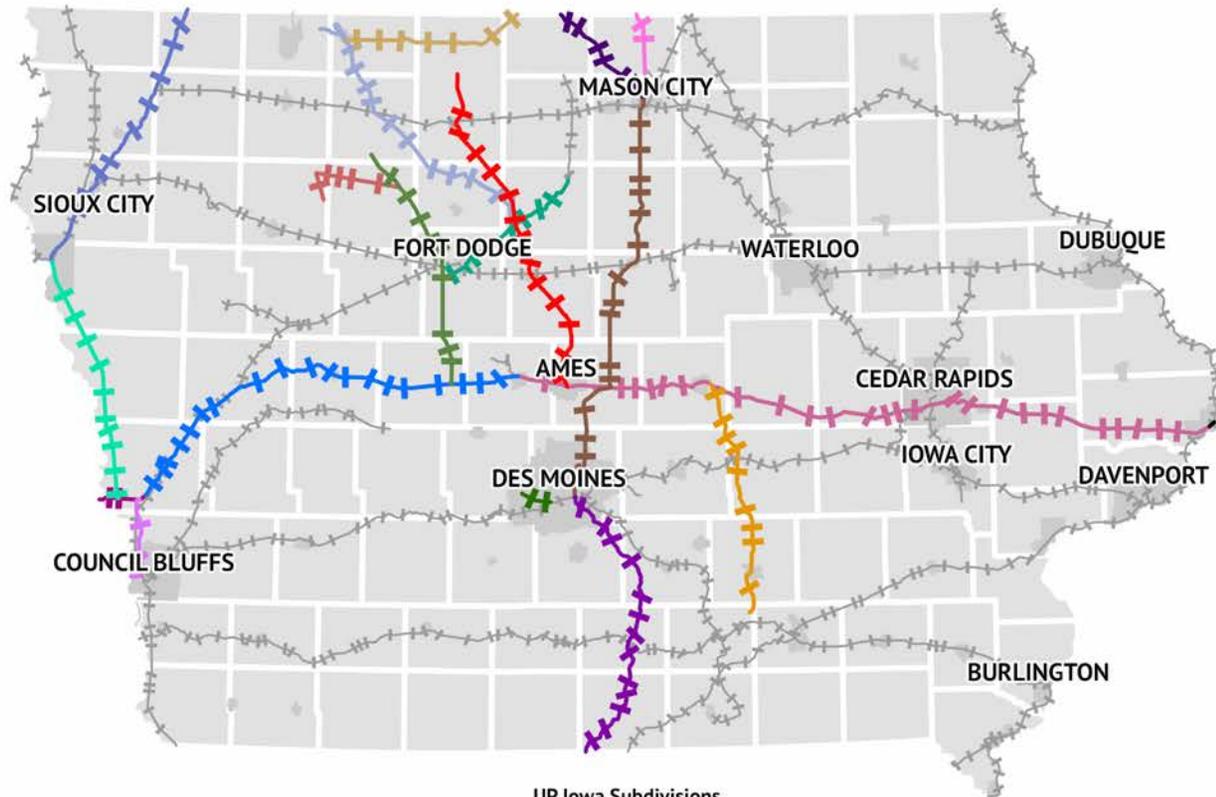
Union Pacific Railroad and the Chicago & North Western Transportation Co., which merged in 1995, have been part of the Iowa landscape since the 1850s. Today, UP's rail network stretches across the state, with its primary east-west main line serving as a vital corridor connecting Chicago to the West Coast. The north-south "Spine Line," which runs through Des Moines and Mason City, links Minneapolis-St. Paul with Kansas City, further enhancing the railroad's regional connectivity. UP operates an extensive branch line network in northwest Iowa supporting local industries and communities.

Commodities





UP Service



UP Iowa Subdivisions

- | | | | | | | | | | |
|------------|---------|-------------|------------|---------|------------|-----------|------------|---------|-------------|
| Albert Lea | Boone | Estherville | Fort Dodge | Jewell | Mason City | Oskaloosa | Rake | Tara | Worthington |
| Blair | Clinton | Fairmont | Geneva | Laurens | Omaha | Perry | Sioux City | Trenton | |

Urban Area Rail Line

UP Subdivisions in Iowa (section 1 of 5)

Subdivision	Division	Railroad Owner	Railroad operator	FRA Track Class	Track Configuration	Signal Type	Method of Operation	Maximum Allowable Weight	Clearances
Geneva	Chicago Area	UP	UP	Class 5	Two main tracks	Centralized Traffic Control (CTC) and Automatic Train Control (ATC) IL/IA state line at Clinton, IA-Clinton, IA	Centralized Traffic Control (CTC)	286,000 lbs.	Approximately 20' 2" Above Top of Rail
Clinton	Iowa Area	UP	UP	Class 5	Two main tracks	Centralized Traffic Control (CTC) and Automatic Train Control (ATC) Clinton, IA-Boone, IA	Centralized Traffic Control (CTC)	286,000 lbs.	Approximately 20' 2" Above Top of Rail (nine bridges on the subdivision will not clear 21' 6" Above Top of Rail)
Boone	Iowa Area	UP	UP	Class 5	Two main tracks	Centralized Traffic Control (CTC) and Automatic Train Control (ATC) Boone, IA-East Missouri Valley, IA	Centralized Traffic Control (CTC)	286,000 lbs.	Approximately 20' 2" Above Top of Rail (four bridges on the subdivision in Iowa will not clear 21' 6" Above Top of Rail)
Oskaloosa	Iowa Area	UP	UP	Class 2	One main track with passing sidings	None	<ul style="list-style-type: none"> • Yard Limits (YL) at Marshalltown, IA • Track Warrant Control (TWC) Marshalltown, IA-Oskaloosa, IA • Yard Limits (YL) at Oskaloosa, IA • Track Warrant Control (TWC) Oskaloosa, IA-Bridgeport, IA • Yard Limits (YL) at Bridgeport, IA 	286,000 lbs.	Height Above Top of Rail unknown (six bridges on the subdivision in Iowa will not clear 21' 6" Above Top of Rail)



UP Subdivisions in Iowa (section 2 of 5)

Subdivision	Division	Railroad Owner	Railroad operator	FRA Track Class	Track Configuration	Signal Type	Method of Operation	Maximum Allowable Weight	Clearances
Estherville	Iowa Area	UP	UP	Class 4	One main track with passing sidings	None	Track Warrant Control (TWC)	<ul style="list-style-type: none"> • 286,000 lbs. (Goldfield-Emmetsburg) • 268,000 lbs. (Emmetsburg-Superior) 	Unknown
Tara	Iowa Area	UP	UP	Class 3	One main track	None	Track Warrant Control (TWC)	<ul style="list-style-type: none"> • 286,000 lbs. East Grand Junction-Tara) • 268,000 lbs. (Tara-Mallard) 	Unknown
Mason City	Iowa Area	UP	UP	Class 4	One main track with passing sidings	<ul style="list-style-type: none"> • Centralized Traffic Control (CTC) Des Moines, IA-Nevada, IA • Automatic Block Signals (ABS) Nevada, IA-Mason City, IA 	<ul style="list-style-type: none"> • Centralized Traffic Control (CTC) Des Moines, IA-Nevada, IA • Track Warrant Control (TWC) Nevada, IA-Flint, IA • Yard Limits (YL) Flint, IA-Mason City, IA 	286,000 lbs.	Approximately 20' 2" Above Top of Rail (one bridge on the subdivision in Iowa will not clear 21' 6" Above Top of Rail)
Jewell	Iowa Area	UP	UP	Class 3	One main track with passing sidings	None	<ul style="list-style-type: none"> • Track Warrant Control (TWC) West Ames, IA-Eagle Grove, IA • Yard Limits (YL) at Eagle Grove, IA • Track Warrant Control (TWC) Eagle Grove, IA-North Burt, IA 	286,000 lbs.	Approximate height Above the Top of the Rail is 20' 9"
Rake	Iowa Area	UP	UP	Class 3	One main track	None	Track Warrant Control (TWC)	<ul style="list-style-type: none"> • 286,000 lbs. (Rake-IA/MN state line near Rake, IA) • 268,000 lbs. Estherville-Rake) 	Unknown

UP Subdivisions in Iowa (section 3 of 5)

Subdivision	Division	Railroad Owner	Railroad operator	FRA Track Class	Track Configuration	Signal Type	Method of Operation	Maximum Allowable Weight	Clearances
Laurens	Iowa Area	UP	UP	Class 2	One main track	None	Track Warrant Control (TWC)	268,000 lbs.	Unknown
Fort Dodge	Iowa Area	UP	UP	<ul style="list-style-type: none"> • Class 4 (Moorland-Eagle Grove) • Class 3 (Eagle Grove-Belmond) 	One main track with passing sidings	None	<ul style="list-style-type: none"> • Track Warrant Control (TWC) Moorland, IA-Eagle Grove, IA • Yard Limits (YL) at Eagle Grove, IA • Track Warrant Control (TWC) Eagle Grove, IA-Belmond, IA 	<ul style="list-style-type: none"> • 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) 	<ul style="list-style-type: none"> • Approximate height Above the Top of the Rail is 20' 9" (Belmond-Eagle Grove) • Height above the Top of Rail unknown (Eagle Grove-Moorland)
Blair	Council Bluffs Area	UP	UP	Class 4	<ul style="list-style-type: none"> • Two main tracks (East Missouri Valley-Allen Creek) • One main track with passing sidings (Allen Creek-IA/NE state line near Blair, NE) 	<ul style="list-style-type: none"> • Centralized Traffic Control (CTC) and Automatic Train Control (ATC) East Missouri Valley, IA- Missouri Valley Junction, IA • Centralized Traffic Control (CTC) Missouri Valley Junction, IA-IA/NE state line near Blair, NE 	Centralized Traffic Control (CTC)	286,000 lbs.	Approximately 20' 2" Above the Top of the Rail (one bridge on the subdivision in Iowa will not clear 21' 6" Above the Top of the Rail)
Worthington	Twin Cities Area	UP	UP	Class 4	One main track with passing sidings	None	Track Warrant Control (TWC) Le Mars, IA - IA/MN state line near Bigelow, MN	286,000 lbs.	Approximately 20' 2" Above the Top of the Rail



UP Subdivisions in Iowa (section 4 of 5)

Subdivision	Division	Railroad Owner	Railroad operator	FRA Track Class	Track Configuration	Signal Type	Method of Operation	Maximum Allowable Weight	Clearances
Sioux City	Council Bluffs Area	UP	UP	Class 3	One main track with passing sidings	<ul style="list-style-type: none"> Centralized Traffic Control (CTC) California Junction, Iowa-Modale, IA Automatic Block Signals (ABS) Modale, IA -Sioux City, IA 	<ul style="list-style-type: none"> Centralized Traffic Control (CTC) California Junction, IA -Modale, IA Track Warrant Control (TWC) Modale, IA -Sioux City, IA Yard Limits (YL) at Sioux City, IA 	286,000 lbs.	Approximately 20' 2" Above the Top of the Rail (two bridges on the subdivision in Iowa will not clear 21' 6" Above the Top of the Rail)
Perry	Iowa Area	UP	UP	Class 1	One main track	None	Restricted Limits (RL) / Yard Limits (YL) East Des Moines, IA - West Des Moines, IA	286,000 lbs.	<ul style="list-style-type: none"> Double-stack compliant (approximately 20' 2" Above Top of Rail) – East Des Moines-West Des Moines Unknown – West Des Moines-Waukee
Trenton	Kansas City Area	UP	UP	Class 4	One main track with passing sidings	<ul style="list-style-type: none"> Centralized Traffic Control (CTC) Des Moines, IA-Beech, IA Automatic Block Signals (ABS) Beech, IA-Williamson, IA Centralized Traffic Control (CTC) Beech, IA-IA/MO state line near Lineville, IA 	<ul style="list-style-type: none"> Centralized Traffic Control (CTC) Des Moines, IA-Beech, IA Track Warrant Control (TWC) Beech, IA-Williamson, IA Centralized Traffic Control (CTC) Williamson, IA-IA/MO state line near Lineville, IA 	286,000 lbs.	Approximately 20' 2" Above the Top of the Rail (two bridges on the subdivision in Iowa will not clear 21' 6" Above the Top of the Rail)

UP Subdivisions in Iowa (section 5 of 5)

Subdivision	Division	Railroad Owner	Railroad operator	FRA Track Class	Track Configuration	Signal Type	Method of Operation	Maximum Allowable Weight	Clearances
Fairmont	Twin Cities Area	UP	UP	Class 2	One main track with passing sidings	None	<ul style="list-style-type: none"> • Yard Limits (YL) Mason City, IA-River City, IA • Track Warrant Control (TWC) River City, IA-IA/MN state line near Scarville, IA 	286,000 lbs.	Unknown
Albert Lea	Twin Cities Area	UP	UP	Class 4	One main track with passing sidings	Centralized Traffic Control (CTC)	<ul style="list-style-type: none"> • Yard Limits (YL) at Mason City, IA • Centralized Traffic Control (CTC) Mason City, IA - IA/MN state line near Northwood, IA 	286,000 lbs.	Approximately 20' 2" Above the Top of the Rail
Omaha	Council Bluffs Area	UP	UP	Class 4	<ul style="list-style-type: none"> • 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-IA/NE state line at Council Bluffs) 	<ul style="list-style-type: none"> • Centralized Traffic Control (CTC) and Automatic Train Control (ATC) Missouri Valley, IA - North Council Bluffs, IA • Automatic Block Signals (ABS) North Council Bluffs, IA-Council Bluffs, IA • Centralized Traffic Control (CTC) Council Bluffs, IA-IA/NE state line at Council Bluffs, IA 	<ul style="list-style-type: none"> • Centralized Traffic Control (CTC) Missouri Valley, IA-North Council Bluffs, IA • Yard Limits (YL) North Council Bluffs, IA -Council Bluffs, IA • Centralized Traffic Control (CTC) Council Bluffs, IA - IA/NE state line at Council Bluffs, IA 	<ul style="list-style-type: none"> • 286,000 lbs. (Missouri Valley-Council Bluffs) • 315,000 lbs. (Council Bluffs-IA/NE state line at Council Bluffs, IA) 	21' 6" Above Top of Rail



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APPENDIX C Rail-Served Freight Facilities



Tables C.1 – C.6 provide an inventory of Iowa freight facilities that are served by rail. These lists are not exhaustive. Some facilities listed may no longer be operational and new facilities may not be represented. Descriptions of freight facility types are included in Chapter 3, Freight Inventory and Performance. Intermodal facilities, transload facilities, barge terminals, public/contract warehouses, coal burning facilities, ethanol plants, and biodiesel plants are listed. Due to the large number of facilities and locations throughout the state, grain elevators are not listed.

Table C.1: Intermodal and transload facilities (section 1 of 2)

City	Facility	Railroad	Intermodal	Transload	Cross-dock	Team track	Warehouse	Truck/ Rail	Truck/ Barge	Rail/ Barge
Altoona	Merchants Distribution Service	IAIS, BNSF, NS, UP		Yes	Yes		Yes	Yes		
Altoona	Lineage Logistics LLC	IAIS			Yes			Yes		
Atlantic	Iowa Interstate Railroad LLC	IAIS				Yes		Yes		
Atlantic	Pattison Sand Company	IAIS		Yes				Yes		
Boone	PDM Transload	BSV					Yes	Yes		
Burlington	BJRY	BJRY, BNSF		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Camanche	ADM Terminal Services	CPKC, BNSF, UP		Yes	Yes		Yes	Yes	Yes	Yes
Cedar Falls	Standard Distribution	CN		Yes	Yes		Yes	Yes		
Cedar Rapids	CRANDIC Wilson Ave Team Track	CIC		Yes	Yes	Yes		Yes		
Cedar Rapids	Logistics Park Cedar Rapids	CIC, CN, UP		Yes	Yes	Yes	Yes	Yes	Yes	
Cherokee	Cloverleaf Cold Storage	CN, UP					Yes	Yes		
Clayton	Consolidated Grain and Barge	CPKC		Yes				Yes		Yes
Clinton	ADM Terminal Services	CPKC, BNSF, UP		Yes			Yes	Yes	Yes	Yes
Clinton	Clausen Companies Warehousing	UP		Yes	Yes		Yes	Yes		
Council Bluffs	IAIS Intermodal Facility	IAIS, BNSF, UP	Yes					Yes		
Council Bluffs	Cox Contracting Company Inc.	IAIS		Yes				Yes		
Council Bluffs	Council Bluffs Railport	IAIS	Yes					Yes		
Council Bluffs	Watco Transloading LLC	IAIS, BNSF, UP		Yes				Yes		
Council Bluffs	Heritage-Crystal Clean LLC	IAIS		Yes				Yes		
Council Bluffs	Pattison Sand Company	IAIS		Yes				Yes		
Council Bluffs	Viterra USA Ingredients LLC	IAIS		Yes				Yes		
Council Bluffs	Martin Marietta Materials	IAIS		Yes				Yes		
Davenport	Catch-Up Logistics	CPKC		Yes	Yes		Yes	Yes		
De Soto	Sioux City Brick and Tile Co.	IAIS			Yes			Yes		
Des Moines	Merchants Distribution Service	UP		Yes	Yes		Yes	Yes		
Des Moines	Luckey Logistics	UP		Yes				Yes		
Des Moines	Des Moines Industrial LLC	BNSF, IAIS, NS, UP		Yes		Yes	Yes	Yes		

Table C.1 (continued): Intermodal and transload facilities (section 2 of 2)

City	Facility	Railroad	Intermodal	Transload	Cross-dock	Team track	Warehouse	Truck/ Rail	Truck/ Barge	Rail/ Barge
Dexter	Reid line LLC	IAIS		Yes				Yes		
Dubuque	Gavilon	CN		Yes			Yes	Yes	Yes	Yes
Dubuque	IEI Barge Services	CN		Yes		Yes	Yes	Yes	Yes	Yes
Emery	Emery Transload Facility	IATR, UP, CPKC		Yes				Yes		
Hawarden	GCC Dakota Cement/L.G. Everist	DAIR, BNSF, UP		Yes				Yes		
Iowa City	Iowa Interstate Railroad LLC	IAIS				Yes		Yes		
Le Mars	BJRY Transload	BJRY, CN		Yes	Yes	Yes		Yes		
Le Mars	Le Mars Public Storage, Inc.	CN			Yes		Yes	Yes		
Manly	Manly Terminal	IANR, UP		Yes				Yes		
Manly	Manly Yard	IANR, UP		Yes			Yes	Yes		
Mason City	Iowa Dry Warehouse	IATR, UP, CPKC		Yes	Yes	Yes	Yes	Yes		
Mason City	IATR/Progressive Rail	IATR, CPKC, UP		Yes	Yes	Yes		Yes		
Mason City	Cartersville Elevator Inc.	CPKC		Yes				Yes		
Mt. Pleasant	BJRY	BJRY, BNSF		Yes				Yes		
Muscatine	Kinder Morgan	CPKC		Yes			Yes	Yes		
Muscatine	CAM II Warehouse	CPKC					Yes	Yes		
New Hampton	New Hampton Transfer & Storage	CPKC		Yes	Yes		Yes	Yes		
Newton	Luckey Logistics	IAIS		Yes				Yes		
Newton	Iowa Interstate Railroad LLC	IAIS				Yes		Yes		
Ottumwa	BJRY	BJRY, BNSF		Yes	Yes	Yes		Yes		
Ottumwa	Quest Liner/Foodliner	CPKC		Yes				Yes		
Shell Rock	Butler Intermodal Terminal	IANR, UP	Yes	Yes			Yes	Yes		
Sioux City	Big Soo Terminal	UP		Yes				Yes	Yes	Yes
Sioux City	L.G. Everist	DAIR, BNSF, CN, UP		Yes				Yes		
Victor	Iowa Interstate Railroad LLC	IAIS				Yes		Yes		
Waterloo	Kinder Morgan/Black Hawk Terminal	UP		Yes			Yes	Yes		
Waterloo	Bryant Yard	IANR		Yes	Yes		Yes	Yes		
West Liberty	ABC-Cascade Holdings LLC	IAIS		Yes				Yes		
Williams	Williams Bulk Transfer	CN		Yes	Yes	Yes	Yes	Yes		
Wilton	Olson Road Solutions LLC	IAIS		Yes				Yes		
Wiota	Pattison Sand Company	IAIS		Yes				Yes		

Source: Survey of Iowa companies



Table C.2: Public/contract warehouses

City	Facility	Railroad
Akron	Heyl Truck Lines	DAIR
Altoona	Iowa Cold Storage, LLC	BNSF, UP
Altoona	Merchants Distribution Service	NS, IAIS, UP
Bettendorf	AmeriCold Logistics	BNSF, UP
Burlington	Diversified Distribution Service Center	BNSF
Camanche	Economy Coating Systems, Inc.	UP
Cedar Rapids	Worley Warehousing, Inc	UP
Cedar Rapids	Midwestern Third-Party Logistics	UP, CN
Clinton	Clausen Warehousing & Trucking	UP
Davenport	Catch-Up Logistics Warehousing and Distribution	CPKC
Davenport	Murray's Warehouse, Inc.	CPKC
Des Moines	Action Warehouse Co., Ltd.	UP
Des Moines	Jacobson Companies	UP
Des Moines	Kitt's Transfer & Storage	UP
Des Moines	Diverse Solutions MBE	BNSF
Des Moines	Centennial Warehouse Corp.	IAIS
Le Mars	Jacobson Companies	CN
Le Mars	Nor-Am Cold Storage	CN
Muscatine	C A M II Warehouse	CPKC
New Hampton	New Hampton Transfer & Storage, Inc.	CPKC
Ottumwa	Hardsocg Pneumatic Tool Co./HPT Stores-All	BNSF
Peosta	Peosta Warehousing	CN
Sioux City	Big Soo Warehouse	UP
Walford	GSTC Logistics, Inc.	CN
Waterloo	Crystal Distribution Services, Inc.	CN
Waterloo	Waterloo Warehousing and Service Co., Inc	IANR, UP, CN

Source: Leonard's Guide National Warehouse and Distribution Directory

Table C.3: Coal burning facilities

City	Facility	Railroad
Cedar Falls	Cedar Fall Utilities	IANR
Cedar Rapids	Archer Daniels Midland Co.	CN
Clinton	Archer Daniels Midland Co.	UP
Des Moines	Archer Daniels Midland Co.	UP
Eagle Grove	Ag Processing Inc.	UP
Iowa City	University of Iowa	CN
Keokuk	Roquette America	KJRY
Middletown	Iowa Army Ammunition Plant	BNSF
Muscatine	Muscatine Power & Water	CPKC
Ottumwa	MidAmerican Energy Co.	BNSF
Salix	MidAmerican Energy Co.	UP
Sergeant Bluff	MidAmerican Energy Co.	UP

Source: Sierra Club

Table C.4: Biodiesel plants

City	Facility	Railroad
Algona	Ag Processing Inc (AGP)	CPKC
Farley	Western Dubuque Biodiesel	CN
Iowa Falls	Cargill, Inc	UP
Mason City	Renewable Energy Group (REG)	IATR
Newton	Renewable Energy Group (REG)	IAIS
Ralston	Renewable Energy Group (REG)	UP
Sergeant Bluff	Ag Processing Inc (AGP)	UP
Wall Lake	Western Iowa Energy	CN
Washington	Iowa Renewable Energy	CPKC

Source: Iowa Renewable Fuels Association

Table C.5: Barge terminals

City	Facility	River	Railroad
Bettendorf	U.S. Oil, Bettendorf Terminal	Mississippi	CPKC
Bettendorf	Continental Cement Co.	Mississippi	CPKC
Buffalo	AGRI Grain Marketing, Buffalo Grain Elevator	Mississippi	CPKC
Buffalo	Blackhawk Fleet, Inc	Mississippi	CPKC
Buffalo	BP Products North America, Davenport Asphalt Terminal	Mississippi	CPKC
Buffalo	Cargill AgHorizons	Mississippi	CPKC
Buffalo	Lafarge North America, Davenport Plan	Mississippi	CPKC
Buffalo	Texpar Energy, Davenport Terminal	Mississippi	CPKC
Burlington	ADM/Growmark	Mississippi	BJRY
Burlington	Alliant Energy-Burlington Generating Station	Mississippi	BNSF
Burlington	Burlington River Terminal, Inc. North	Mississippi	BJRY
Burlington	Matteson River Terminal	Mississippi	BJRY
Camanche	American River Transportation Company	Mississippi	BNSF, UP, CPKC
Camanche	Vertex Chemical Corporation	Mississippi	BNSF, UP, CPKC
Clayton	Pattison Brothers - North	Mississippi	CPKC
Clinton	ADM Corn Processing	Mississippi	BNSF, UP, CPKC
Clinton	ADM/Growmark	Mississippi	CPKC
Clinton	Interstate Power & Light Co., M.L. Kapp Plant	Mississippi	CPKC
Clinton	Clinton Municipal Dock	Mississippi	CPKC
Council Bluffs	AGRI Grain Marketing Council Bluffs Terminal	Missouri	UP
Council Bluffs	AGRILIANCE Co. Council Bluffs Terminal	Missouri	UP
Davenport	Linwood Mining & Minerals	Mississippi	CPKC
Davenport	River/Gulf Grain Company	Mississippi	CPKC
Davenport	W.G. Block	Mississippi	CPKC

City	Facility	River	Railroad
Davenport	Harvest States Cooperatives, Davenport West Grain Elevator	Mississippi	CPKC
Davenport	Blackhawk Fleet	Mississippi	CPKC
Davenport	Builders Sand And Cement Co.	Mississippi	CPKC
Davenport	Koch Materials Co.	Mississippi	CPKC
Dubuque	Peavey Company	Mississippi	CN
Dubuque	Interstate Power & Light Co., Dubuque Plant Coal Dock	Mississippi	CN
Dubuque	Koch Materials Co., Dubuque Terminal	Mississippi	CN
Dubuque	Cargill AgHorizons	Mississippi	CN
Dubuque	Dubuque River Terminal	Mississippi	CN
Fort Madison	Hall Towing, Inc.	Mississippi	BNSF
Keokuk	Iowa Gateway Terminal	Mississippi	KJRY, BNSF
Keokuk	Orba-Johnson Transshipment Co.	Mississippi	BNSF
Keokuk	Roquette America, Inc.	Mississippi	KJRY
Lansing	Interstate Power & Light Co., Lansing Plant Coal Dock	Mississippi	CPKC
McGregor	AGRI Grain Marketing, McGregor River Terminal	Mississippi	CPKC
Montpelier	Central Iowa Power Co.	Mississippi	CPKC
Muscatine	Grain Processing Corporation	Mississippi	CPKC
Muscatine	K.A. Steel	Mississippi	CPKC
Muscatine	Muscatine Power & Water Generation	Mississippi	CPKC
Muscatine	River Terminal Corp.	Mississippi	CPKC
Muscatine	AGRI Grain Marketing, Muscatine Grain Elevator	Mississippi	CPKC
Muscatine	ACME Fuel And Material Co.	Mississippi	CPKC
Muscatine	AGRILIANCE, Muscatine Terminal	Mississippi	CPKC
Muscatine	River Trading Co.	Mississippi	CPKC
Sioux City	Jebro, Inc.	Missouri	UP
Sioux City	Big Soo Terminal	Missouri	UP

Source: U.S. Army Corps of Engineers



Table C.6: Ethanol plants

City	Facility	Railroad
Albert City	Valero Renewables	UP
Arthur	POET - Arthur	CN
Ashton	POET - Ashton	UP
Atlantic	Elite Octane	IAIS
Cedar Rapids	Archer Daniels Midland	CN
Cedar Rapids	Archer Daniels Midland	CN
Charles City	Valero Renewables	UP
Clinton	Archer Daniels Midland	CPKC
Coon Rapids	POET - Coon Rapids	BNSF
Corning	POET - Corning	BNSF
Council Bluffs	Southwest Iowa Renewable Energy	BNSF
Denison	The Andersons Denison Ethanol, LLC	UP
Dyersville	Big River United Energy, LLC	CN
Eddyville	Cargill, Inc	BNSF, UP
Emmetsburg	POET - Emmetsburg	UP
Emmetsburg	POET - DSM Advanced Biofuel, LLC	UP
Fairbank	POET - Fairbank	IANR
Fort Dodge	Cargill, Inc	CN
Fort Dodge	Valero Renewables	CPKC
Goldfield	Corn, LP	UP
Gowrie	POET - Gowrie	UP

City	Facility	Railroad
Grand Junction	Louis Dreyfus Commodities, LLC	UP
Hanlon town	POET - Hanlon town	UP
Hartley	Valero Renewables	CPKC
Iowa Falls	POET - Iowa Falls	UP
Jewell	POET - Jewell	UP
Lakota	Valero Renewables	UP
Lawler	Homeland Energy Solutions	CPKC
Marcus	Little Sioux Corn Processors	CN
Mason City	Golden Grain Energy	UP
Menlo	POET - Menlo	IAIS
Merrill	Lakeview Plymouth Energy	BNSF
Muscatine	Grain Processing Corporation	CPKC
Nevada	Lincoln way Energy	UP
Nevada	Verbio Nevada	UP
St. Ansgar	Absolute Energy (MN)	CPKC
Shell Rock	POET - Shell Rock	IANR
Shenandoah	Green Plains, Inc.	BNSF
Steamboat Rock	Pine Lake Corn Processors, LLC	IARR
Superior	Green Plains, Inc	UP
West Burlington	Big River Resources	BNSF

Source: Iowa Renewable Fuels Association



APPENDIX D

Freight Railroad Improvements and Investments





Tables D.1 – D.12 include federal and state Highway-Railroad Crossing Safety Program and Grade Crossing Improvement projects in Iowa from 2019 to 2024. These projects are essential initiatives aimed at improving safety and reducing the risk of accidents at highway-railroad crossings by upgrading infrastructure, implementing advanced safety measures, and minimizing the potential for collisions where roadways and railways intersect.

Federal Highway-Railroad Crossing Safety Program and Grade Crossing Improvement projects in Iowa, 2019-2024

Table D.1: Federal-Aid Highway-Railroad Safety Fund 2019 accomplishment program candidates (section 1 of 2)

B/C Ratio	Federal ID No.	Railroad	County	Highway Jurisdiction	Road Location	Present Warning Device	Type of Improvement	Federal Funds
3.4	876035W	UP	Polk	Polk Co	NE 150 th Ave	Signals	Signals w/gate arms	\$225,000
2.2	385271U	DME	Chickasaw	Lawler	Benz St	Crossbucks	Signals w/gate arms	\$247,500
2.2	385270M	DME	Chickasaw	Lawler	Depot St	Crossbucks	Signals w/gate arms	\$247,500
2.1	605729D	UP	Warren	Warren Co	190th Ave	Crossbucks	Signals w/gate arms	\$225,000
2.0	191357P	UP	Woodbury	Sioux City	Dace Ave	Signals	Signals w/gate arms	\$202,500
1.7	385273H	DME	Chickasaw	Lawler	Lincoln St	Crossbucks	Signals w/gate arms	\$202,500
0.9	380010C	DME	Cerro Gordo	Mason City	N Kentucky St	Signals	Signals w/gate arms	\$202,500
0.8	385516H	DME	Cerro Gordo	Clear Lake	Buddy Holly Pl	Signals	Signals w/gate arms	\$247,500
0.8	385563R	DME	Hancock	Britt	Main Ave N	Signals	Signals w/gate arms	\$270,000
0.7	385179U	DME	Allamakee	Postville	Lybrand St	Signals	Signals w/gate arms	\$202,500
0.7	382078X	BNSF	Woodbury	Sioux City	Military Rd	Signals	Signals w/gate arms	\$315,000
0.7	307688E	UP	Woodbury	Sioux City	41st St	Signals	Signals w/gate arms	\$270,000
0.7	379989X	DME	Cerro Gordo	Mason City	E State St	Signals	Signals w/gate arms	\$202,500
0.6	385628G	DME	Kossuth	Iowa DOT	IA 15	Signals	Signals w/gate arms	\$202,500
0.6	385775U	DME	O'Brien	Sheldon	Washington Ave	Signals	Signals w/gate arms	\$202,500
0.6	385487A	DME	Cerro Gordo	Mason City	S Carolina Ave	Signals w/ gate arms	Constant warning time	\$202,500
0.6	385193P	DME	Winneshiek	Iowa DOT	US 52	Signals w/ gate arms	Constant warning time	\$202,500
0.6	196994L	UP	Story	Story City	Broad St	Signals	Signals w/gate arms	\$247,000
0.6	385749E	DME	O'Brien	O'Brien Co	Vine Ave	Signals	Signals w/gate arms	\$202,500
0.6	385247T	DME	Winneshiek	Fort Atkinson	4th St NW	Signals	Signals w/gate arms	\$202,500
0.5	385485L	DME	Cerro Gordo	Mason City	S Virginia Ave	Signals	Signals w/gate arms	\$202,500
0.5	382076J	BNSF	Woodbury	Sioux City	W 19th St	Signals	Signals w/gate arms	\$270,000

Table D.1 (continued): Federal-Aid Highway-Railroad Safety Fund 2019 accomplishment program candidates (section 2 of 2)

B/C Ratio	Federal ID No.	Railroad	County	Highway Jurisdiction	Road Location	Present Warning Device	Type of Improvement	Federal Funds
0.5	196614C	UP	Pocahontas	Pocahontas Co	140th Ave	Crossbucks	Signals w/gate arms	\$205,500
0.5	191314W	UP	Woodbury	Sioux City	Harbor Dr	Crossbucks	Signals w/gate arms	\$225,000
0.4	385223E	DME	Winneshiek	Winneshiek Co	155th St	Crossbucks	Signals w/gate arms	\$162,000
0.4	385203T	DME	Winneshiek	Winneshiek Co	123rd St	Crossbucks	Signals w/gate arms	\$162,000
0.4	195940C	UP	Wright	Woolstock	Neville St	Crossbucks	Signals w/gate arms	\$180,000
0.4	192750N	UP	Polk	Iowa DOT	US 6	Signals	Signals w/gate arms	\$202,500
0.4	064048E	BNSF	Woodbury	Sioux City	Dace Ave	Signals	Signals w/gate arms	\$216,000
0.4	376192J	DME	Allamakee	Harpers Ferry	Chestnut St	Signals	Signals w/gate arms	\$202,500
0.4	196421D	UP	Wright	Iowa DOT	US 69	Signals	Signals w/gate arms	\$189,000
0.4	195946T	UP	Kossuth	Kossuth Co	190th Ave	Crossbucks	Signals w/gate arms	\$198,000
0.4	097457N	BNSF	Sioux	Sioux Center	20th St SW	Signals	Signals w/gate arms	\$180,000
0.3	196916E	UP	Pocahontas	Laurens	East St	Crossbucks	Signals w/gate arms	\$180,000
0.3	876110F	UP	Hardin	Hardin Co	CR D-47	Signals	Signals w/gate arms	\$189,000
0.3	604460X	UP	Wayne	Corydon	Dekalb St	Signals	Signals w/gate arms	\$220,500
0.3	196581S	UP	Wright	Iowa DOT	IA 3	Signals	Signals w/gate arms	\$247,500
0.3	911768L	UP	Plymouth	Plymouth Co	CR C-70	Signals	Signals w/gate arms	\$180,000
0.3	067326D	BNSF	Plymouth	Plymouth Co	CR C-70	Signals	Signals w/gate arms	\$225,000
0.3	876195K	UP	Cerro Gordo	Cerro Gordo Co	210th St	Signals	Signals w/gate arms	\$189,000
-	-	-	-	Statewide	-	-	Crossing closures	\$15,000

Total: \$8,315,748

Source: Iowa DOT



Table D.2: Federal-Aid Highway-Railroad Safety Fund 2020 accomplishment program candidates

B/C Ratio	Federal ID No.	Railroad	County	Highway Jurisdiction	Road Location	Present Warning Device	Type of Improvement	Federal Funds
2.8	190587M	UP	Tama	Tama Co	V Ave	Crossbucks	Signals w/gate arms	\$350,000
2.8	840206T	CIC	Linn	Cedar Rapids	Bowling St	Signals	Signals w/gate arms	\$150,000
2.4	191136M	UP	Pottawattamie	Council Bluffs	2nd Ave	Signals	Signals w/gate arms	\$50,000
2.3	608576M	UP	Kossuth	Iowa DOT	IA 9	Signals	Signals w/gate arms	\$230,000
2.3	603326H	IAIS	Dallas	West Des Moines	S 88th St	Crossbucks	Signals w/gate arms	\$325,000
1.9	191082J	UP	Harrison	Harrison Co	Kermit Pl	Crossbucks	Signals w/gate arms	\$350,000
1.5	608101V	UP	Emmet	Estherville	N 2nd St	Crossbucks	Signals w/gate arms	\$250,000
1.5	201768B	UP	Webster	Webster Co	260th St	Crossbucks	Signals w/gate arms	\$250,000
1.4	190435R	UP	Cedar	Clarence	4th Ave	Crossbucks	Signals w/gate arms	\$350,000
1.1	385243R	DME	Winneshiek	Winneshiek Co	266th Ave	Crossbucks	Signals w/gate arms	\$250,000
1.0	307845V	CCP	Linn	Cedar Rapids	H Ave	Signals	Signals w/gate arms	\$450,000
0.9	307013D	CCP	Delaware	Earlville	S Wine St	Signals	Signals w/gate arms	\$230,000
0.7	376125P	DME	Dubuque	Dubuque	E 14th St	Signals	Signals w/gate arms	\$225,000
0.7	190676E	UP	Marshall	Marshall Co	Canfield Ave	Crossbucks	Signals w/gate arms	\$350,000
0.7	190682H	UP	Story	Story Co	720th Ave	Crossbucks	Signals w/gate arms	\$350,000
0.6	190616V	UP	Marshall	Marshall Co	Three Bridges Rd	Crossbucks	Signals w/gate arms	\$375,000
0.6	307541E	CCP	Cherokee	Aurelia	W 3rd St	Crossbucks	Signals w/gate arms	\$200,000
0.3	196993E	UP	Story	Story City	Washington St	Crossbucks	Signals w/gate arms	\$400,000
-	-	-	-	Statewide	-	-	Crossing closure	\$15,000

Total: \$5,150,000

Source: Iowa DOT

Table D.3: Federal-Aid Highway-Railroad Safety Fund 2021 accomplishment program candidates

B/C Ratio	Federal ID No.	Railroad	County	Highway Jurisdiction	Road Location	Present Warning Device	Type of Improvement	Federal Funds
2.2	603280W	IAIS	Guthrie	Guthrie Co	Talon Ave	Crossbucks	Signals w/gate arms	\$202,500
1.9	064031B	BNSF	Woodbury	Sioux City	6th St	Cantilever/ Signals w/gate arms	Constant Warning Time	\$45,000
1.8	606842A	IAIS	Muscatine	Atalissa	Oak St	Signals	Signals w/gate arms	\$180,000
1.1	063403M	BNSF	Marion	Iowa DOT	Lincoln St	Cantilever/ Signals w/gate arms	Constant Warning Time	\$450,000
1.0	067364M	BNSF	Sioux	Sioux Co	360th Ave	Cantilever/ Signals	Signals w/gate arms	\$247,500
0.9	078051D	BNSF	Lee	Lee Co	48th St	Cantilever/ Signals	Signals w/gate arms	\$225,000
0.9	082342A	BNSF	Lyon	Lyon Co	210th St	Signals	Signals w/gate arms	\$225,000
0.8	063246W	BNSF	Lee	Fort Madison	2nd St	Cantilever/ Signals	Signals w/gate arms	\$360,000
0.8	376717A	CIC	Linn	Cedar Rapids	1st St SW	Cantilever/ Signals	Signals w/gate arms	\$166,500
0.7	082337D	BNSF	Lyon	Lyon Co	CR A-26	Signals	Signals w/gate arms	\$225,000
0.7	063232N	BNSF	Lee	Fort Madison	27th St	Signals	Signals w/gate arms	\$225,000
0.7	190508Y	UP	Linn	Cedar Rapids	1st Ave SE	Cantilever/ Signals	Signals w/gate arms	\$360,000
0.7	074396K	BNSF	Pottawattamie	Pottawattamie Co	192nd St	Signals	Signals w/gate arms	\$225,000
0.7	382037T	BNSF	Woodbury	Sioux City	Court St	Crossbucks	Signals w/gate arms	\$450,000
0.6	385463L	DME	Floyd	Floyd Co	Zinnia Ave	Signals	Signals w/gate arms	\$247,500
0.6	190563Y	UP	Benton	Benton Co	25th Ave	Crossbucks	Signals w/gate arms	\$315,000
0.1	926050N	IAIS	Guthrie	Guthrie Co	Talon Ave	Crossbucks	Signals w/gate arms	\$202,500
-	-	-	-	Statewide	-	-	Crossing closure	\$15,000

Total: \$4.366.500

Source: Iowa DOT



Table D.4: Federal-Aid Highway-Railroad Safety Fund 2022 accomplishment program candidates

B/C Ratio	Federal ID No.	Railroad	County	Highway Jurisdiction	Road Location	Present Warning Device	Type of Improvement	Federal Funds
7.0	385716S	DME	Clay	Iowa DOT	US 18	Cantilever/ Signals w/gate arms	Signals w/gate arms	\$292,500
4.3	064031B	DME	Dubuque	Dubuque	Jones St	Cantilever/ Signals w/gate arms	Constant Warning Time	\$157,500
1.5	376043H	DME	Clinton	Clinton	30th Ave N	Crossbucks	Signals w/gate arms	\$360,000
1.3	380021P	DME	Cerro Gordo	Cerro Gordo Co	Spruce Ave	Crossbucks	Signals w/gate arms	\$292,500
0.8	190945U	CCP	Sac	Iowa DOT	IA 39	Signals	Signals w/gate arms	\$252,000
0.7	078050W	BNSF	Lee	Lee Co	Ortho Way	Signals	Signals w/gate arms	\$270,000
0.7	074970K	BNSF	Fremont	Fremont Co	155th Ave	Signals w/gate arms	Constant Warning Time	\$369,000
0.7	376039T	DME	Clinton	Clinton	23rd Ave N	Crossbucks	Signals w/gate arms	\$369,000
0.6	307518K	CCP	Buena Vista	Iowa DOT	IA 110	Signals	Signals w/gate arms	\$270,000
0.6	097445U	BNSF	Sioux	Maurice	4th St	Signals	Signals w/gate arms	\$283,500
0.6	376045W	DME	Clinton	Clinton	32nd Ave N	Crossbucks	Signals w/gate arms	\$427,500
0.5	097429K	BNSF	Plymouth	Plymouth Co	CR C-16	Signals	Signals w/gate arms	\$315,000
0.5	376027Y	DME	Clinton	Clinton	9th Ave N	Cantilever/ Signals	Signals w/gate arms	\$315,000
0.5	074503X	BNSF	Fremont	Fremont Co	Washington St	Signals w/gate arms	Constant Warning Time	\$369,000
0.4	074962T	BNSF	Fremont	Fremont Co	220th St	Signals	Signals w/gate arms	\$369,000
0.4	074504E	BNSF	Fremont	Fremont Co	Main St	Signals w/gate arms	Constant Warning Time	\$369,000
0.0	074046T	BNSF	Clarke	Osceola	US 69	Cantilever/ Signals w/gate arms	Fencing	\$49,500
-	-	-	-	Statewide	-	-	Crossing closure	\$15,000

Total: \$5,145,000

Source: Iowa DOT

Table D.5: Federal-Aid Highway-Railroad Safety Fund 2023 accomplishment program candidates

B/C Ratio	Federal ID No.	Railroad	County	Highway Jurisdiction	Road Location	Present Warning Device	Type of Improvement	Federal Funds
4.46	067357C	BNSF	Plymouth	Iowa DOT	IA 3	Cantilever/ Signals w/gate arms	Interconnected advanced warning sign	\$31,500
3.35	190461F	UP	Cedar	Cedar Co	115th St	Crossbucks	Signals w/gate arms	\$337,500
1.65	608572K	UP	Kossuth	Kossuth Co	185th Ave	Crossbucks	Signals w/gate arms	\$292,500
1.47	385427R	DME	Floyd	Charles City	E St	Signals w/gate arms	Constant Warning Time	\$427,500
1.35	608579H	UP	Kossuth	Kosuth Co	440th St	Crossbucks	Signals w/gate arms	\$292,500
1.24	190501B	UP	Linn	Cedar Rapids	8th St SE	Cantilever, Signals w/gate arms	Constant Warning Time	\$337,500
1.22	607858A	IANR	Linn	Cedar Rapids	42nd St	Crossbucks	Signals w/gate arms	\$202,500
1.19	190734X	UP	Greene	Greene Co	Linwood Ave	Crossbucks	Signals w/gate arms	\$337,500
1.0	376730N	CIC	Linn	Cedar Rapids	Wilson Ave SW	Cantilever, Signals w/gate arms	Constant Warning Time	\$292,500
0.97	190547P	UP	Benton	Benton Co	32nd Ave	Crossbucks	Signals w/gate arms	\$337,500
0.75	607175J	DME	Muscatine	Muscatine Co	Tombstone Tr	Signals w/gate arms	Constant Warning Time	\$427,500
0.67	922467W	UP	Benton	Benton Co	22nd Ave	Crossbucks	Signals w/gate arms	\$337,500
0.66	380054C	DME	Mitchell	Carpenter	William St	Cantilever, Signals w/gate arms	Constant Warning Time	\$427,500
0.61	606843G	IAIS	Muscatine	Iowa DOT	US 6	Cantilever, Signals w/gate arms	Constant Warning Time	\$337,500
0.14	607399G	IANR	Butler	Butler Co	220th St	Signals	Signals w/gate arms	\$198,000
0.0	876012P	UP	Polk	Polk Co	NE Broadway	Signals w/gate arms	Grade separation project contribution	\$500,000
-	-	-	-	Statewide	-	-	Crossing closure	\$15,000

Total: \$5,132,000

Source: Iowa DOT



Table D.6: Federal-Aid Highway-Railroad Safety Fund 2024 accomplishment program candidates

B/C Ratio	Federal ID No.	Railroad	County	Highway Jurisdiction	Road Location	Present Warning Device	Type of Improvement	Federal Funds
49.34	307816K	CCP	Linn	Linn Co	Arabian Rd	Crossbucks	Signals w/gate arms	\$405,000
22.36	197056P	UP	Kossuth	Kossuth Co	150th St	Crossbucks	Signals w/gate arms	\$470,000
16.00	607425U	IANR	Butler	Butler Co	T-47 / Packard Ave	Crossbucks	Signals w/gate arms	\$300,000
7.52	375972F	DME	Scott	Scott Co	210th St	Signals	Signals w/gate arms	\$460,000
2.93	307097B	CCP	Black Hawk	Black Hawk Co	S Canfield Rd	Signals	Signals w/gate arms	\$400,000
2.84	082335P	BNSF	Lyon	Lyon Co	170th St	Crossbucks	Signals w/gate arms	\$395,000
2.4	377213D	IAIS	Polk	Windsor Heights	73rd St	Cantilever, signals	Signals w/gate arms	\$400,000
2.13	606887G	IAIS	Johnson	Coralville	Camp Cardinal Blvd	Signals	Cantilever, Flashing lights & Gates	\$400,000
2.09	840173H	CIC	Johnson	Coralville	12th Ave	Cantilever, signals	Signals w/gate arms	\$275,000
1.9	385747R	DME	O'Brien	Hartley	S Central Ave	Signals	Signals w/gate arms	\$495,000
1.78	385428X	DME	Floyd	Charles City	Grand Ave	Cantilever, signals	Cantilever, Signals w/gate arms	\$500,000
1.71	607880M	IAIS	Polk	Altoona	9th St NW	Signals	Signals w/gate arms	\$350,000
1.61	606850S	IAIS	Muscatine	Iowa DOT	IA 70	Flashing lights with motion circuitry	Signals w/gate arms	\$325,000
1.5	078040R	BNSF	Lee	Lee Co	245th Ave	Crossbucks	Flashing lights & Gates with CWT	\$425,000
1.43	385645X	DME	Palo Alto	Palo Alto Co	490th Ave	Signals	Signals w/gate arms	\$350,000
1.08	607146Y	DME	Scott	Davenport	Wapello Ave	Signals	Signals w/gate arms	\$475,000
0.27	599322V	IANR	Hancock	Iowa DOT	US 18	Cantilever, signals	Signals w/gate arms	\$450,000
-	-	-	-	Statewide	-	-	Crossing closure	\$300,000

Total: \$7,175,000

Source: Iowa DOT

State Highway-Railroad Crossing Surface Repair Program and Grade Crossing Improvement projects in Iowa, 2019-2024

Table D.7: 2019 State Highway-Railroad Crossing Surface Repair Program projects

County	Federal ID No.	Railroad	Highway Jurisdiction	Road Location	State Repair Fund (60%)
Black Hawk	307189N	CCP	Cedar Falls	Center St	\$83,812
Linn	307802C	CCP	Linn Co	Central City Rd E-16	\$65,400
Linn	307805X	CCP	Linn Co	Central City Rd E-16	\$74,400
Linn	307840L	CCP	Cedar Rapids	McCloud Pl NE	\$58,200
Buena Vista	307503V	CCP	Storm Lake	Oneida St	\$80,400
Buena Vista	307505J	CCP	Storm Lake	Cayuga St	\$60,600
Buena Vista	307512U	CCP	Storm Lake	W 5th St	\$128,400
Lyon	082328E	BNSF	Lyon Co	Clinton St	\$55,328
Clarke	074070U	BNSF	Osceola	S Ridge Rd	\$57,600
Clarke	074050H	BNSF	Osceola	240th Ave	\$57,600
O'Brien	385769R	DME	O'Brien Co	L-40 / Oriole Av	\$40,590
Wright	197025R	UP	Goldfield	E Cedar St	\$75,000
Blackhawk	200782T	UP	Waterloo	Franklin St	\$71,794

Total: \$909,124

Source: Iowa DOT



Table D.8: 2020 State Highway-Railroad Crossing Surface Repair Program projects

County	Federal ID No.	Railroad	Highway Jurisdiction	Road Location	State Repair Fund (60%)
Black Hawk	307177U	CCP	Waterloo	Wagner Rd	\$71,400
Buchanan	307064N	CCP	Buchanan Co	Nathan Bethel Ave	\$51,600
Black Hawk	307112B	CCP	Waterloo	Osage Ave	\$123,000
Buchanan	307075B	CCP	Buchanan Co	Golf Course Blvd	\$51,600
Black Hawk	307181J	CCP	Waterloo	Airport Blvd	\$82,200
Plymouth	307671B	UP	Hinton	Main St	\$54,184
Plymouth	067334V	BNSF	Hinton	Main St	\$79,517
Plymouth	307671B	Central Valley AG	Hinton	Main St	\$54,184
Plymouth	067334V	Central Valley AG	Hinton	Main St	\$50,792
Lyon	082328E	Lester Feed & Grain	Lyon Co	Clinton St	\$55,328
Linn	376717A	CIC	Cedar Rapids	1st St SW	\$147,900
Clay	385696H	MaxYield Coop	Dickens	Main St	\$39,720
Clay	385696H	CP	Dickens	Main St	\$39,720

Total: \$901,145

Source: Iowa DOT

Table D.9: 2021 State Highway-Railroad Crossing Surface Repair Program projects

County	Federal ID No.	Railroad	Highway Jurisdiction	Road Location	State Repair Fund (60%)
Black Hawk	307861E	CCP	Waterloo	Newton St	\$80,400
Black Hawk	307869J	CCP	Waterloo	Conger St	\$85,800
Black Hawk	307173S	CCP	Waterloo	Burton Ave	\$100,200
Black Hawk	307897M	CCP	Waterloo	Rainbow Dr	\$71,400
Plymouth	307615U	CCP	Remsen	Washington St	\$84,600
Polk	603720K	IAIS	Des Moines	SW 5th Ave	\$61,200
Linn	840206T	CIC	Cedar Rapids	S Bowling St	\$79,200
Winnebago	608601T	UP	Winnebago Co	20th Ave/CR R-20	\$31,800
Cerro Gordo	201859G	UP	Mason City	S Monroe St	\$102,900
Cerro Gordo	385463L	DME	Cerro Gordo Co	Zinnia Ave	\$42,600
Kossuth	385619H	DME	Kossuth Co	B-40 / 210th St	\$133,000
Black Hawk	307861E	CCP	Waterloo	Newton St	\$80,400
Black Hawk	307869J	CCP	Waterloo	Conger St	\$85,800

Total: \$1,1039,300

Source: Iowa DOT

Table D.10: 2022 State Highway-Railroad Crossing Surface Repair Program projects

County	Federal ID No.	Railroad	Highway Jurisdiction	Road Location	State Repair Fund (60%)
Calhoun	307447R	CCP	Pomeroy	Ontario St	\$136,200
Cerro Gordo	385516H	DME	Clear Lake	Buddy Holly Pl	\$73,200
Floyd	385422G	DME	Floyd Co	Underwood Ave(T-66)	\$42,000
O'Brien	385762T	DME	O'Brien Co	B-20 (Roosevelt Ave)	\$56,760
Chickasaw	385301J	DME	Chickasaw Co	B-57 (220th St)	\$73,800
Cerro Gordo	874095Y	IATR	Mason City	19th St SW	\$79,400
Cerro Gordo	874104V	IATR	Mason City	19th St SW	\$101,289
Plymouth	307616B	Farmer's Co-op	Remsen	Washington St	\$141,999
Lee	072519M	KJRY	Keokuk	Twin Rivers Dr	\$49,320
Adams	095331A	BNSF	Adams Co	2nd St	116,922
Palo Alto	385645X	DME	Palo Alto Co	490th Ave	\$39,600
Johnson	607299C	CIC	Iowa City	South Gilbert St (S crossing)	\$42,240
Henry	079161S	BNSF	Henry Co	Oasis Ave	\$86,400
Guthrie	603291J	IAIS	Guthrie Co	McPherson St	\$64,826

Total: \$1,103,956

Source: Iowa DOT



Table D.11: 2023 State Highway-Railroad Crossing Surface Repair Program projects

County	Federal ID No.	Railroad	Highway Jurisdiction	Road Location	State Repair Fund (60%)
Polk	607878L	IAIS	Altoona	5th Ave	\$76,621
Polk	607880M	IAIS	Altoona	9th St / 5th Ave	\$81,934
Benton	607937L	IANR	Shellsburg	Smith St	\$34,560
Linn	840212W	CIC	Cedar Rapids	9th St SW	\$38,310
Cerro Gordo	380019N	DME	Cerro Gordo Co	305th St	\$47,700
Cherokee	307576F	CCP	Cherokee	W Cedar St	\$85,200
Linn	376726Y	CIC	Cedar Rapids	9th St SW	\$206,400
Polk	377207A	IAIS	Clive	86th St	\$171,674
Sioux	067362Y	BNSF	Sioux Center	20th St NW	\$82,800
Sioux	067359R	BNSF	Sioux Center	4th St NW	\$67,800
Sioux	067358J	BNSF	Sioux Center	3rd St NW	\$70,200
Sioux	067358J	Farmer's Co-op	Sioux Center	3rd St NW	\$44,400
Sioux	067359R	Farmer's Co-op	Sioux Center	4th St NW	\$44,400

Total: \$1,051,999

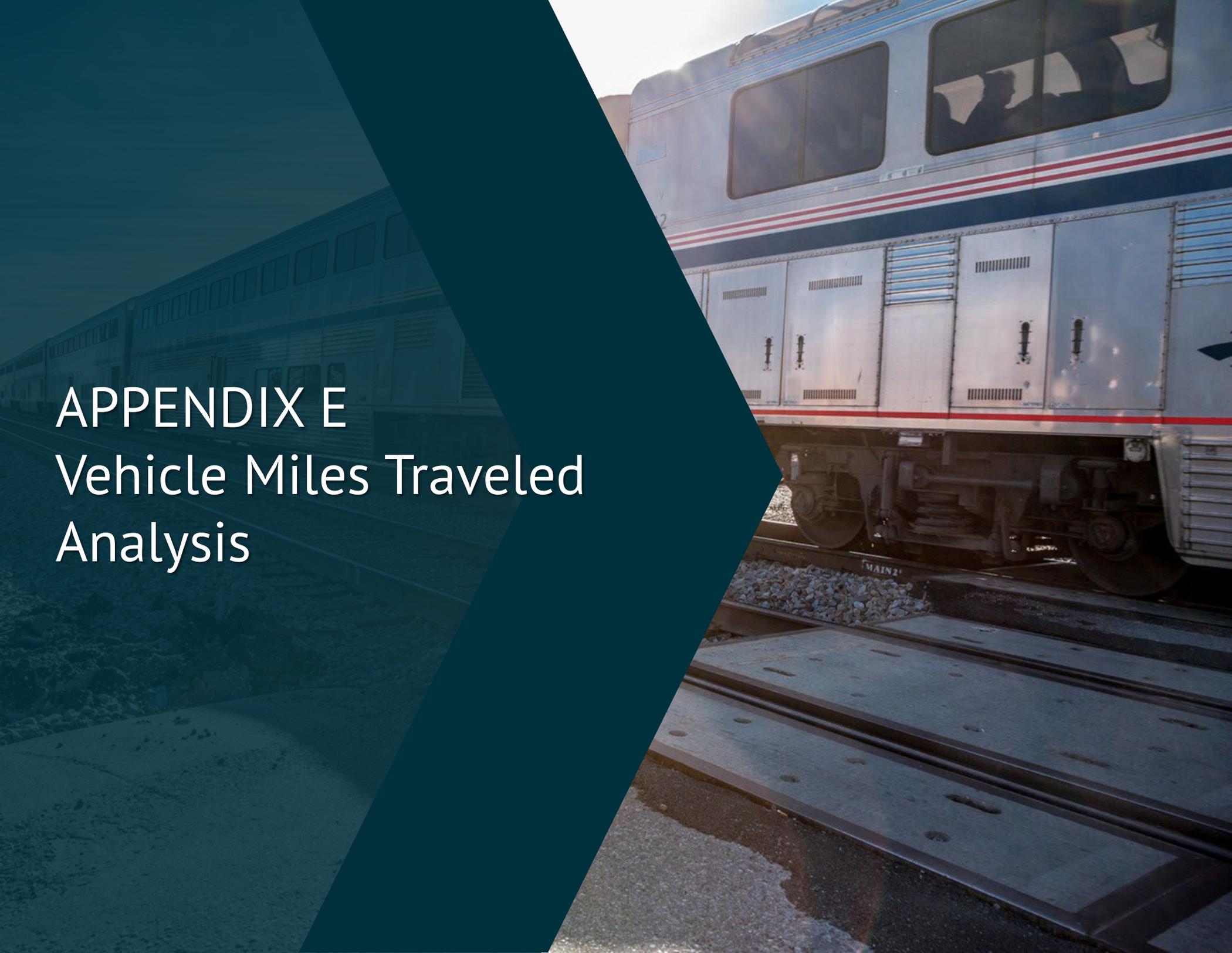
Source: Iowa DOT

Table D.12: 2024 State Highway-Railroad Crossing Surface Repair Program projects

County	Federal ID No.	Railroad	Highway Jurisdiction	Road Location	State Repair Fund (60%)
Linn	307841T	CCP	Cedar Rapids	29th St NE	\$135,000
Linn	840224R	CIC	Cedar Rapids	Wright Brothers E	\$96,000
Linn	840198D	CIC	Cedar Rapids	60th Ave SW	\$66,000
Linn	840199K	CIC	Cedar Rapids	Waconia Ave SW	\$69,000
Johnson	607307S	CIC	Iowa City	Kirkwood Ave	\$57,000
Polk	377221V	IAIS	Des Moines	Grand Ave	\$148,200
Washington	607335V	DME	Washington Co	Old Military Rd	\$58,200
Johnson	606887G	IAIS	Coralville	Camp Cardinal Blvd	\$102,000
Black Hawk	607625D	IANR	Black Hawk Co	Cedar Wapsi Road (C-57)	\$46,800
Kossuth	390124S	DME	Algona	East St / Finn Dr	\$115,136
Johnson	608027T	IAIS	Oxford	Augusta Ave	\$185,050

Total: \$1,078,386

Source: Iowa DOT



APPENDIX E

Vehicle Miles Traveled Analysis

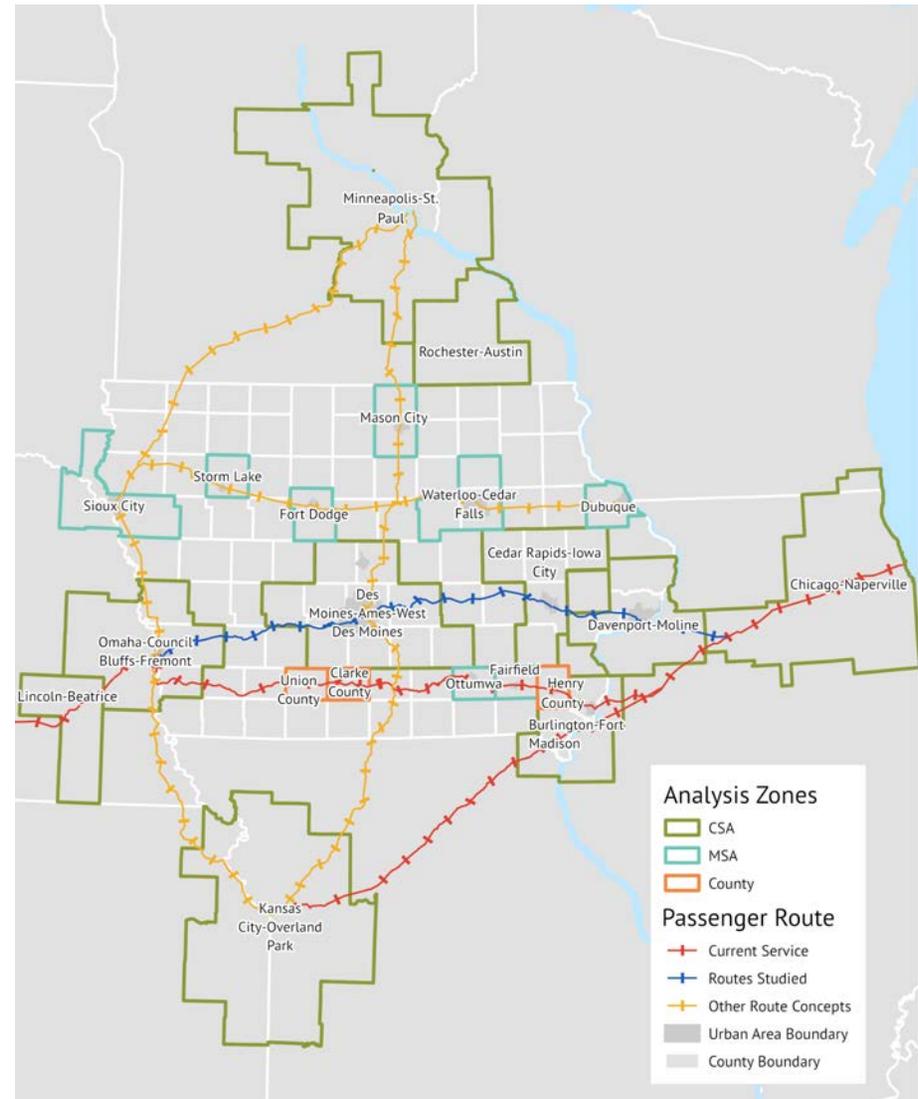


As referenced in Chapter 4, Iowa DOT conducted a Vehicle Miles Traveled (VMT) analysis for proposed passenger rail routes. The analysis used the Iowa Travel Analysis Model (iTRAM) to calculate the number of trips between selected geographies and to estimate the typical travel distance between those geographies.

The geographies used are Metropolitan Statistical Areas (MSAs), Combined Statistical Areas (CSAs) and selected Iowa counties. MSAs are Census Bureau-defined areas consisting of one or more counties that contain a city of 50,000 or more inhabitants. Additional counties qualify to be included by meeting a specified level of commuting to the counties containing the population concentration and by meeting certain other requirements of metropolitan character, such as a specified minimum population density or percentage of the population that is urban. CSAs are United States Office of Management and Budget delineated groupings of adjacent metropolitan and/or micropolitan statistical areas that have social and economic ties as measured by commuting to work, but at lower levels than are found among counties within individual metropolitan and micropolitan statistical areas. CSAs can be characterized as representing larger regions that reflect wider-ranging social and economic interactions, such as wholesaling, commodity distribution, and weekend recreation activities, as well as lower levels of daily commuting interaction. The individual counties selected represent locations with existing Amtrak stations that are not within an MSA or CSA.

A map of the proposed routes and the geographies used in the analysis is shown in Figure E.1. Matrices showing projected daily passenger VMT between destinations along existing and potential routes in 2018 and 2050 are provided in Tables E.1 – E.12. These daily VMT would be traveling along Iowa and neighboring states' highways and could potentially be diverted to passenger rail if existing service was improved, or if new service was added.

Figure E.1: Geographies analyzed in VMT analysis and current and proposed passenger rail routes



Source: Iowa DOT

California Zephyr Route

Table E.1: Projected daily vehicle miles traveled (VMT) between Chicago, IL and Amtrak station areas along California Zephyr route in 2018

Origin/Destination	Chicago, IL	Burlington-Fort Madison	Henry County	Ottumwa	Clarke County	Union County	Omaha, NE	Lincoln, NE
Chicago, IL	-	81,401	15,734	28,430	10,816	14,814	1,364,037	455,199
Burlington-Fort Madison	81,332	-	129,890	7,467	24	23	10,714	3,868
Henry County	15,582	130,311	-	10,457	13	3	2,003	758
Ottumwa	28,327	7,446	10,428	-	1,791	300	2,734	1,032
Clarke County	10,757	24	13	1,798	-	18,093	1,135	201
Union County	14,772	23	3	300	18,073	-	2,609	219
Omaha, NE	1,367,658	10,691	1,990	2,738	1,143	2,622	-	667,280
Lincoln, NE	455,233	3,576	712	1,013	200	218	667,015	-

Origin is shown in the left column; destination is shown in the top row.

Source: Iowa DOT

Table E.2: Projected daily VMT between Chicago, IL and Amtrak station areas along California Zephyr route in 2050

Origin/Destination	Chicago, IL	Burlington-Fort Madison	Henry County	Ottumwa	Clarke County	Union County	Omaha, NE	Lincoln, NE
Chicago, IL	-	69,840	14,808	25,789	10,446	13,792	1,545,508	498,850
Burlington-Fort Madison	69,788	-	121,047	7,226	23	19	10,845	3,700
Henry County	14,737	121,431	-	12,678	21	4	2,215	795
Ottumwa	24,904	7,202	12,631	-	1,951	323	2,828	1,026
Clarke County	10,391	23	21	1,958	-	19,898	1,450	215
Union County	13,754	19	4	323	19,875	-	2,868	227
Omaha, NE	1,545,874	10,770	2,189	2,815	1,451	2,871	-	830,041
Lincoln, NE	498,863	3,417	745	992	214	225	829,884	-

Origin is shown in the left column; destination is shown in the top row.

Source: Iowa DOT



Southwest Chief Route

Table E.3: Projected daily VMT between Chicago, IL and Amtrak station areas along Southwest Chief route in 2018

Origin/ Destination	Chicago, IL	Burlington- Fort Madison	Kansas City, MO
Chicago, IL	-	81,401	5,609,617
Burlington-Fort Madison	81,332	-	24,347
Kansas City, MO	5,609,381	24,297	-

Origin is shown in the left column; destination is shown in the top row.

Source: Iowa DOT

Table E.4: Projected daily VMT between Chicago, IL and Amtrak station areas along Southwest Chief route in 2050

Origin/ Destination	Chicago, IL	Burlington- Fort Madison	Kansas City, MO
Chicago, IL	-	69,840	6,767,971
Burlington-Fort Madison	69,788	-	25,960
Kansas City, MO	6,767,972	25,895	-

Origin is shown in the left column; destination is shown in the top row.

Source: Iowa DOT

Chicago – Des Moines – Omaha-Council Bluffs

Table E.5: Projected daily VMT between Chicago, IL and Omaha, NE via Des Moines in 2018

Origin/ Destination	Chicago, IL	Davenport	Cedar Rapids- Iowa City	Des Moines	Omaha, NE
Chicago, IL	-	476,937	398,991	1,101,274	1,364,037
Davenport	474,603	-	361,888	18,175	48,239
Cedar Rapids- Iowa City	397,460	360,819	-	69,373	53,233
Des Moines	1,100,723	18,298	69,915	-	143,647
Omaha, NE	1,367,658	48,384	53,383	143,228	-

Origin is shown in the left column; destination is shown in the top row.

Source: Iowa DOT

Table E.6: Projected daily VMT between Chicago, IL and Omaha, NE via Des Moines in 2050

Origin/ Destination	Chicago, IL	Davenport	Cedar Rapids- Iowa City	Des Moines	Omaha, NE
Chicago, IL	-	538,493	449,551	1,313,389	1,545,508
Davenport	534,398	-	374,260	29,570	54,629
Cedar Rapids- Iowa City	447,225	372,708	-	150,536	70,868
Des Moines	1,314,021	27,494	152,165	-	243,528
Omaha, NE	1,545,874	54,605	70,737	242,520	-

Origin is shown in the left column; destination is shown in the top row.

Source: Iowa DOT

Minneapolis – Sioux City - Omaha

Table E.7: Projected daily VMT between Minneapolis, MN and Omaha, NE via Sioux City in 2018

Origin/ Destination	Minneapolis, MN	Sioux City	Omaha, NE
Minneapolis, MN	-	67,545	596,914
Sioux City	68,252	-	29,562
Omaha, NE	595,988	29,771	-

Origin is shown in the left column; destination is shown in the top row.

Source: Iowa DOT

Table E.8: Projected daily VMT between Minneapolis, MN and Omaha, NE via Sioux City in 2050

Origin/ Destination	Minneapolis, MN	Sioux City	Omaha, NE
Minneapolis, MN	-	89,600	904,154
Sioux City	90,053	-	45,857
Omaha, NE	902,518	46,044	-

Origin is shown in the left column; destination is shown in the top row.

Source: Iowa DOT

Chicago – Dubuque – Sioux City

Table E.9: Projected daily VMT between Chicago, IL and Sioux City via Dubuque in 2018

Origin/ Destination	Chicago, IL	Dubuque	Waterloo- Cedar Falls	Fort Dodge	Storm Lake	Sioux City
Chicago, IL	-	61,199	152,850	39,667	26,926	211,979
Dubuque	61,482	-	5,317	16	6	468
Waterloo- Cedar Falls	153,380	5,277	-	2,854	56	683
Fort Dodge	39,678	16	2,865	-	6,038	820
Storm Lake	26,984	6	56	6,012	-	13,473
Sioux City	209,078	468	683	826	13,441	-

Origin is shown in the left column; destination is shown in the top row.

Source: Iowa DOT

Table E.10: Projected daily VMT between Chicago, IL and Sioux City via Dubuque in 2050

Origin/ Destination	Chicago, IL	Dubuque	Waterloo- Cedar Falls	Fort Dodge	Storm Lake	Sioux City
Chicago, IL	-	62,992	151,464	32,995	24,938	214,700
Dubuque	63,321	-	16,921	25	5	496
Waterloo- Cedar Falls	152,000	16,738	-	4,463	56	691
Fort Dodge	33,011	25	4,480	-	5,384	731
Storm Lake	24,995	5	56	5,359	-	14,257
Sioux City	211,648	495	692	736	14,218	-

Origin is shown in the left column; destination is shown in the top row.

Source: Iowa DOT



Minneapolis – Des Moines – Kansas City

Table E.11: Projected daily VMT between Minneapolis, MN and Kansas City, MO via Des Moines in 2018

Origin/Destination	Minneapolis, MN	Rochester, MN	Mason City	Des Moines	Clarke County	Kansas City, MO
Minneapolis, MN	-	1,149,310	29,284	447,876	4,690	1,304,961
Rochester, MN	1,148,790	-	43,774	16,927	178	51,594
Mason City	29,305	43,745	-	15,580	18	14,057
Des Moines	447,474	16,872	15,686	-	172,440	176,013
Clarke County	4,641	176	18	170,387	-	1,140
Kansas City, MO	1,300,247	51,417	14,044	175,848	1,133	-

Origin is shown in the left column; destination is shown in the top row.

Source: Iowa DOT

Table E.12: Projected daily VMT between Minneapolis, MN and Kansas City, MO via Des Moines in 2050

Origin/Destination	Minneapolis, MN	Rochester, MN	Mason City	Des Moines	Clarke County	Kansas City, MO
Minneapolis, MN	-	1,471,388	37,355	710,996	6,050	2,120,071
Rochester, MN	1,470,591	-	26,765	24,386	205	74,281
Mason City	37,391	26,737	-	17,471	17	14,729
Des Moines	710,281	24,305	17,622	-	191,395	261,284
Clarke County	5,985	202	17	189,174	-	1,342
Kansas City, MO	2,112,654	74,024	14,714	261,196	1,334	-

Origin is shown in the left column; destination is shown in the top row.

Source: Iowa DOT

APPENDIX F

Commodity Movements





This appendix provides tables to support the freight rail trends discussed in Chapter 4, Rail Planning Considerations. 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. Tables F.1 – F. 7 use the Standard Transportation Commodity Code (STCC), a seven-digit numeric code, categorized by 40 commodity groupings, based on physical product information used on shipping documents and published/maintained by the Association of American Railroads. Additional detail on the data and sources can be found in the endnotes of Chapter 4, Rail Planning Considerations. Tables are provided for the following information.

- Table F.1: Rail movement by commodity (all directions), 2022
- Table F.2: Rail outbound movement by commodity, 2022
- Table F.3: Rail inbound movement by commodity, 2022
- Table F.4: Rail intrastate movement by commodity, 2022
- Table F.5: Rail through movement by commodity, 2022
- Table F.6: Rail outbound tons by geography, 2022
- Table F.7: Rail inbound tons by geography, 2022
- Tables F.8–F.12: Federal Highway Administration Freight Analysis Framework (FHWA FAF) rail tons by Standard Classification of Transportable Goods (SCTG), 2022 and 2050



Table F.1: Rail movements by commodity (all directions), 2022

STCC2	Commodity	Tons	Percent of Tons	Units (Carloads)	Percent of Carloads
1	Farm Products	34,343,384	12.6%	403,206	6.7%
8	Forest Products	20,435	0.0%	310	0.0%
9	Fresh Fish or Marine Products	7,370	0.0%	280	0.0%
10	Metallic Ores	193,169	0.1%	1,963	0.0%
11	Coal	64,731,272	23.7%	545,981	9.1%
13	Petroleum Prod, Natural Gas	416,181	0.2%	4,532	0.1%
14	Nonmetallic Minerals	11,963,961	4.4%	108,146	1.8%
19	Ordnance or Accessories	19,560	0.0%	625	0.0%
20	Food or Kindred Products	50,393,045	18.4%	704,104	11.7%
21	Tobacco Products	0	0.0%	0	0.0%
22	Textile Mill Products	36,390	0.0%	2,645	0.0%
23	Apparel or Related Products	1,230,440	0.4%	91,320	1.5%
24	Logs, Lumber, Wood Prod.	4,131,235	1.5%	62,150	1.0%
25	Furniture or Fixtures	719,600	0.3%	62,760	1.0%
26	Pulp, Paper or Allied Products	3,066,560	1.1%	89,040	1.5%
27	Printed Matter	136,040	0.0%	7,640	0.1%
28	Chemicals or Allied Products	41,186,691	15.1%	489,372	8.1%
29	Petroleum or Coal Products	7,687,067	2.8%	94,873	1.6%
30	Rubber or Misc Plastics	1,160,630	0.4%	90,780	1.5%
31	Leather or Leather Products	6,880	0.0%	920	0.0%
32	Clay, Concrete, Glass, or Stone	5,072,837	1.9%	59,187	1.0%
33	Primary Metal Products	5,249,134	1.9%	64,835	1.1%
34	Fabricated Metal Products	259,100	0.1%	15,255	0.3%
35	Machinery	500,911	0.2%	31,937	0.5%
36	Electrical Equipment	529,885	0.2%	47,550	0.8%
37	Transportation Equipment	5,121,432	1.9%	314,206	5.2%
38	Instrum, Photo Equip, Optical Eq	68,440	0.0%	4,520	0.1%
39	Misc Manufacturing Products	147,960	0.1%	13,640	0.2%
40	Waste or Scrap Materials Not Identified by Producing Industry	2,530,535	0.9%	33,847	0.6%
41	Misc Freight Shipments	187,425	0.1%	18,545	0.3%
42	Shipping Containers	41,565	0.0%	431,265	7.2%
43	Mail or Contract Traffic	1,200	0.0%	240	0.0%
44	Unknown	2,796,373	1.0%	132,226	2.2%
46	Misc Mixed Shipments	28,030,450	10.2%	1,982,145	32.9%
47	Small Pig Freight Shipments	1,549,240	0.6%	112,160	1.9%
48	Waste Hazardous Materials or Waste Hazardous Substances	96,495	0.0%	1,330	0.0%
All	Total	273,632,892	100.0%	6,023,535	100.0%

Source: Calculated based on Surface Transportation Board (STB) Waybill Sample Data for 2022.



Table F.2: Rail outbound movements by commodity, 2022

STCC2	Commodity	Tons	Percent of Tons	Units (Carloads)	Percent of Carloads
1	Farm Products	12,341,770	22.0%	119,644	20.3%
8	Forest Products	0	0.0%	0	0.0%
9	Fresh Fish or Marine Products	0	0.0%	0	0.0%
10	Metallic Ores	0	0.0%	0	0.0%
11	Coal	2,347,498	4.2%	19,436	3.3%
13	Petroleum Prod, Natural Gas	0	0.0%	0	0.0%
14	Nonmetallic Minerals	2,246,092	4.0%	19,788	3.4%
19	Ordnance or Accessories	3,635	0.0%	50	0.0%
20	Food or Kindred Products	20,693,376	36.9%	212,003	36.0%
21	Tobacco Products	0	0.0%	0	0.0%
22	Textile Mill Products	0	0.0%	0	0.0%
23	Apparel or Related Products	0	0.0%	0	0.0%
24	Logs, Lumber, Wood Prod.	6,485	0.0%	70	0.0%
25	Furniture or Fixtures	2,160	0.0%	160	0.0%
26	Pulp, Paper or Allied Products	187,125	0.3%	2,810	0.5%
27	Printed Matter	0	0.0%	0	0.0%
28	Chemicals or Allied Products	14,887,312	26.6%	159,347	27.0%
29	Petroleum or Coal Products	187,675	0.3%	2,190	0.4%
30	Rubber or Misc Plastics	0	0.0%	0	0.0%
31	Leather or Leather Products	0	0.0%	0	0.0%
32	Clay, Concrete, Glass, or Stone	809,044	1.4%	7,824	1.3%
33	Primary Metal Products	644,710	1.2%	6,985	1.2%
34	Fabricated Metal Products	360	0.0%	40	0.0%
35	Machinery	71,070	0.1%	1,940	0.3%
36	Electrical Equipment	2,025	0.0%	85	0.0%
37	Transportation Equipment	127,473	0.2%	11,614	2.0%
38	Instrum, Photo Equip, Optical Eq	840	0.0%	40	0.0%
39	Misc Manufacturing Products	0	0.0%	0	0.0%
40	Waste or Scrap Materials Not Identified by Producing Industry	392,375	0.7%	4,719	0.8%
41	Misc Freight Shipments	0	0.0%	0	0.0%
42	Shipping Containers	0	0.0%	3,125	0.5%
43	Mail or Contract Traffic	0	0.0%	0	0.0%
44	Unknown	922,773	1.6%	9,346	1.6%
46	Misc Mixed Shipments	153,695	0.3%	7,965	1.4%
47	Small Pig Freight Shipments	0	0.0%	0	0.0%
48	Waste Hazardous Materials or Waste Hazardous Substances	420	0.0%	15	0.0%
All	Total	56,027,913	100.0%	589,196	100.0%

Source: Calculated based on Surface Transportation Board (STB) Waybill Sample Data for 2022.

Table F.3: Rail inbound movements by commodity, 2022

STCC2	Commodity	Tons	Percent of Tons	Units (Carloads)	Percent of Carloads
1	Farm Products	1,238,974	4.7%	13,013	4.5%
8	Forest Products	19,635	0.1%	270	0.1%
9	Fresh Fish or Marine Products	0	0.0%	0	0.0%
10	Metallic Ores	775	0.0%	10	0.0%
11	Coal	14,128,164	53.8%	118,150	41.2%
13	Petroleum Prod, Natural Gas	5,365	0.0%	70	0.0%
14	Nonmetallic Minerals	610,938	2.3%	5,733	2.0%
19	Ordnance or Accessories	0	0.0%	0	0.0%
20	Food or Kindred Products	2,172,278	8.3%	21,657	7.6%
21	Tobacco Products	0	0.0%	0	0.0%
22	Textile Mill Products	1,800	0.0%	160	0.1%
23	Apparel or Related Products	0	0.0%	0	0.0%
24	Logs, Lumber, Wood Prod.	368,870	1.4%	3,990	1.4%
25	Furniture or Fixtures	240	0.0%	80	0.0%
26	Pulp, Paper or Allied Products	323,795	1.2%	4,315	1.5%
27	Printed Matter	0	0.0%	0	0.0%
28	Chemicals or Allied Products	4,436,212	16.9%	46,178	16.1%
29	Petroleum or Coal Products	447,035	1.7%	5,085	1.8%
30	Rubber or Misc Plastics	505	0.0%	5	0.0%
31	Leather or Leather Products	0	0.0%	0	0.0%
32	Clay, Concrete, Glass, or Stone	1,053,850	4.0%	10,312	3.6%
33	Primary Metal Products	457,505	1.7%	4,970	1.7%
34	Fabricated Metal Products	1,360	0.0%	80	0.0%
35	Machinery	31,505	0.1%	2,389	0.8%
36	Electrical Equipment	980	0.0%	5	0.0%
37	Transportation Equipment	187,494	0.7%	13,323	4.7%
38	Instrum, Photo Equip, Optical Eq	0	0.0%	0	0.0%
39	Misc Manufacturing Products	0	0.0%	0	0.0%
40	Waste or Scrap Materials Not Identified by Producing Industry	555,195	2.1%	6,245	2.2%
41	Misc Freight Shipments	0	0.0%	0	0.0%
42	Shipping Containers	0	0.0%	12,520	4.4%
43	Mail or Contract Traffic	0	0.0%	0	0.0%
44	Unknown	0	0.0%	0	0.0%
46	Misc Mixed Shipments	233,120	0.9%	17,840	6.2%
47	Small Pig Freight Shipments	0	0.0%	0	0.0%
48	Waste Hazardous Materials or Waste Hazardous Substances	785	0.0%	25	0.0%
All	Total	26,276,380	100.0%	286,425	100.0%

Source: Calculated based on Surface Transportation Board (STB) Waybill Sample Data for 2022.



Table F.4: Rail intrastate movements by commodity, 2022

STCC2	Commodity	Tons	Percent of Tons	Units (Carloads)	Percent of Carloads
1	Farm Products	1,133,868	10.3%	11,366	10.1%
8	Forest Products	0	0.0%	0	0.0%
9	Fresh Fish or Marine Products	0	0.0%	0	0.0%
10	Metallic Ores	0	0.0%	0	0.0%
11	Coal	2,428,727	22.1%	20,344	18.0%
13	Petroleum Prod, Natural Gas	0	0.0%	0	0.0%
14	Nonmetallic Minerals	602,347	5.5%	5,557	4.9%
19	Ordnance or Accessories	0	0.0%	0	0.0%
20	Food or Kindred Products	3,996,058	36.4%	40,317	35.8%
21	Tobacco Products	0	0.0%	0	0.0%
22	Textile Mill Products	0	0.0%	0	0.0%
23	Apparel or Related Products	0	0.0%	0	0.0%
24	Logs, Lumber, Wood Prod.	10,715	0.1%	120	0.1%
25	Furniture or Fixtures	0	0.0%	0	0.0%
26	Pulp, Paper or Allied Products	2,655	0.0%	50	0.0%
27	Printed Matter	0	0.0%	0	0.0%
28	Chemicals or Allied Products	2,145,331	19.6%	22,528	20.0%
29	Petroleum or Coal Products	15,325	0.1%	180	0.2%
30	Rubber or Misc Plastics	0	0.0%	0	0.0%
31	Leather or Leather Products	0	0.0%	0	0.0%
32	Clay, Concrete, Glass, or Stone	94,690	0.9%	905	0.8%
33	Primary Metal Products	38,500	0.4%	430	0.4%
34	Fabricated Metal Products	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	65,236	0.6%	5,691	5.0%
38	Instrum, Photo Equip, Optical Eq	0	0.0%	0	0.0%
39	Misc Manufacturing Products	0	0.0%	0	0.0%
40	Waste or Scrap Materials Not Identified by Producing Industry	435,815	4.0%	5,180	4.6%
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	Unknown	0	0.0%	0	0.0%
46	Misc Mixed Shipments	820	0.0%	15	0.0%
47	Small Pig Freight Shipments	0	0.0%	0	0.0%
48	Waste Hazardous Materials or Waste Hazardous Substances	1,320	0.0%	80	0.1%
All	Total	10,971,407	100.0%	112,763	100.0%

Source: Calculated based on Surface Transportation Board (STB) Waybill Sample Data for 2022.

Table F.5: Rail through movements by commodity, 2022

STCC2	Commodity	Tons	Percent of Tons	Units (Carloads)	Percent of Carloads
1	Farm Products	19,628,772	10.9%	259,183	5.1%
8	Forest Products	800	0.0%	40	0.0%
9	Fresh Fish or Marine Products	7,370	0.0%	280	0.0%
10	Metallic Ores	192,394	0.1%	1,953	0.0%
11	Coal	45,826,883	25.4%	388,051	7.7%
13	Petroleum Prod, Natural Gas	410,816	0.2%	4,462	0.1%
14	Nonmetallic Minerals	8,504,584	4.7%	77,068	1.5%
19	Ordnance or Accessories	15,925	0.0%	575	0.0%
20	Food or Kindred Products	23,531,333	13.0%	430,127	8.5%
21	Tobacco Products	0	0.0%	0	0.0%
22	Textile Mill Products	34,590	0.0%	2,485	0.0%
23	Apparel or Related Products	1,230,440	0.7%	91,320	1.8%
24	Logs, Lumber, Wood Prod.	3,745,165	2.1%	57,970	1.2%
25	Furniture or Fixtures	717,200	0.4%	62,520	1.2%
26	Pulp, Paper or Allied Products	2,552,985	1.4%	81,865	1.6%
27	Printed Matter	136,040	0.1%	7,640	0.2%
28	Chemicals or Allied Products	19,717,836	10.9%	261,319	5.2%
29	Petroleum or Coal Products	7,037,032	3.9%	87,418	1.7%
30	Rubber or Misc Plastics	1,160,125	0.6%	90,775	1.8%
31	Leather or Leather Products	6,880	0.0%	920	0.0%
32	Clay, Concrete, Glass, or Stone	3,115,253	1.7%	40,146	0.8%
33	Primary Metal Products	4,108,419	2.3%	52,450	1.0%
34	Fabricated Metal Products	257,380	0.1%	15,135	0.3%
35	Machinery	398,336	0.2%	27,608	0.5%
36	Electrical Equipment	526,880	0.3%	47,460	0.9%
37	Transportation Equipment	4,741,229	2.6%	283,578	5.6%
38	Instrum, Photo Equip, Optical Eq	67,600	0.0%	4,480	0.1%
39	Misc Manufacturing Products	147,960	0.1%	13,640	0.3%
40	Waste or Scrap Materials Not Identified by Producing Industry	1,147,150	0.6%	17,703	0.4%
41	Misc Freight Shipments	187,425	0.1%	18,545	0.4%
42	Shipping Containers	41,565	0.0%	415,620	8.3%
43	Mail or Contract Traffic	1,200	0.0%	240	0.0%
44	Unknown	1,873,600	1.0%	122,880	2.4%
46	Misc Mixed Shipments	27,642,815	15.3%	1,956,325	38.9%
47	Small Pig Freight Shipments	1,549,240	0.9%	112,160	2.2%
48	Waste Hazardous Materials or Waste Hazardous Substances	93,970	0.1%	1,210	0.0%
All	Total	180,357,192	100.0%	5,035,151	100.0%

Source: Calculated based on Surface Transportation Board (STB) Waybill Sample Data for 2022.



Table F.6: Rail outbound tons by geography, 2022

Originating Iowa Counties

STCC2	Pottawattamie	Clinton	Woodbury	Wapello	Johnson	Remaining	Total	Percent
20 Food or Kindred Products	3,790,665	1,374,462	2,450,827	2,410,140	1,853,788	8,813,494	20,693,376	36.9%
28 Chemicals or Allied Products	860,255	878,947	900,194	46,895	1,119,570	11,081,451	14,887,312	26.6%
01 Farm Products	3,226,885	0	785,060	0	0	8,329,825	12,341,770	22.0%
11 Coal	0	2,347,498	0	0	0	0	2,347,498	4.2%
14 Nonmetallic Minerals	2,145	0	28,586	518,515	0	1,696,846	2,246,092	4.0%
Remaining Commodities	269,520	315,680	111,750	12,590	1,855	2,800,470	3,511,865	6.3%
Total	8,149,470	4,916,587	4,276,417	2,988,140	2,975,213	32,722,086	56,027,913	100.0%
Percent	14.5%	8.8%	7.6%	5.3%	5.3%	58.4%	100.0%	100.0%

Terminating Location

STCC2	Illinois	Texas	California	Wisconsin	Mexico	Remaining	Total	Percent
20 Food or Kindred Products	6,072,778	5,425,374	2,388,515	48,435	128,876	6,629,398	20,693,376	36.9%
28 Chemicals or Allied Products	8,763,689	2,406,847	742,722	65,315	50,795	2,857,944	14,887,312	26.6%
01 Farm Products	748,572	3,659,626	1,524,015	0	2,069,924	4,339,633	12,341,770	22.0%
11 Coal	0	0	0	2,347,498	0	0	2,347,498	4.2%
14 Nonmetallic Minerals	758,204	181,076	0	0	0	1,306,812	2,246,092	4.0%
Remaining Commodities	409,860	189,014	125,345	105,876	4,310	2,677,460	3,511,865	6.3%
Total	16,753,103	11,861,937	4,780,597	2,567,124	2,253,905	17,811,247	56,027,913	100.0%
Percent	29.9%	21.2%	8.5%	4.6%	4.0%	31.8%	100.0%	100.0%

Source: Calculated based on STB Waybill Sample Data for 2022.

Table F.7: Rail inbound tons by geography, 2022

Originating Location								
STCC2	Wyoming	Illinois	Canada	Wisconsin	Nebraska	Remaining	Total	Percent
11 Coal	13,943,314	184,850	0	0	0	0	14,128,164	53.8%
28 Chemicals or Allied Products	206,400	679,460	614,184	451,854	35,655	2,448,659	4,436,212	16.9%
20 Food or Kindred Products	0	268,425	162,118	7,120	923,725	810,890	2,172,278	8.3%
1 Farm Products	495	96,981	441,734	27,729	37,090	634,945	1,238,974	4.7%
32 Clay, Concrete, Glass, or Stone	21,030	85,670	0	0	42,634	904,516	1,053,850	4.0%
Remaining Commodities	675	433,165	453,145	663,179	26,980	1,669,758	3,246,902	12.4%
Total	14,171,914	1,748,551	1,671,181	1,149,882	1,066,084	6,468,768	26,276,380	100.0%
Percent	53.9%	6.7%	6.4%	4.4%	4.1%	24.6%	100.0%	100.0%

Terminating Iowa County								
STCC2	Wapello	Pottawattamie	Clinton	Linn	Woodbury	Remaining	Total	Percent
11 Coal	4,717,844	2,985,966	3,313,864	1,607,228	1,253,210	250,052	14,128,164	53.8%
28 Chemicals or Allied Products	172,480	220,845	220,060	90,980	577,742	3,154,105	4,436,212	16.9%
20 Food or Kindred Products	64,040	971,940	218,480	206,750	77,460	633,608	2,172,278	8.3%
1 Farm Products	22,938	28,035	109,662	281,823	24,125	772,391	1,238,974	4.7%
32 Clay, Concrete, Glass, or Stone	13,800	13,370	39,575	0	4,295	982,810	1,053,850	4.0%
Remaining Commodities	446,424	525,205	102,485	100,965	282,589	1,789,234	3,246,902	12.4%
Total	5,437,526	4,745,361	4,004,126	2,287,746	2,219,421	7,582,200	26,276,380	100.0%
Percent	20.7%	18.1%	15.2%	8.7%	8.4%	28.9%	100.0%	100.0%

Source: Calculated based on STB Waybill Sample Data for 2022.



Table F.8: FHWA FAF Rail Tons by SCTG, 2022 and 2050—Agriculture

SCTG	Description	Outbound 2022	Outbound 2050	Outbound CAGR	Inbound 2022	Inbound 2050	Inbound CAGR	Intrastate 2022	Intrastate 2050	Intrastate CAGR
1	Live animals/fish	0	0	0.0%	0	0	0.0%	0	0	0.0%
2	Cereal grains	5,755,842	7,831,245	1.1%	4,431,479	4,788,158	0.3%	3,204,960	3,487,679	0.3%
3	Other ag prods.	1,317,438	740,696	-2.0%	639,662	664,722	0.1%	558,884	620,605	0.4%
4	Animal feed	7,221,589	18,328,753	3.4%	787,573	1,572,829	2.5%	278,157	563,479	2.6%
5	Meat/seafood	4,873	2,474	-2.4%	903	1,351	1.4%	0	0	0.0%
6	Milled grain prods.	1,380,326	2,132,927	1.6%	1,195,457	1,848,057	1.6%	1,112,172	1,766,379	1.7%
7	Other foodstuffs	5,760,806	8,337,787	1.3%	1,498,301	2,003,035	1.0%	987,445	1,329,477	1.1%
8	Alcoholic beverages	268,028	366,189	1.1%	89,606	146,466	1.8%	89,520	146,056	1.8%
9	Tobacco prods.	0	0	0.0%	0	0	0.0%	0	0	0.0%
All	Subtotal	21,708,902	37,740,072	2.0%	8,642,982	11,024,617	0.9%	6,231,137	7,913,675	0.9%

Source: Calculated based on FHWA FAF v5.6.1

Table F.9: FHWA FAF Rail Tons by SCTG, 2022 and 2050—Mining/Extraction

SCTG	Description	Outbound 2022	Outbound 2050	Outbound CAGR	Inbound 2022	Inbound 2050	Inbound CAGR	Intrastate 2022	Intrastate 2050	Intrastate CAGR
10	Building stone	0	0	0.0%	0	0	0.0%	0	0	0.0%
11	Natural sands	1,724,581	3,108,157	2.1%	0	0	0.0%	0	0	0.0%
12	Gravel	247,713	266,134	0.3%	205	16,831	17.0%	4	6	2.1%
13	Nonmetallic minerals	42,724	33,805	-0.8%	2,039,840	3,720,007	2.2%	1,832	2,904	1.7%
14	Metallic ores	188,553	726	-18.0%	0	0	0.0%	0	0	0.0%
15	Coal	9,659	0	-100.0%	11,199,520	3,104,861	-4.5%	0	0	0.0%
16	Crude petroleum	0	0	0.0%	0	0	0.0%	0	0	0.0%
All	Subtotal	2,213,230	3,408,822	1.6%	13,239,566	6,841,699	-2.3%	1,835	2,910	1.7%

Source: Calculated based on FHWA FAF v5.6.1

Table F.10: FHWA FAF Rail Tons by SCTG, 2022 and 2050—Manufacturing

SCTG	Description	Outbound 2022	Outbound 2050	Outbound CAGR	Inbound 2022	Inbound 2050	Inbound CAGR	Intrastate 2022	Intrastate 2050	Intrastate CAGR
17	Gasoline	7,589,347	12,971,299	1.9%	790,387	978,513	0.8%	790,160	978,513	0.8%
18	Fuel oils	491,539	893,813	2.2%	78,896	83,497	0.2%	77,243	83,048	0.3%
19	Natural gas and other fossil products	255,720	415,950	1.8%	566,659	645,118	0.5%	68,658	88,577	0.9%
20	Basic chemicals	333,713	1,188,095	4.6%	1,104,195	3,450,288	4.2%	1,902	6,897	4.7%
21	Pharmaceuticals	2,310	1,157	-2.4%	8,123	2,312	-4.4%	0	0	0.0%
22	Fertilizers	487,813	1,037,118	2.7%	1,181,926	5,431,736	5.6%	26,518	81,100	4.1%
23	Chemical prods.	184,875	715,163	5.0%	162,529	461,898	3.8%	93,658	280,932	4.0%
24	Plastics/rubber	943,100	2,544,968	3.6%	252,581	660,372	3.5%	70,372	182,485	3.5%
25	Logs	12,782	837	-9.3%	58,162	78,165	1.1%	0	0	0.0%
26	Wood prods.	5,110	9,464	2.2%	296,718	381,983	0.9%	0	0	0.0%
27	Newsprint/paper	2,613	599	-5.1%	87,651	129,844	1.4%	0	0	0.0%
28	Paper articles	2,225	2,158	-0.1%	297	59	-5.6%	0	0	0.0%
29	Printed prods.	807	17	-12.9%	207	175	-0.6%	0	0	0.0%
30	Textiles/leather	493	1,011	2.6%	6,654	6,685	0.0%	0	0	0.0%
31	Nonmetal min. prods.	577,870	1,074,425	2.2%	59,048	78,310	1.0%	45,594	75,534	1.8%
32	Base metals	353,073	702,716	2.5%	662,242	943,213	1.3%	194,034	406,391	2.7%
33	Articles-base metal	49,481	116,037	3.1%	144,348	242,955	1.9%	47,494	85,721	2.1%
34	Machinery	74,980	63,424	-0.6%	138,427	86,118	-1.7%	0	0	0.0%
35	Electronics	1,021	828	-0.7%	7,287	11,264	1.6%	78	205	3.5%
36	Motorized vehicles	55,769	75,278	1.1%	22,279	30,809	1.2%	0	0	0.0%
37	Transport equip.	11,985	7,552	-1.6%	19,328	30,569	1.7%	0	0	0.0%
38	Precision instruments	580	17	-11.8%	327	493	1.5%	0	0	0.0%
39	Furniture	3,691	1,777	-2.6%	3,296	30,285	8.2%	0	0	0.0%
40	Misc. mfg. prods.	3,198	5,769	2.1%	5,100	20,901	5.2%	1,568	5,218	4.4%
All	Subtotal	11,444,093	21,829,469	2.3%	5,656,668	13,785,561	3.2%	1,417,279	2,274,620	1.7%

Source: Calculated based on FHWA FAF v5.6.1



Table F.11: FHWA FAF Rail Tons by SCTG, 2022 and 2050—Other

SCTG	Description	Outbound 2022	Outbound 2050	Outbound CAGR	Inbound 2022	Inbound 2050	Inbound CAGR	Intrastate 2022	Intrastate 2050	Intrastate CAGR
41	Waste/scrap	718,197	1,063,386	1.4%	799,490	672,364	-0.6%	342,043	412,362	0.7%
43	Mixed freight	12,605	21,902	2.0%	1,126	7,215	6.9%	0	0	0.0%
All	Subtotal	730,802	1,085,288	1.4%	800,616	679,579	-0.6%	342,043	412,362	0.7%

Source: Calculated based on FHWA FAF v5.6.1

Table F.12: FHWA FAF Rail Tons by SCTG, 2022 and 2050—Summary

Description	Outbound 2022	Outbound 2050	Outbound CAGR	Inbound 2022	Inbound 2050	Inbound CAGR	Intrastate 2022	Intrastate 2050	Intrastate CAGR
Agriculture	21,708,902	37,740,072	2.0%	8,642,982	11,024,617	0.9%	6,231,137	7,913,675	0.9%
Mining/Extraction	2,213,230	3,408,822	1.6%	13,239,566	6,841,699	-2.3%	1,835	2,910	1.7%
Manufacturing	11,444,093	21,829,469	2.3%	5,656,668	13,785,561	3.2%	1,417,279	2,274,620	1.7%
Other	730,802	1,085,288	1.4%	800,616	679,579	-0.6%	342,043	412,362	0.7%
Total	36,097,027	64,063,652	2.1%	28,339,832	32,331,457	0.5%	7,992,295	10,603,567	1.0%

Source: Calculated based on FHWA FAF v5.6.1





APPENDIX G

Economic Impact Analysis



Executive Summary

The economic impacts of rail transportation in Iowa in 2022 were estimated using economic impact multipliers from the IMPLAN modeling tool with input data and assumptions on the following.

- Freight movements, based on data derived from the U.S. Surface Transportation Board (STB) 2022 Waybill Sample data of shipments originating in Iowa as described in Chapter 4 of the Iowa State Rail Plan.
- Values of commodity shipments extracted from the Federal Highway Administration's (FHWA's) Freight Analysis Framework (FAF) data base for rail shipments originating in Iowa in 2022, converted to a value (2022 dollars) per ton.
- Rail transportation operations.

Impacts of the rail industry in Iowa considered in this analysis stem from organizations providing freight and passenger transport and tourism services, as well as industries using rail freight services to trade goods (i.e., shippers of goods or commodities).

Impacts were estimated and presented by activity (service provision and rail users), type (direct, indirect, induced, and total), and measure (employment, income, value added, and taxes) for 2022 to provide an extensive review of how rail operations in Iowa impact the State's economy. Table G.1 provides a summary of the economic impacts which include the following.

- **Output:** In terms of total revenue, the rail-related industries generated an estimated \$22.5 billion in output, nearly all of which was contributed by freight rail operations and services.
- **Employment:** Rail transportation supported over 28,900 jobs directly through the provision of rail transportation services (both freight and passenger) and facilitation of operation of rail transportation users. If multiplier effects (indirect and induced) are included as well, rail transportation industry supported 63,700 jobs.
- **Labor Income:** In total, the rail transportation industries supported \$6.1 billion in earnings for employees. These earnings include employee compensation and proprietary incomes.
- **Value Added:** The combined value-added impact of rail-related activity amounted to nearly \$10.2 billion, accounting for approximately 4.3% of Iowa's Gross Domestic Product (GDP) in 2022.¹
- **Tax:** Rail-related industries generated over \$669.8 million in government tax revenues, with the majority of these revenues attributable to freight rail operations and freight rail users.

Table G.1: Economic impacts of rail transportation in Iowa

Impact Metric	Type	Services: Freight	Services: Passenger	Users: Freight	Users: Passenger	Total: Freight	Total: Passenger	Total: All
Output (\$M)	Direct	\$2,745.4	\$10.3	\$12,142.8	\$10.9	\$14,888.2	\$21.1	\$14,909.4
	Total	\$3,841.0	\$14.4	\$18,667.6	\$20.2	\$22,508.6	\$34.6	\$22,543.2
Employment (Jobs)	Direct	2,938	11	25,875	107	28,813	118	28,931
	Total	8,566	32	54,938	164	63,504	196	63,700
Employment Income (\$M)	Direct	\$435.3	\$1.2	\$1,993.3	\$7.5	\$2,428.6	\$8.7	\$2,437.4
	Total	\$766.0	\$2.5	\$5,343.6	\$10.6	\$6,109.7	\$13.0	\$6,122.7
Value Added (\$M)	Direct	\$1,828.4	\$6.8	\$4,432.9	\$6.6	\$6,261.3	\$13.5	\$6,274.8
	Total	\$2,431.7	\$9.1	\$7,706.4	\$11.8	\$10,138.1	\$20.9	\$10,159.0
Taxes (\$M)	Direct	\$40.2	\$0.15	\$334.4	\$0.4	\$374.6	\$0.55	\$375.2
	Total	\$97.5	\$0.37	\$571.1	\$0.8	\$668.6	\$1.2	\$669.8

Note: All monetary values are in millions of 2022 dollars

Source: Calculated based on STB Waybill Sample Data for 2022, FHWA FAF v5.6.1, and IMPLAN Data



Introduction

Economic impacts of the rail transportation industry in Iowa assessed in this analysis stem from 1) railroads providing freight and passenger rail services, and 2) industries using such services to trade or transport goods (i.e., the shippers of goods or commodities) and tourism-related visitors to Iowa via rail. Of these activities, freight users generate the most significant impacts.

This section outlines the methodology of quantification of these impacts together with input data and results. The methodology represents an input-output approach that captures and quantifies the flow of goods and services (or expenditures) between various industries in the economy arising from technical requirements of one industry for inputs provided by another industry. These inter-industry requirements for input supplies and labor create rounds of expenditures and impacts that, when added throughout the economy, exceed the initial expenditure.

The analysis is implemented on the basis of Surface Transportation Board (STB) 2022 Waybill Sample data of shipments originating in Iowa and using the economic impact multipliers from the IMpact analysis for PLANing (IMPLAN) economic impact modeling tool.ⁱⁱ Shipments with destinations in Iowa are excluded from the analysis, as this would result in double counting of economic impacts, as the economic impact of any inputs received from other states would be captured through the output of final goods transported out of Iowa.

The remainder of this section is organized as follows.

- **Methodology, Data Sources, and Assumptions:** Highlights the methodology used for the economic impact analysis (EIA), as well as the assumptions and the various data sources used in the analysis.
- **Results:** Presents the results of the EIA.
- **Summary of Impacts:** Summarizes the findings from the EIA.

Methodology, Data Sources, and Assumptions

Key Concepts

Economic impact analysis (or assessment) is a type of conceptual analysis that identifies and quantifies the economic activity that is generated or can be attributed and linked to an investment project, government policies, events, etc. being evaluated. These projects, policies, or events have some underlying change in the stream of expenditures in an economy and lead to a change in the demand for goods and services. This has implications on the number of jobs and other measures of economic activity in the local, regional, and national economy.

Traditionally, economic impact analysis involves the estimation of three distinct types of economic activity, commonly referred to as direct impacts, indirect impacts, and induced impacts. These impacts are attributable to an initial stream of incremental capital or operating expenditures and are defined as follows.

- **Direct impacts** refer to the initial economic effects occurring as the result of capital or operating expenditures directly related to the project, policy, or event being evaluated. Direct spending results in the employment of workers, business output, and sales of locally produced goods or services.
 - **Indirect impacts** refer to the “spin-off” economic activities that result from purchases of production inputs, goods, and services by businesses that are impacted by the initial expenditures. The spending by the supplier firms on their labor, production inputs, and goods and services that they require creates output of other firms further down the production chain, bringing about additional business output, employment, and earnings. The sum of these effects across the supply chain is the indirect impact.
 - **Induced impacts** represent the increase in business output, employment, and earnings over and above the direct and indirect impacts, generated by re-spending of employment income derived from the direct and indirect employment. Induced impacts are thus changes in economic activity that are the result of personal (household) spending for goods and services by employees comprising the direct and indirect impacts.
 - **Total economic impact** is the sum of the direct, indirect, and induced impacts for the activity being evaluated.
- Each of the direct, indirect, and induced impacts is estimated in terms of the following various measures of economic activity.
- **Output:** Is the total gross value of all business revenue. Output represents the total sum of all economic activity that has taken place in connection with it. This is the broadest measure of economic activity.
 - **Employment:** The number of incremental jobs created as a result of all expenditures related to the activities evaluated.ⁱⁱⁱ
 - **Labor Income:** The additional earnings that would be paid to jobs/employees. These earnings include employee compensation and proprietary incomes. Specifically, employee compensation includes wages or salary payments, employee benefits, and employer paid payroll taxes. Meanwhile, proprietary incomes consist of payments received by self-employed individuals and unincorporated business owners.
 - **Value Added:** The value added represents the unduplicated measure of the total value of economic activity. This is also sometimes referred to as the gross domestic product (GDP), the “value added” to the economy, or the value of output minus the value of purchased goods and services used in the production process.
 - **Taxes:** The government tax revenue generated from the taxes on products associated with direct, indirect, and induced economic activities.



Indirect and induced impacts are often referred to as “multiplier effects,” since they increase the overall economic impacts of the original expenditure that initiated the rounds of spending and effects described above.

The analysis is made operational via an input-output methodology and multipliers that capture and quantify the flow of goods and services between various industries in an economy arising from technical requirements of one industry for inputs produced by another industry (supply-purchase relationships).

Aggregate measures of the requirements of one industry from all other industries (per \$1 of output) represent indirect multipliers. Own industry requirements for labor and operational profile (wages and salaries paid, use of production inputs) represent direct multipliers. Indirect multipliers can be used to estimate indirect impacts, and direct multipliers can be used to estimate direct effects (or its missing components, e.g., employment from given expenditure amount). Induced impacts are estimated based on profile of consumer expenditures on goods and services, and the aggregate results of re-spending of labor income represent the induced multipliers which can be used in a similar way as indirect multipliers and direct multipliers.

Economic impacts of transportation include both impacts of transportation services and the choice of rail transportation made by users of these services themselves. That is, Iowa economic impacts stemming from rail transportation are categorized into services provision and user impacts. Rail transportation services would be curtailed in the absence of rail activity (elimination of goods or passenger movements). Transportation user aspect focuses on the impacts pertaining to industries using freight rail to transport goods. The nature of these impacts include the following.

- **Transportation Service Providers:** Impacts associated with the provision of rail transportation include a wide range of primarily modal transport activity, but also may include other support and administrative operations. In particular, these impacts reflect freight and passenger railroad operations.
- **Transportation Users (Freight Users):** Impacts associated with shippers of freight and the industries that supply goods and services to them. Specifically, this reflects the impacts associated with shippers using freight rail for goods movement, except for the rail industry itself. Rail users have several options available to transport freight and could substitute this service with other modes, such as truck or barge, if rail services were unavailable. However, the choice to use rail service to ship freight indicates cost and/or logistical advantages in a competitive marketplace. Loss of rail service could negatively affect its current users. In this sense, rail contributes to the vitality of the state economy and supports jobs and economic activity of its users involved in the production of goods shipped.

This analysis focuses on the impacts to shippers as captured by outbound freight that originated within Iowa. Although freight receivers may also benefit by being able to obtain their orders by rail at a lower cost, including many production inputs and supplies, this impact is difficult to quantify without a risk of overstating the impact. For example, the receivers of production supplies may then themselves ship final goods they produce by rail as well. The economic activity and contribution to the state economy corresponding to the production of those final goods will be accounted for under outbound freight. Including impact due to being able to obtain production supplies by rail as well carries a high risk of double counting as those supplies may be used to produce the goods already captured under the outbound freight.

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

The above analysis is implemented and estimated using economic impact multipliers from IMPLAN. These multipliers are widely used in economic impact modeling to forecast the effect of a given change in the economy's activity on the local, regional, and national economy.

The activity is specified in terms of incremental expenditures related to the activity, such as revenue of the industry that receives orders of its goods and services, or the number of workers that will be required to complete the order. The multipliers are then applied to incremental revenues (or jobs) for each of the metrics discussed previously to calculate direct, indirect, and induced impacts, all in terms of business output, jobs, employment income, value-added, and taxes. The approach is based on classic input-output modeling principles. This analysis used the statewide multipliers for Iowa.

Estimation of economic impacts with IMPLAN multipliers involved the following key steps.

- **Step 1:** Identify the streams of revenues directly related to the activity being analyzed (i.e., freight shippers' sales by commodity) and classify them into industrial sectors.
- **Step 2:** Identify IMPLAN industries that most closely correspond to the industrial sectors of revenues listed in Step 1, based on the type and nature of commodities involved.
- **Step 3:** Compile multipliers by identified industries, match with streams of revenues, and code all direct, indirect, and induced impacts.
- **Step 4:** Run model simulations and analyze results.

The specific data and methodological assumptions used develop the streams of expenditures generating economic impacts are discussed in the next section.



Data and Assumptions

Rail Service Provision

Estimation of economic impacts of passenger rail services in Iowa are based on information on direct industry employment. Per Amtrak’s fiscal year 2023 fact sheet outlining its contribution to Iowa’s economy, Amtrak employed 11 Iowa residents in 2023.^{iv}

With respect to passenger visitor expenditures, out-of-state visitor expenditures reflect Amtrak and tourist rail passengers arriving in Iowa (similarly, from Amtrak’s fact sheets and tourist rail websites). This information is combined with the Iowa Economic Development Authority’s Tourism Office’s visitor profile to estimate the share of rail visitors and average visitor spending.^v Assumptions used in the estimation of passenger rail visitor expenditures for Amtrak and the Boone & Scenic Valley Railroad are presented in Table G.2. According to Amtrak’s fact sheet, in 2016, 16,000 tourists visited Iowa via Amtrak services. Per Iowa’s Tourism Office, the average visit duration is 3.6 days, with visitors spending an average of \$131 (2022\$) per day, resulting in an estimated total Amtrak visitor expenditure of \$7.6 million.

Meanwhile, the economic impacts of freight rail services were estimated based on railroad revenues provided in the STB 2022 Waybill Sample data for each record together with other shipment details, such as weight, number of carloads, and commodity classification.

To align this analysis with the scope of impacts to transportation users, the focus is on impacts due to outbound and intrastate shipping and corresponding railroad revenues. It is recognized that some of this revenue would likely accrue to destination states, rather, than Iowa. However, railroad revenues in Iowa, and thus economic impacts, may also accrue via services provided to inbound and through shipments. Overall, given the tonnage of inbound and through shipments, economic impacts based on railroad revenues from outbound and intrastate shipping are likely to represent a conservative estimate of impacts.

Table G.2: Passenger rail visitor expenditures

Annual Passengers			
Metric	Amtrak	Boone & Scenic Valley	Total
Total Movements	33,725	50,000	83,725

Visitors (Out of State)			
Metric	Amtrak	Boone & Scenic Valley	Total
Percent	47%	50%	N/A
Visitors	16,000	25,000	41,000
Expenditures/ Day	\$131.40	\$131.40	N/A
Days/Visit	3.6	1.0	N/A
Visitor Expenditures	\$7,570,132	\$3,285,648	\$10,855,780

Note: All monetary values are in 2022 dollars

Source: Amtrak, BSV, IEDA

Freight Movements

The STB 2022 Waybill Sample data of rail shipments originating in Iowa described in Chapter 4 provided the volume of shipments of goods originating in Iowa. Meanwhile, FAF data was leveraged to extract values of shipments by rail that originate in Iowa in millions of 2022 dollars. The total shipment values were converted to average commodity value, by commodity, in terms of value per ton in 2022 dollars. These were then matched to commodity categories in the STB 2022 Waybill Sample data.

Multiplying the tonnage of shipments from the Waybill data by the average value of goods provided the total value of commodities shipped from an Iowa origin. As mentioned in the previous section, this is interpreted as shippers' revenue, or the value of production supported (facilitated or made more competitive) by the presence of rail transportation. The employment and income related to these shipments are interpreted as the economic impacts related to rail.

It is noted that in practice many shipments may represent movements of goods from warehousing and distribution centers, rather than manufacturing establishments directly. In particular, the analysis of 2017 Commodity Flow Survey data reveals that, by value, 39.2% of shipments are shipped by manufacturing industries, and about 54.9% are shipped by wholesale trade and warehousing and storage industries.^{vi} Based on this analysis, 54.9% of all commodity shipments by value were assigned to wholesale trade and the remaining share were assigned to the various industries that produce a given commodity. Revenue of the warehousing industry was estimated using an assumption for the wholesale margin which was applied to the value of the goods handled. The wholesale margin was sourced from the 2017 U.S. Census, which indicated that the margins for wholesalers are approximately 27.5%^{vii}, and the total value was allocated to wholesale trade.

As shown in Table G.3, the top 12 volume of goods shipped from Iowa origins amount to just over 66.1 million tons, which reflects approximately 99.9% of the total volume of goods shipped from Iowa and have a total value of \$24.6 billion. The table also indicates that the top three shipments, in terms of tonnage, were Food or Kindred Products (37.3% of total tonnage), followed by Chemicals or Allied Products (25.7% of total tonnage), and Farm Products (20.4% of total tonnage). Meanwhile, in terms of value, the top three shipments were Chemicals or Allied Products (\$6.1 billion), Misc. Mixed Shipments (\$3.9 billion), and Food or Kindred Products (\$2.1 billion).



Table G.3: Freight shipments assessed in the economic impact analysis

Commodity Group	Outbound and Intrastate Volumes (tons)	Commodity Value (\$/ton)	Shipment Value (\$M)	Value Allocated to Whole Trade (\$M)	Value Allocated to IMPLAN Industries (\$M)
Food or Kindred Products	24,689,434	\$158.5	\$3,912.3	\$2,149.3	\$1,762.9
Chemicals or Allied Products	17,032,643	\$648.1	\$11,038.7	\$6,064.5	\$4,974.2
Farm Products	13,475,638	\$143.0	\$1,927.5	\$1,058.9	\$868.6
Coal	4,776,225	\$239.4	\$1,143.2	\$1,143.2	\$0.0
Nonmetallic Minerals	2,848,439	\$143.6	\$409.0	\$224.7	\$184.3
Clay, Concrete, Glass, or Stone	903,734	\$37.8	\$34.1	\$18.8	\$15.4
Primary Metal Products	683,210	\$355.9	\$243.1	\$133.6	\$109.6
Petroleum or Coal Products	203,000	\$409.6	\$83.2	\$45.7	\$37.5
Transportation Equipment	192,709	\$6,190.9	\$1,193.0	\$655.4	\$537.6
Pulp, Paper or Allied Products	189,780	\$1,794.9	\$340.6	\$187.1	\$153.5
Misc Mixed Shipments	1,077,288	\$520.9	\$3,927.3	\$2,157.6	\$1,769.7
Machinery	71,070	\$3,822.1	\$271.6	\$149.2	\$122.4
Remaining Commodities	10,760	\$3,066.7	\$33.0	\$18.1	\$14.9
Total	66,153,930	\$17,531	\$24,557	\$14,006	\$10,550

Note: All monetary values are in 2022 dollars

Source: U.S. Census Bureau; Calculated based on STB Waybill Sample Data for 2022, FHWA FAF v5.6.1, and IMPLAN Data

Results

Rail Transportation Service Impacts

Table G.4 presents the economic impact of rail transportation services in Iowa in 2022. The rail transportation services industry in Iowa supported just under 8,600 jobs, which were comprised of 32 passenger rail related jobs and 8,566 freight transportation related jobs. The indirect and induced effects in other related industries, due to spending on rail operations, supported 5,649 of these jobs (3,086 indirect jobs and 2,563 induced jobs) throughout the state. Combined, in 2022 the provision of freight and passenger rail services supported an estimated 8,598 jobs. Other industry impacts included the following.

- \$3.9 billion in total output
- \$0.8 billion in total labor income
- \$2.4 billion in total value added
- \$97.9 million in total tax revenues

Table G.4: Economic impact of rail transportation service, 2022

Note: All monetary values are in millions of 2022 dollars.

Output

Impact Metric	Freight	Passenger	Total
Direct	\$2,745.4	\$10.3	\$2,755.7
Indirect	\$663.5	\$2.5	\$666.0
Induced	\$432.1	\$1.6	\$433.7
Total	\$3,841.0	\$14.4	\$3,855.4

Employment (Jobs)

Impact Metric	Freight	Passenger	Total
Direct	2,938	11	2,949
Indirect	3,075	12	3,086
Induced	2,553	10	2,563
Total	8,566	32	8,598

Employment Income (\$M)

Impact Metric	Freight	Passenger	Total
Direct	\$435.3	\$1.2	\$436.6
Indirect	\$203.2	\$0.8	\$203.9
Induced	\$127.5	\$0.5	\$128.0
Total	\$766.0	\$2.5	\$768.5

Value Added (\$M)

Impact Metric	Freight	Passenger	Total
Direct	\$1,828.4	\$6.8	\$1,835.2
Indirect	\$356.4	\$1.3	\$357.7
Induced	\$246.9	\$0.9	\$247.8
Total	\$2,431.7	\$9.1	\$2,440.8

Taxes (\$M)

Impact Metric	Freight	Passenger	Total
Direct	\$40.2	\$0.2	\$40.3
Indirect	\$36.5	\$0.1	\$36.6
Induced	\$20.9	\$0.1	\$20.9
Total	\$97.5	\$0.4	\$97.9

Source: Calculated based on STB Waybill Sample Data for 2022, FHWA FAF v5.6.1, and IMPLAN Data



Table G.5: Economic impact of rail transportation users, 2022

Note: All monetary values are in millions of 2022 dollars.

Rail Transportation Users Impacts

Table G.5 presents the impacts of rail transportation users in Iowa in 2022. Through their economic activities, rail users directly supported 25,982 jobs, and a total of over 55,102 jobs when indirect and induced employment is considered. Other industry impacts included the following.

- \$18.7 billion in total output
- \$5.4 billion in total employment income
- \$7.7 billion in total value added
- \$0.6 billion in total tax revenues based on the services and products

Output

Impact Metric	Freight	Passenger	Total
Direct	\$12,142.8	\$10.9	\$12,153.7
Indirect	\$4,391.3	\$3.4	\$4,394.7
Induced	\$2,133.5	\$6.0	\$2,139.5
Total	\$18,667.6	\$20.2	\$18,687.8

Employment (Jobs)

Impact Metric	Freight	Passenger	Total
Direct	25,875	107	25,982
Indirect	16,394	22	16,416
Induced	12,669	35	12,704
Total	54,938	164	55,102

Employment Income (\$M)

Impact Metric	Freight	Passenger	Total
Direct	\$1,993.3	\$7.5	\$2,000.8
Indirect	\$2,153.0	\$1.3	\$2,154.3
Induced	\$1,197.4	\$1.8	\$1,199.1
Total	\$5,343.6	\$10.6	\$5,354.2

Value Added (\$M)

Impact Metric	Freight	Passenger	Total
Direct	\$4,432.9	\$6.6	\$4,439.5
Indirect	\$2,051.9	\$1.8	\$2,053.7
Induced	\$1,221.5	\$3.4	\$1,224.9
Total	\$7,706.4	\$11.8	\$7,718.2

Taxes (\$M)

Impact Metric	Freight	Passenger	Total
Direct	\$334.4	\$0.4	\$334.8
Indirect	\$134.8	\$0.1	\$134.9
Induced	\$101.8	\$0.3	\$102.1
Total	\$571.1	\$0.8	\$571.9

Source: Calculated based on STB Waybill Sample Data for 2022, FHWA FAF v5.6.1, and IMPLAN Data

Summary of Impacts

Total Rail Activity Impacts

Table G.6 provides a summary of the total rail-related impacts in Iowa in 2022. Accounting for both rail transportation users and rail transportation services, the rail industry supported over 63,700 jobs and \$6.1 billion in employment income in Iowa. Moreover, the rail-related impacts generated \$22.5 billion in output, \$10.2 billion in value-added to the state, and \$0.7 billion in tax revenue.

Table G.6: Total rail transportation impacts, 2022

Note: All monetary values are in millions of 2022 dollars.

Output

Impact Metric	Freight	Passenger	Total
Direct	\$12,153.7	\$2,755.7	\$14,909.4
Indirect	\$4,394.7	\$666.0	\$5,060.7
Induced	\$2,139.5	\$433.7	\$2,573.2
Total	\$18,687.8	\$3,855.4	\$22,543.2

Employment (Jobs)

Impact Metric	Freight	Passenger	Total
Direct	25,982	2,949	28,931
Indirect	16,416	3,086	19,502
Induced	12,704	2,563	15,267
Total	55,102	8,598	63,700

Employment Income (\$M)

Impact Metric	Freight	Passenger	Total
Direct	\$2,000.8	\$436.6	\$2,437.4
Indirect	\$2,154.3	\$203.9	\$2,358.2
Induced	\$1,199.1	\$128.0	\$1,327.1
Total	\$5,354.2	\$768.5	\$6,122.7

Value Added (\$M)

Impact Metric	Freight	Passenger	Total
Direct	\$4,439.5	\$1,835.2	\$6,274.8
Indirect	\$2,053.7	\$357.7	\$2,411.5
Induced	\$1,224.9	\$247.8	\$1,472.8
Total	\$7,718.2	\$2,440.8	\$10,159.0

Taxes (\$M)

Impact Metric	Freight	Passenger	Total
Direct	\$334.8	\$40.3	\$375.2
Indirect	\$134.9	\$36.6	\$171.6
Induced	\$102.1	\$20.9	\$123.1
Total	\$571.9	\$97.9	\$669.8

Source: Calculated based on STB Waybill Sample Data for 2022, FHWA FAF v5.6.1, and IMPLAN Data



Impacts as a Percentage of the Total Economy

To present the economic contribution of the rail industry in Iowa, the estimated impacts were compared with the corresponding economic statistics for the entire state. The comparison of the data points is presented in Table G.7. The results indicate that the rail industry in Iowa accounted for about 3.8% to 6.7% of the state’s economy^{viii}, depending on the reference measure.

Table G.7: Iowa and rail-related economic measures, 2022

Measure of Economic Activity	Overall State Level	Rail Industry Related Activity	Share of Rail Related Activity
Employment	1,658,607	63,700	3.8%
Employment Income	\$91,335.3	\$6,122.7	6.7%
Value Added (GDP)	\$238,342.3	\$10,159.0	4.3%

Note: All monetary values are in millions of 2022 dollars.

Source: U.S. Census Bureau; Calculated based on STB Waybill Sample Data for 2022, FHWA FAF v5.6.1, and IMPLAN Data

Appendix Endnotes

ⁱ Based on a GDP of \$238,342.3 million for Iowa in 2022. U.S. Bureau of Economic Analysis, Gross Domestic Product: All Industry Total in Iowa [IANGSP], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/IANGSP>, September 19, 2024.

ⁱⁱ IMPLAN (Impact analysis for PLANning) is an economic impact modeling tool used for forecasting the effect of a given economic activity on the local, regional, and national economy. The activity is specified in terms of incremental expenditures related to the activity (e.g., revenue of the industry that receives the orders for its goods and services, or number of workers that will be required to complete the order). The model is based on classic input-output modeling approaches combined with social accounting matrices and multiplier. IMPLAN has datasets for the geography analyzed, which may include the entire United States, a state, a county, a zip code area, or a combination of these areas, depending on the specific project and desired geographic area of impact assessment.

ⁱⁱⁱ In economic impact analysis, employment impacts are typically estimated terms of job-years which expresses the number of jobs created multiplied by the length of time, in years, for which they would last. Example: 1 job-year is 1 job created for 1 year. For simplicity, we refer here to these impacts as employment, or jobs. They include both full time jobs and part-time jobs.

^{iv} Amtrak, Iowa. Amtrak’s Contributions to Iowa, 2023.

^v Iowa Economic Development Authority, Tourism Office. Iowa Welcome Center Survey Report. 2015. [2015_WC_Survey_Report_2_26_16_FINAL.pdf \(traveliowa.com\)](https://www.traveliowa.com/2015-WC-Survey-Report-2-26-16-FINAL.pdf)

^{vi} Calculated based on United States 2017 Economic Census: Transportation, Table A7a.

^{vii} Based on data from: U.S. Census Bureau. "Wholesale Trade: Gross Margin and its Components for Merchant Wholesalers for the U.S.: 2017." Economic Census, ECN Sector Statistics Wholesale Trade: Gross Margin and its Components for Merchant Wholesalers for the U.S., Table EC1742MARGIN, 2017, <https://data.census.gov/table/ECNMARGIN2017.EC1742MARGIN?q=EC1742MARGIN>. Accessed on September 15, 2024.

^{viii} Employment for Iowa in 2022 were obtained from the U.S. Census Bureau’s 2022. Total employment income in Iowa in 2022 was obtained from the U.S. Bureau of Economic Analysis Total Wages and Salaries in Iowa [IAWTOT], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/IAWTOT>, September 23, 2024. The value added / GDP from Iowa in 2022 were obtained from the U.S. Bureau of Economic Analysis, Gross Domestic Product: All Industry Total in Iowa [IANGSP], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/IANGSP>, September 23, 2024