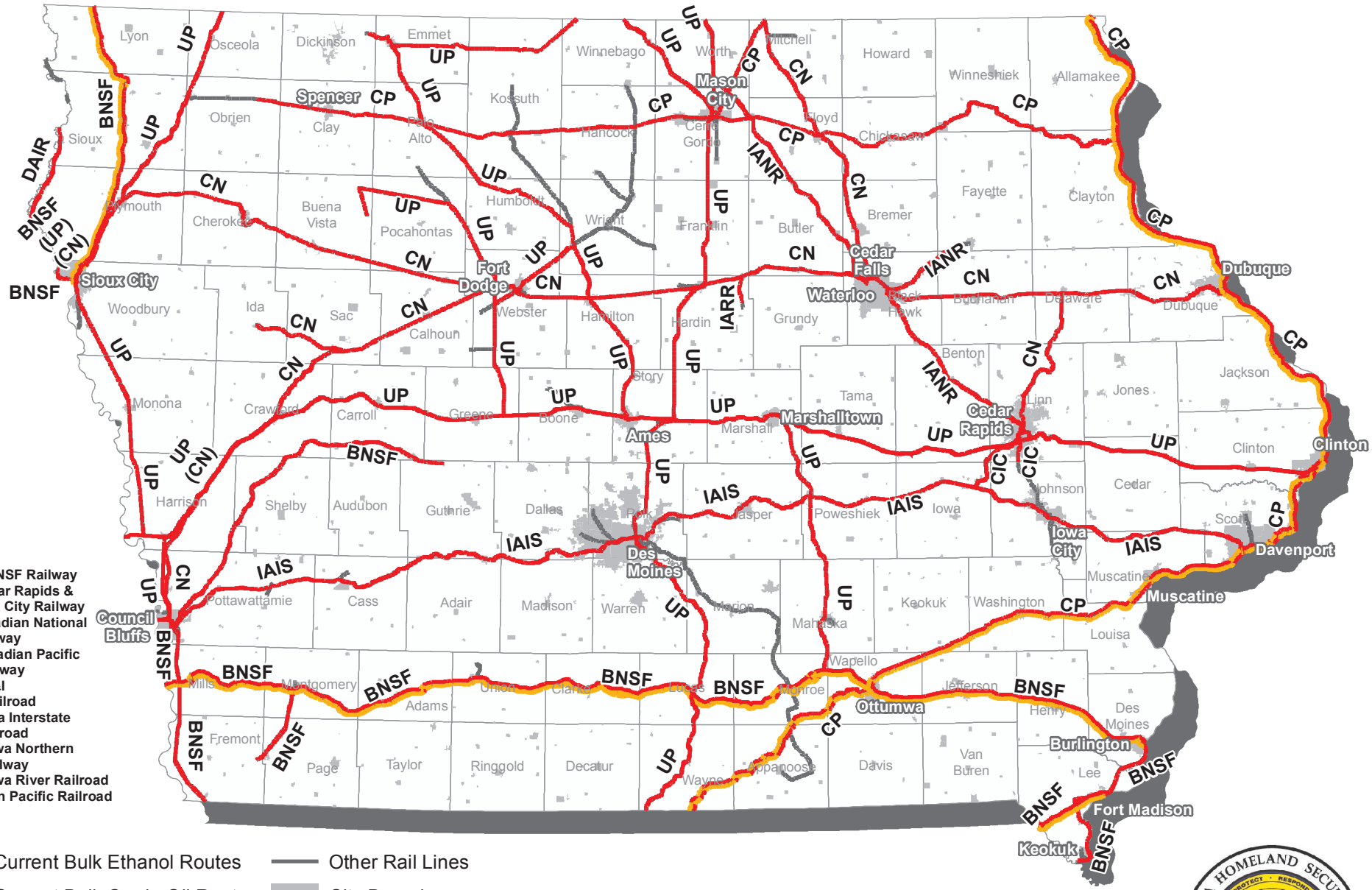
9.0 Appendix I - Maps

IOWA ETHANOL AND CRUDE OIL RAIL ROUTES



KEY

BNSF - BNSF Railway
CIC - Cedar Rapids & Iowa City Railway
CN - Canadian National Railway
CP - Canadian Pacific Railway
DAIR - D&I Railroad
IAIS - Iowa Interstate Railroad
IANR - Iowa Northern Railway
IARR - Iowa River Railroad
UP - Union Pacific Railroad

LEGEND

- Current Bulk Ethanol Routes
- Current Bulk Crude Oil Routes
- Other Rail Lines
- City Boundary
- County Boundary

0 Miles 40

IOWA HOMELAND SECURITY AND EMERGENCY MANAGEMENT

IOWADOT

HDR

PATH: Z:\PROJECTS\IDOT\263221_IADOT_CRUDE_BIOFUEL_TRANS_STUDY\MAP_DOCS\FINAL\FIG_8X11_ETHANOL_CRUDE_OIL_ROUTES_V2.MXD - USER: TTALBITZ - DATE: 1/27/2016

IOWA

Biodiesel Ethanol Map

Prepared by

IOWADOT

Phone (515) 239 - 1664

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

Miles 0 10 20 30 40 50

Kilometers 0 10 20 30 40 50

N W E S

Iowa Plants for Biodiesel and Ethanol

- Under Construction
- In Operation
- 30 Annual Capacity in Millions of Gallons 65

Iowa Road Network

- Interstates
- Designated Routes
- Pending Routes

Railroad Operators

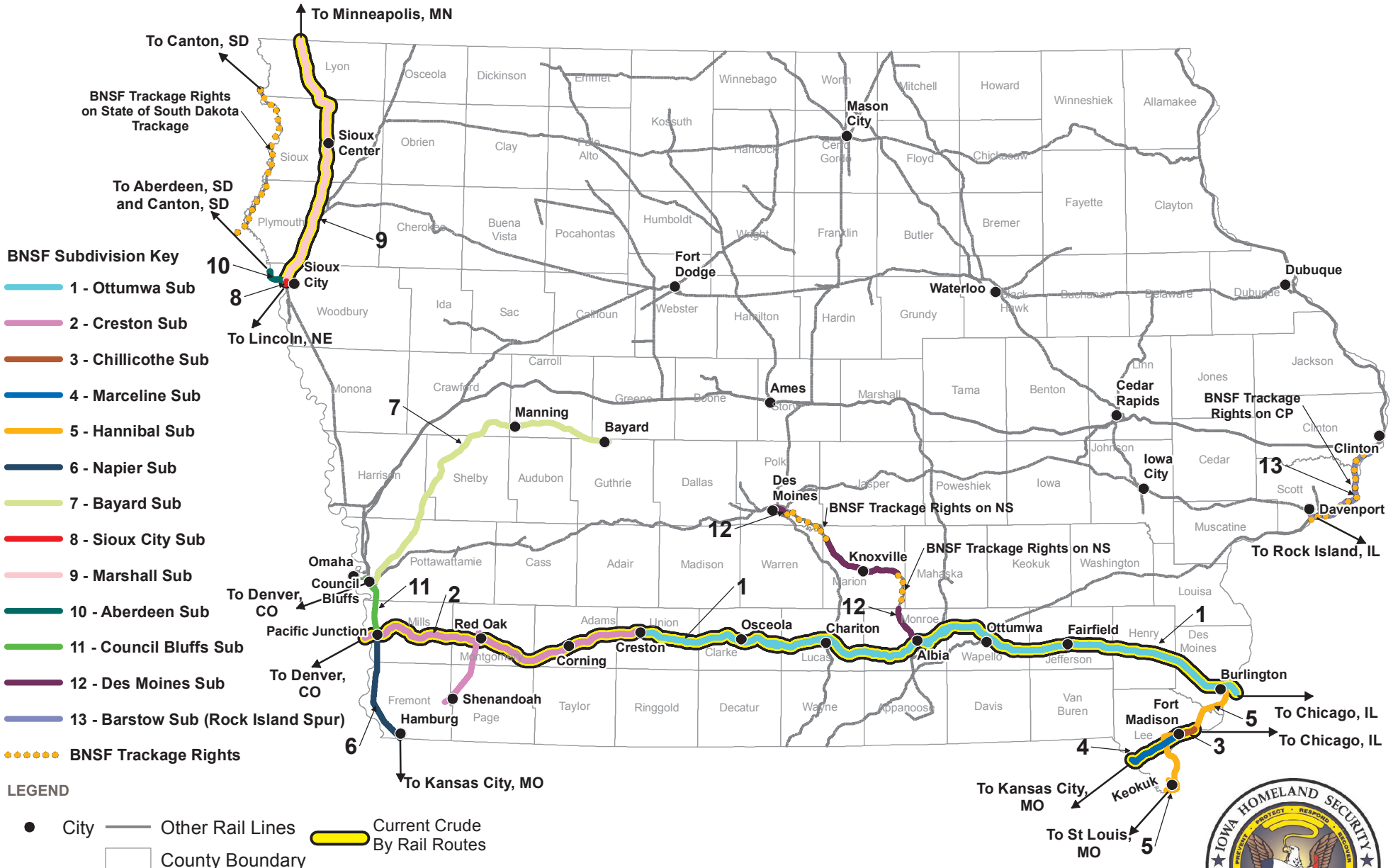
Amtrak	AMTK
Appanoose County Community R.R. Co.	APNC
Boone Scenic Valley R.R.	BSV
Burlington Junction Ry. Co.	BJRY
BNSF Railway Co.	BNSF
Cedar Rapids and Iowa City Ry. Co.	CIC
Cedar River Railroad Co.	CEDR
Chicago, Central & Pacific Railroad	CC
D & I Railroad Co.	DAIR
Dakota, Minnesota and Eastern R.R.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

Railroad Owners Non-Operators

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

8-24-2015

BNSF NETWORK SUBDIVISIONS CURRENTLY CARRYING BULK CRUDE OIL IN IOWA



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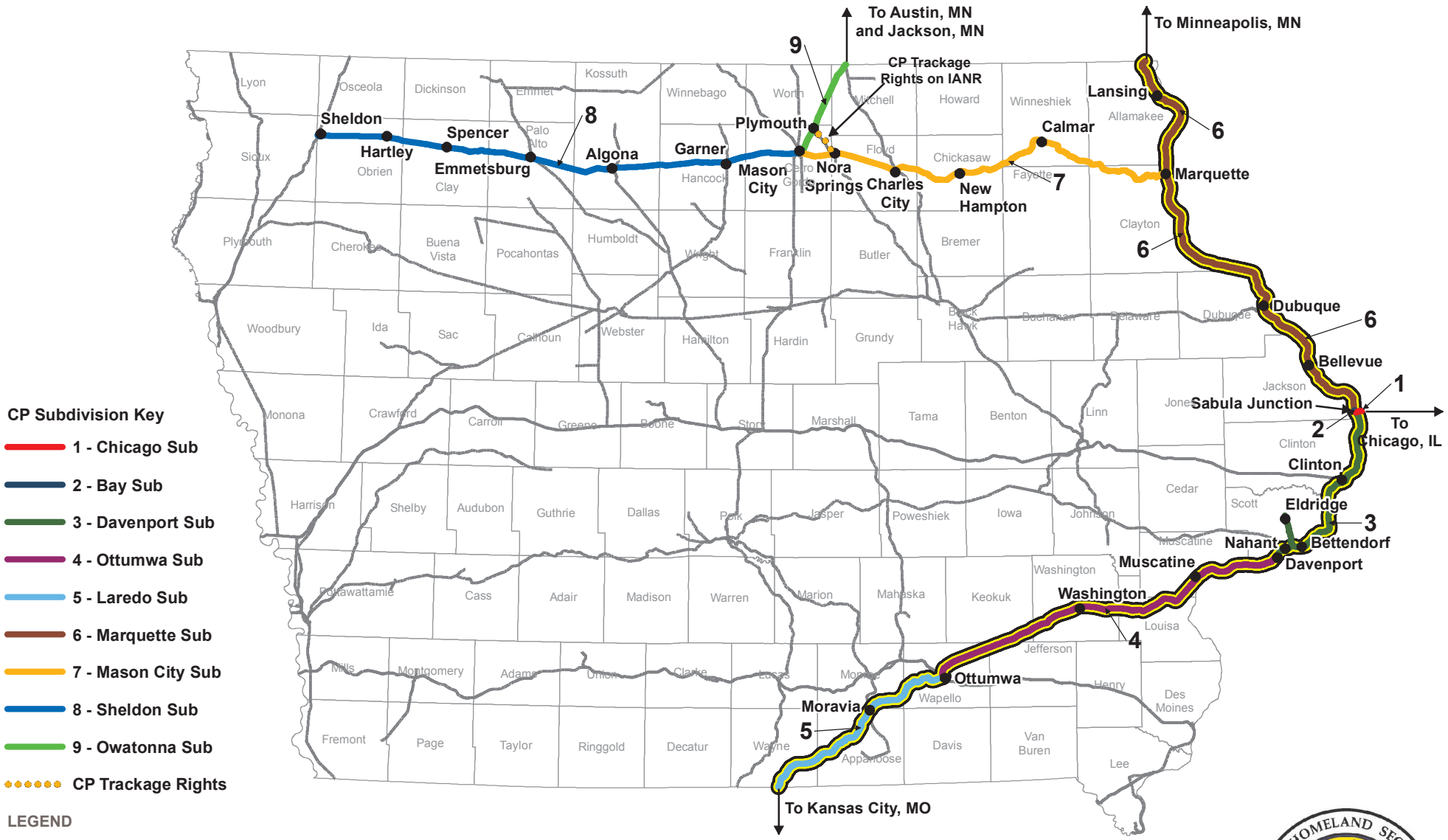
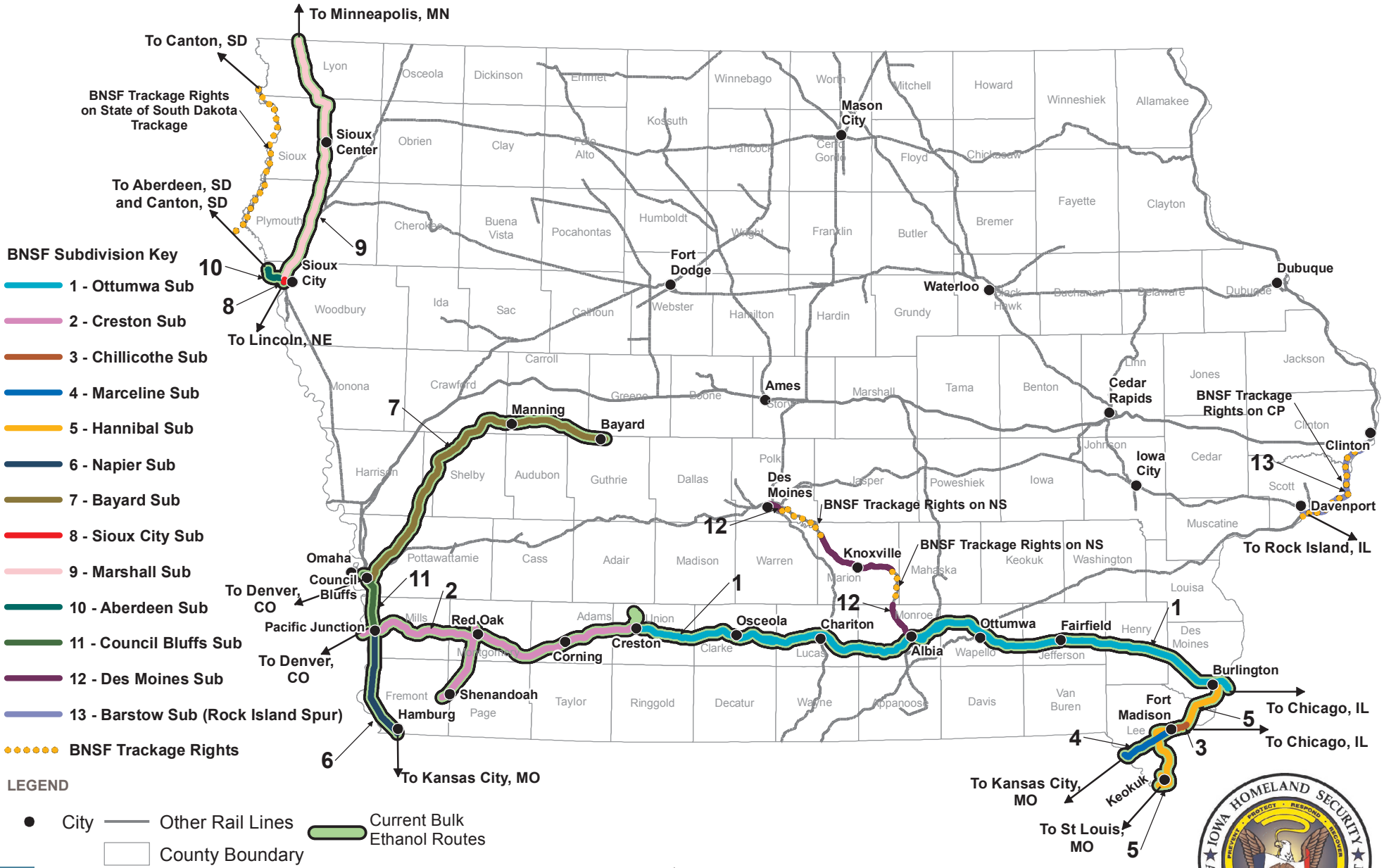
CANADIAN PACIFIC NETWORK SUBDIVISIONS CURRENTLY CARRYING BULK CRUDE OIL IN IOWA



BNSF NETWORK SUBDIVISIONS CURRENTLY CARRYING BULK ETHANOL IN IOWA



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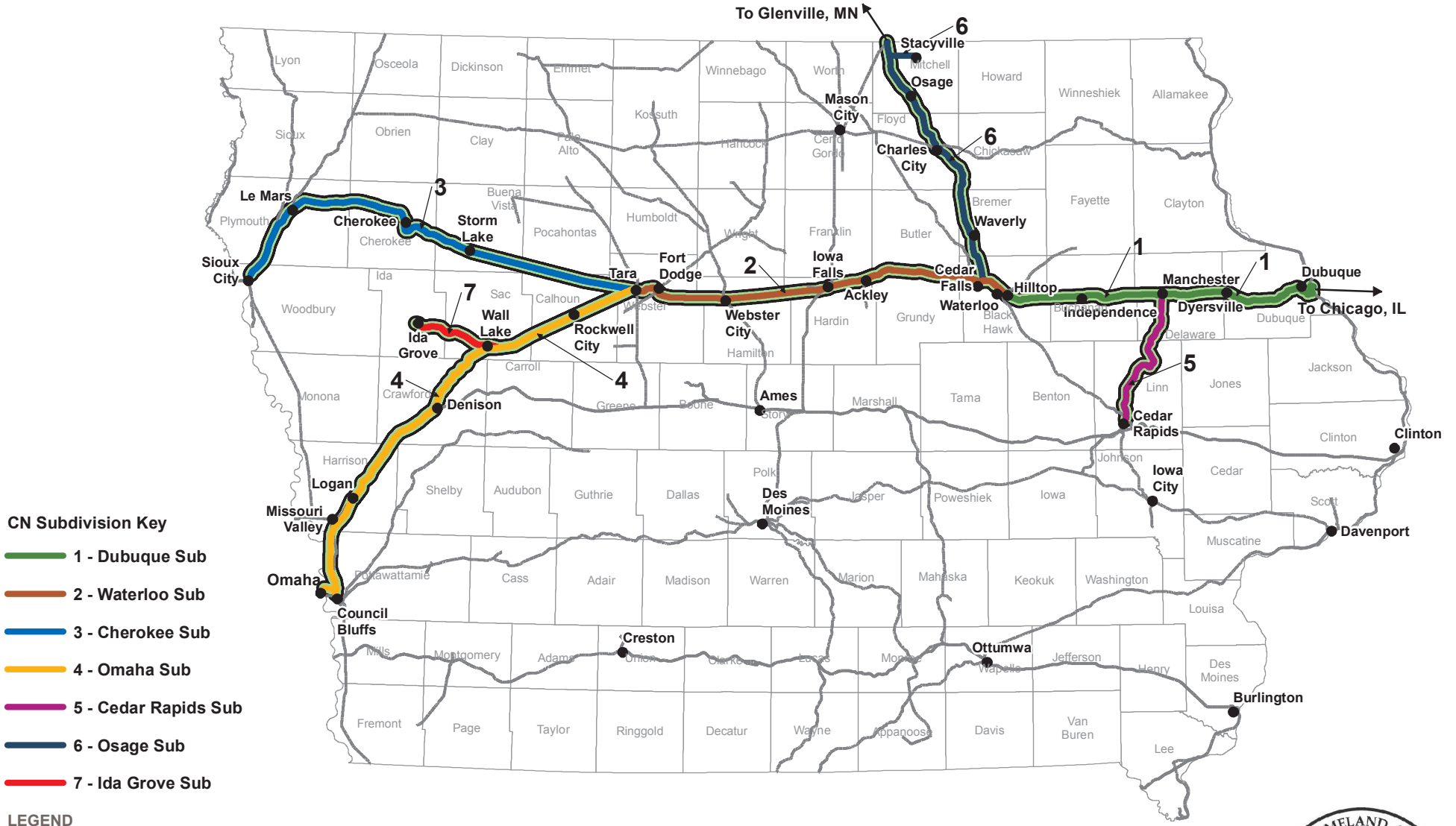
CANADIAN NATIONAL NETWORK SUBDIVISIONS CURRENTLY CARRYING BULK ETHANOL IN IOWA



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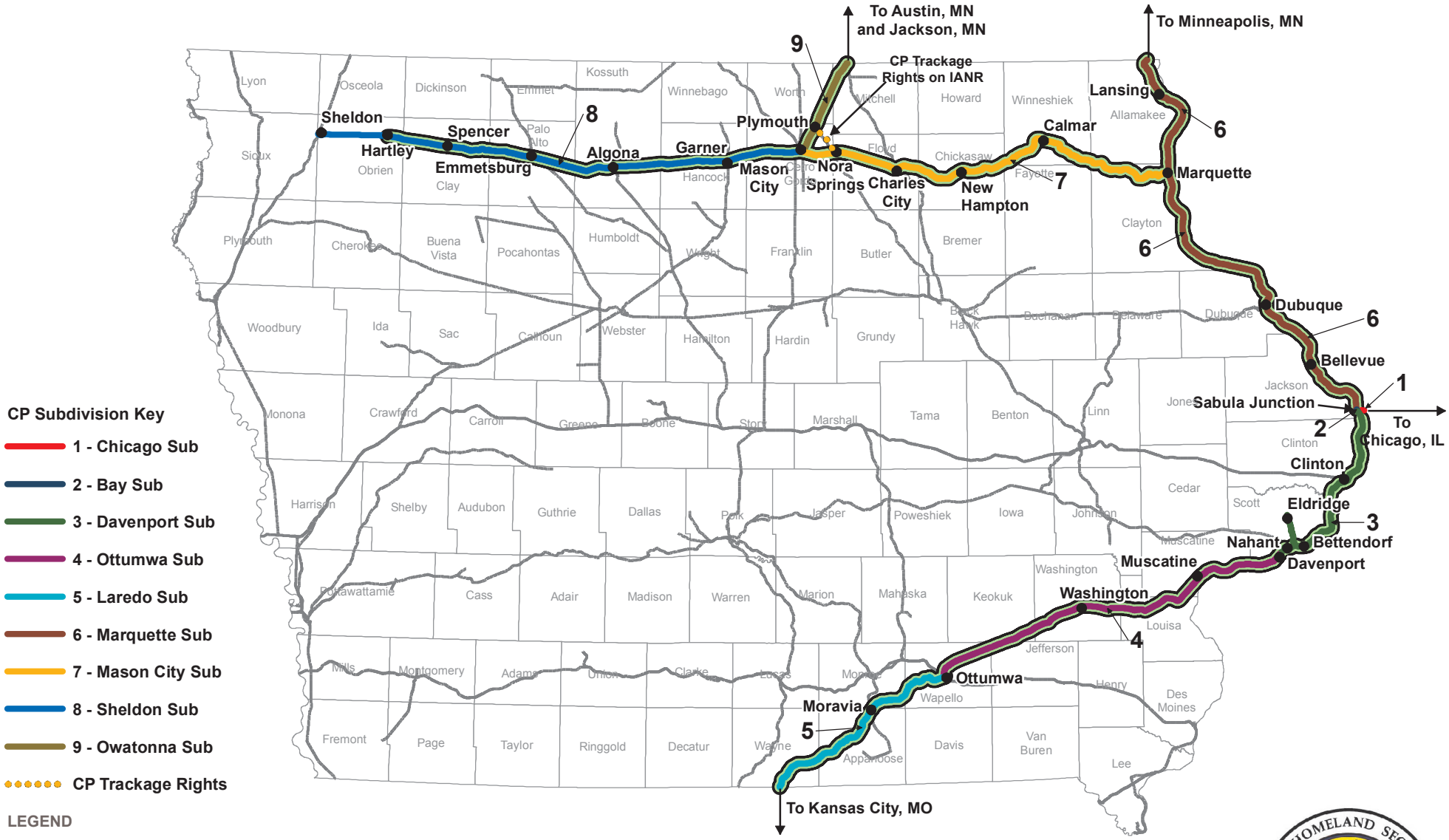
CANADIAN PACIFIC NETWORK SUBDIVISIONS CURRENTLY CARRYING BULK ETHANOL IN IOWA



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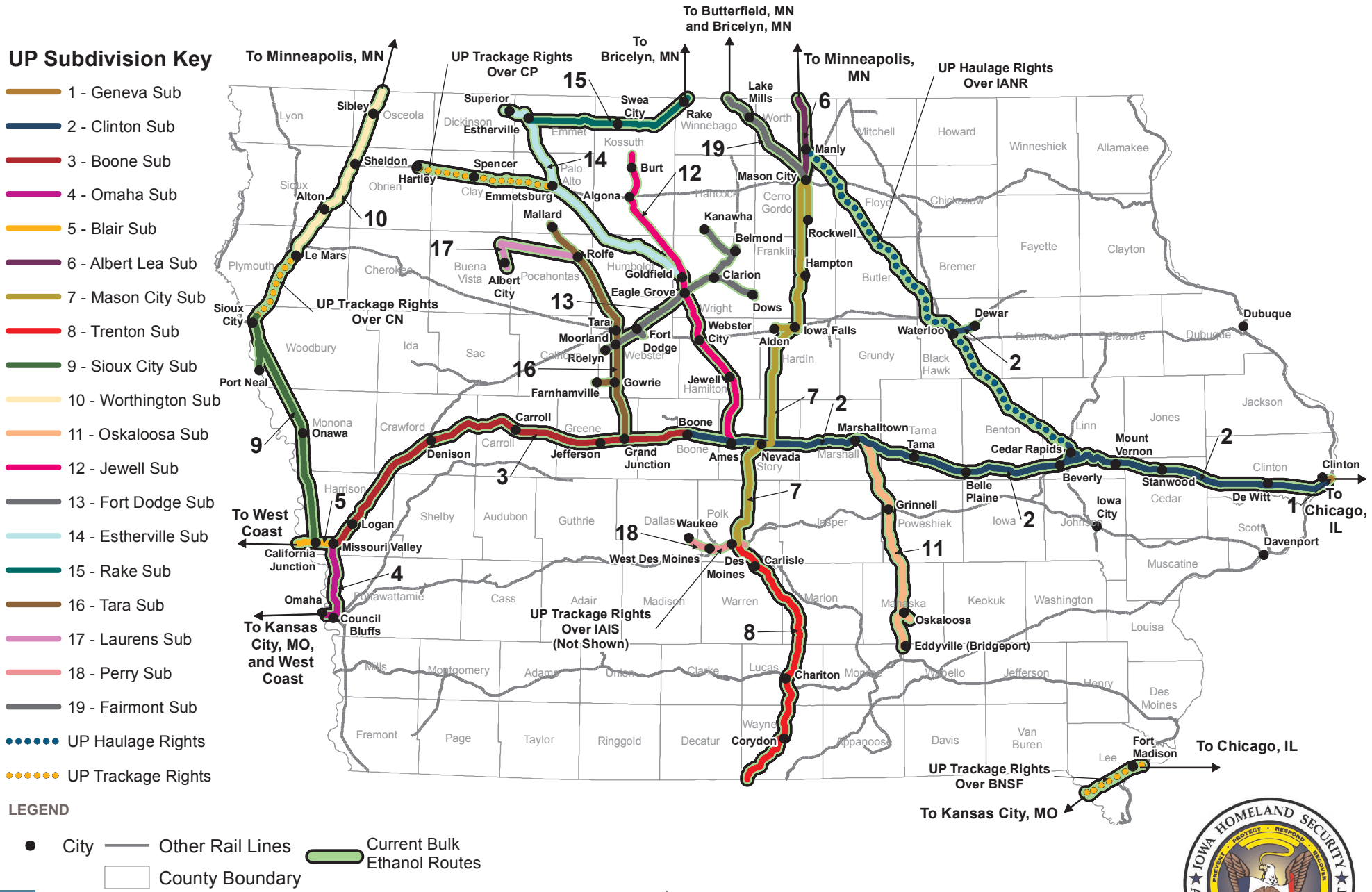
UNION PACIFIC NETWORK SUBDIVISIONS CURRENTLY CARRYING BULK ETHANOL IN IOWA



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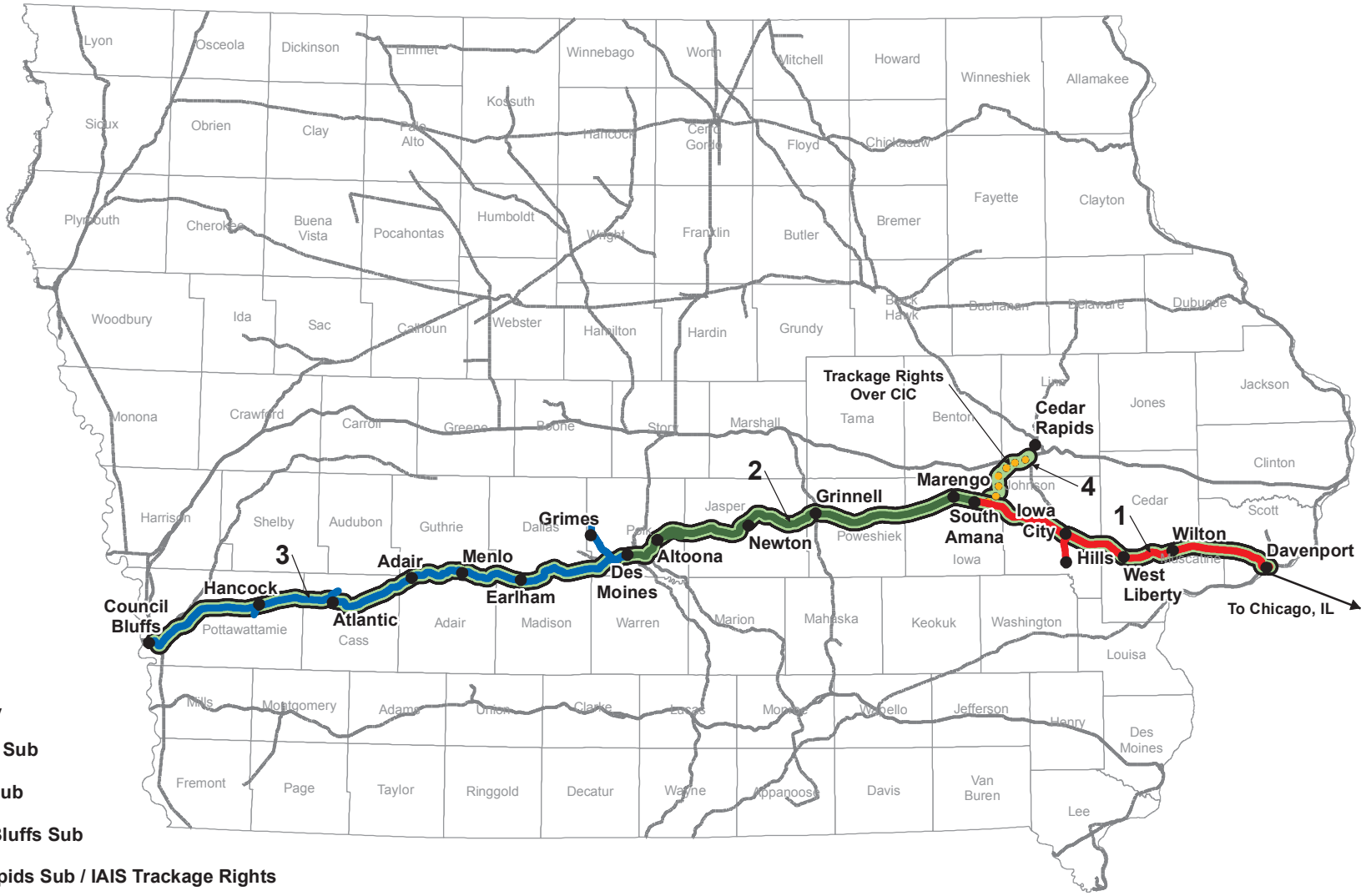
IOWA INTERSTATE NETWORK SUBDIVISIONS CURRENTLY CARRYING BULK ETHANOL IN IOWA



IAIS Subdivision Key

- 1 - Iowa City Sub
- 2 - Newton Sub
- 3 - Council Bluffs Sub
- 4 - Cedar Rapids Sub / IAIS Trackage Rights

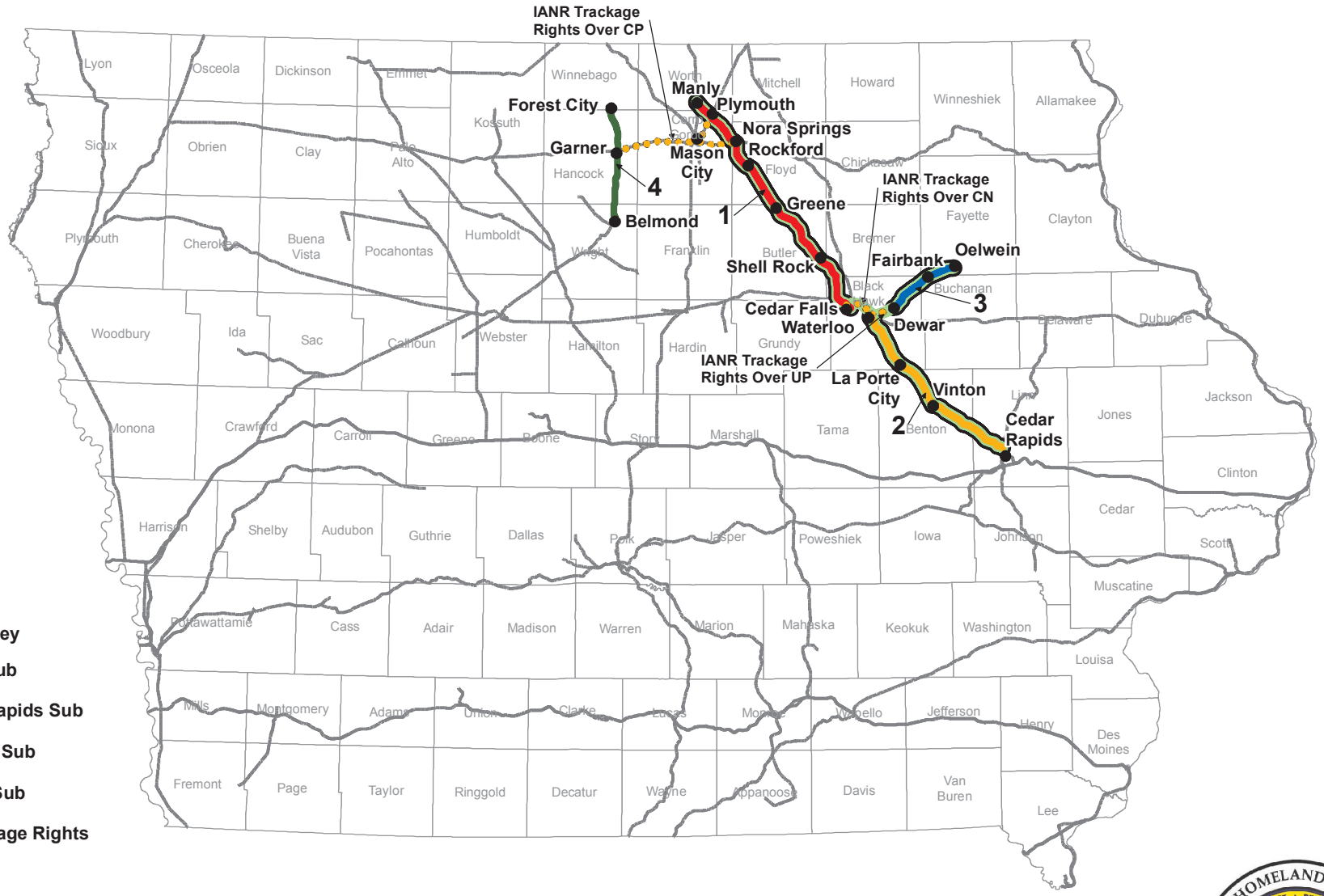
LEGEND

City | Other Rail Lines | Current Bulk Ethanol Routes | County Boundary

0 Miles 40

PATH: Z:\PROJECTS\IDOT\2566691_IOWARAILNETWORKMAPPING\MAP_DOCS\FINAL\FIG_8X11_IAIS_NETWORK_EBR.MXD - USER: TTALBITZ - DATE: 1/28/2016

IOWA NORTHERN NETWORK SUBDIVISIONS CURRENTLY CARRYING BULK ETHANOL IN IOWA



IANR Subdivision Key

- 1 - Manly Sub
- 2 - Cedar Rapids Sub
- 3 - Oelwein Sub
- 4 - Garner Sub
- IANR Trackage Rights

LEGEND

- City
- Other Rail Lines
- Current Bulk Ethanol Routes
- County Boundary

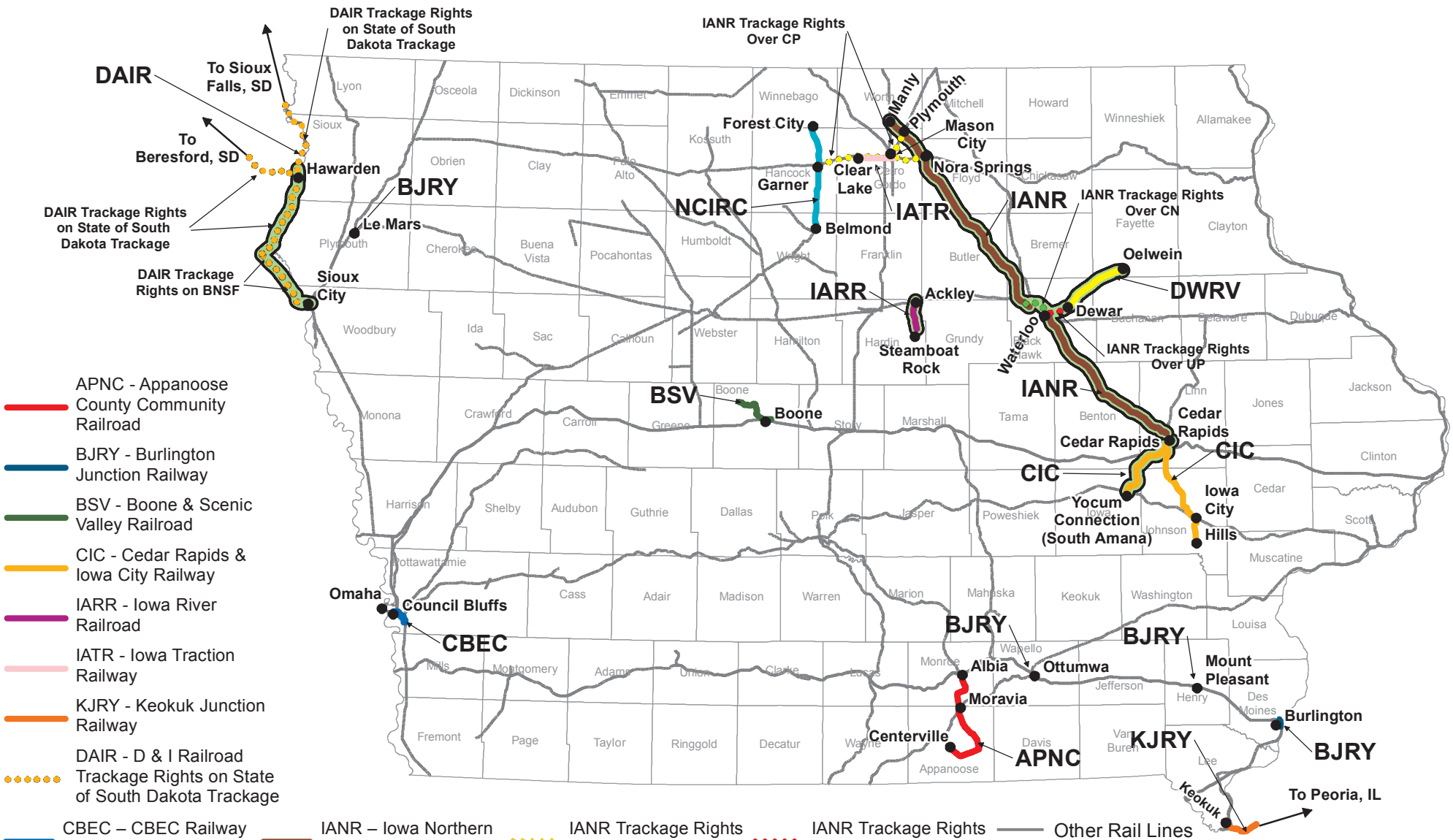
0 Miles 40

IOWA DOT

IOWA HOMELAND SECURITY AND EMERGENCY MANAGEMENT

PATH: Z:\PROJECTS\IDOT\2566691_IOWARAILNETWORKMAPPING\MAP_DOCS\FINAL\FIG_8X11_IANR_NETWORK_EBR.MXD - USER: TTALBITZ - DATE: 1/28/2016

IOWA SRP: CLASS III RAILROADS AND NON-OPERATING RAILROAD OWNERS



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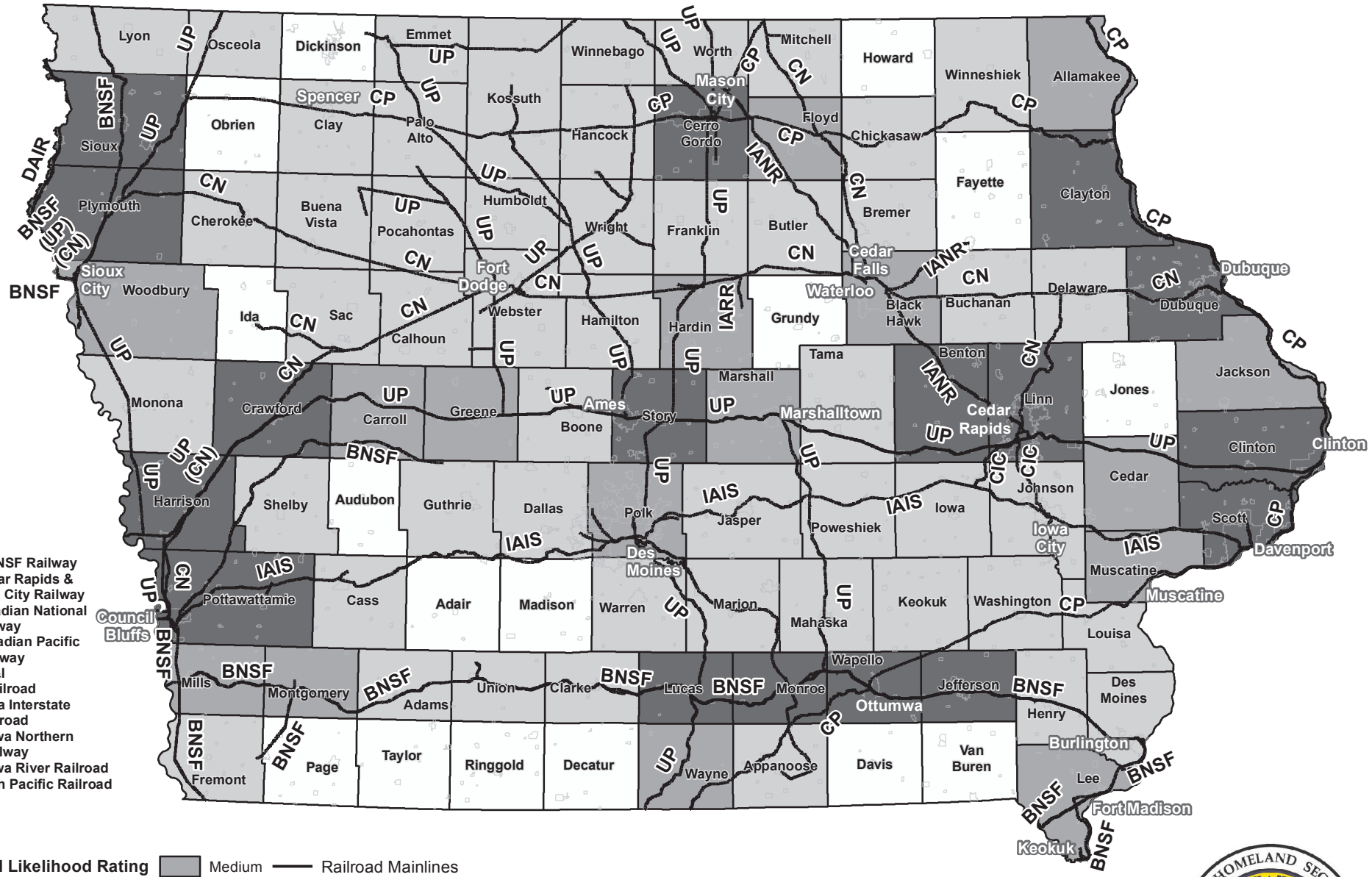
RAILROAD LIKELIHOOD RATING



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DAIR - D&I Railroad
IAIS - Iowa Interstate Railroad
IANR - Iowa Northern Railway
IARR - Iowa River Railroad
UP - Union Pacific Railroad

LEGEND

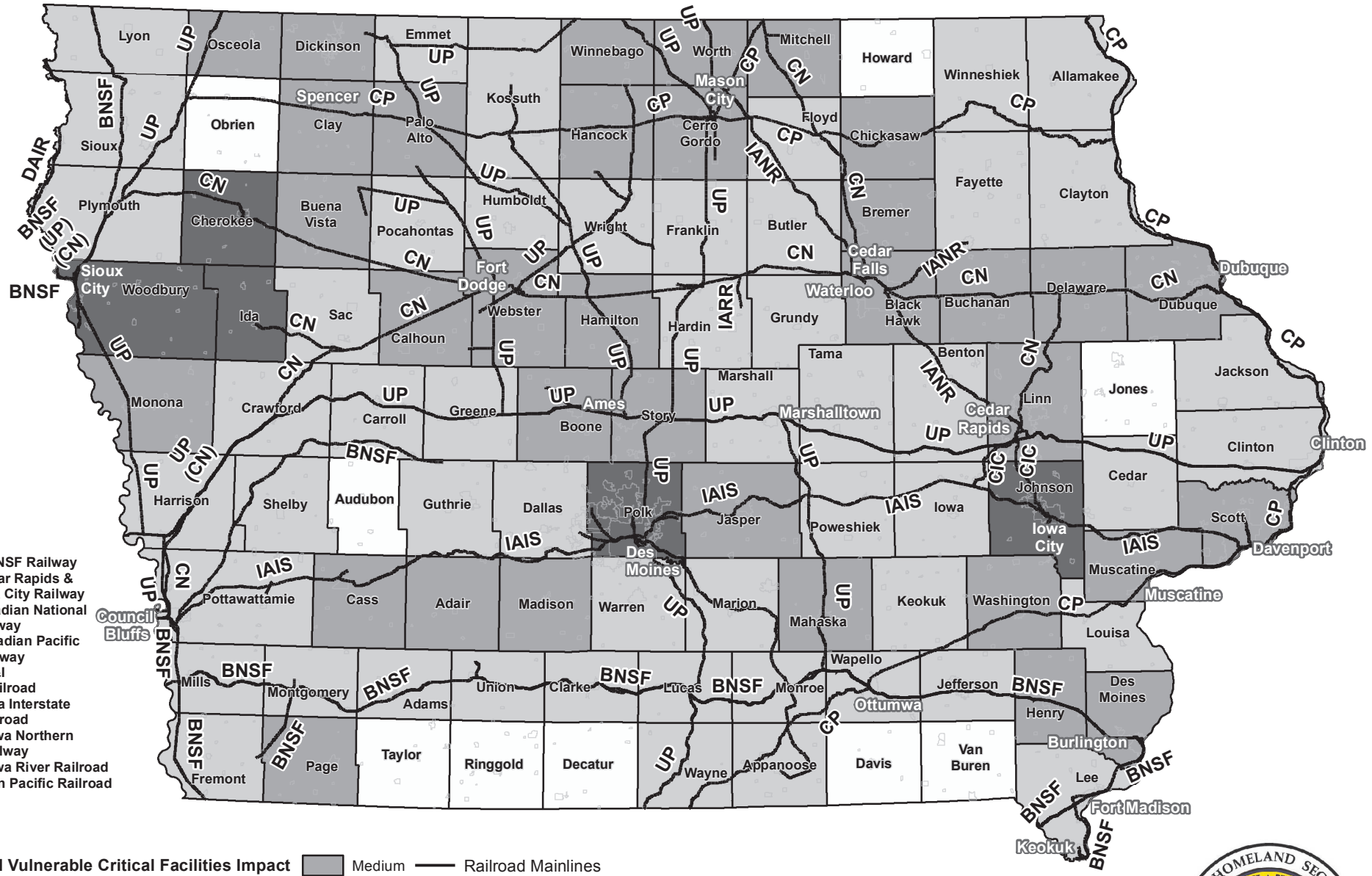
Railroad Likelihood Rating

- None
- Low
- Medium
- High
- Railroad Mainlines
- City Boundary
- County Boundary

0 Miles 40

PATH: Z:\PROJECTS\IDOT\263221_IADOT_CRUDE_BIOFUEL_TRANS_STUDY\MAP_DOCS\FINAL\FIG_8X11_RAILROAD_LIKELIHOOD_RATING.MXD - USER: TTALBITZ - DATE: 4/4/2016

RAILROAD VULNERABLE CRITICAL FACILITIES IMPACT



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- IARR - Iowa River Railroad
- UP - Union Pacific Railroad

LEGEND

Railroad Vulnerable Critical Facilities Impact

- None
- Low
- Medium
- High

- Railroad Mainlines
- City Boundary
- County Boundary

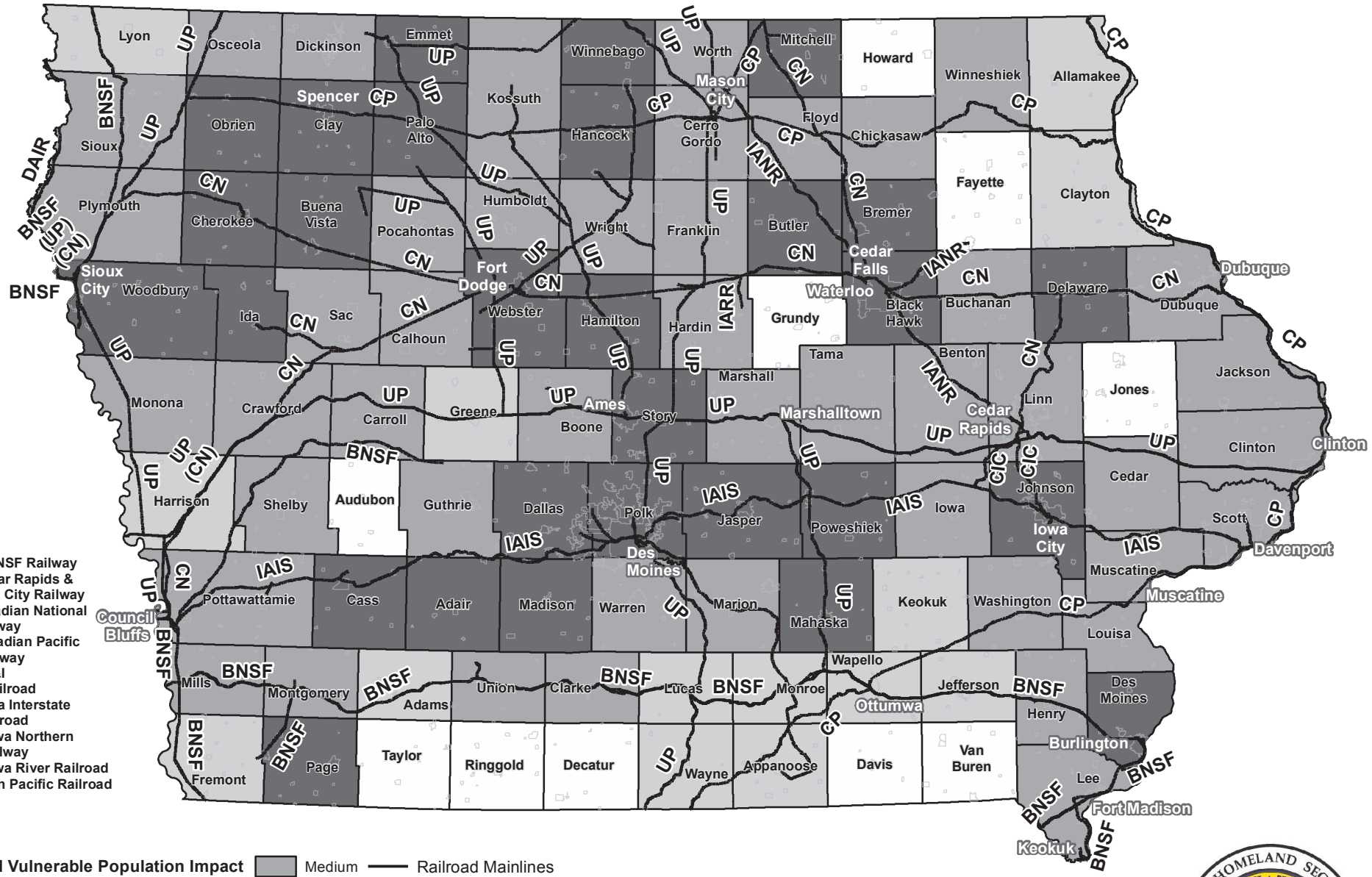
0 Miles 40

IOWADOT

IOWA HOMELAND SECURITY AND EMERGENCY MANAGEMENT

PATH: Z:\PROJECTS\IDOT\263221_IADOT_CRUDE_BIOFUEL_TRANS_STUDY\MAP_DOCS\FINAL\FIG_8X11_VULNERABLE_CRITICAL_FACILITY_IMPACT.MXD - USER: TTALBITZ - DATE: 4/4/2016

RAILROAD VULNERABLE POPULATION IMPACT



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UP - Union Pacific Railroad

LEGEND

Railroad Vulnerable Population Impact

- None
- Low
- Medium
- High
- Railroad Mainlines
- City Boundary
- County Boundary

0 Miles 40

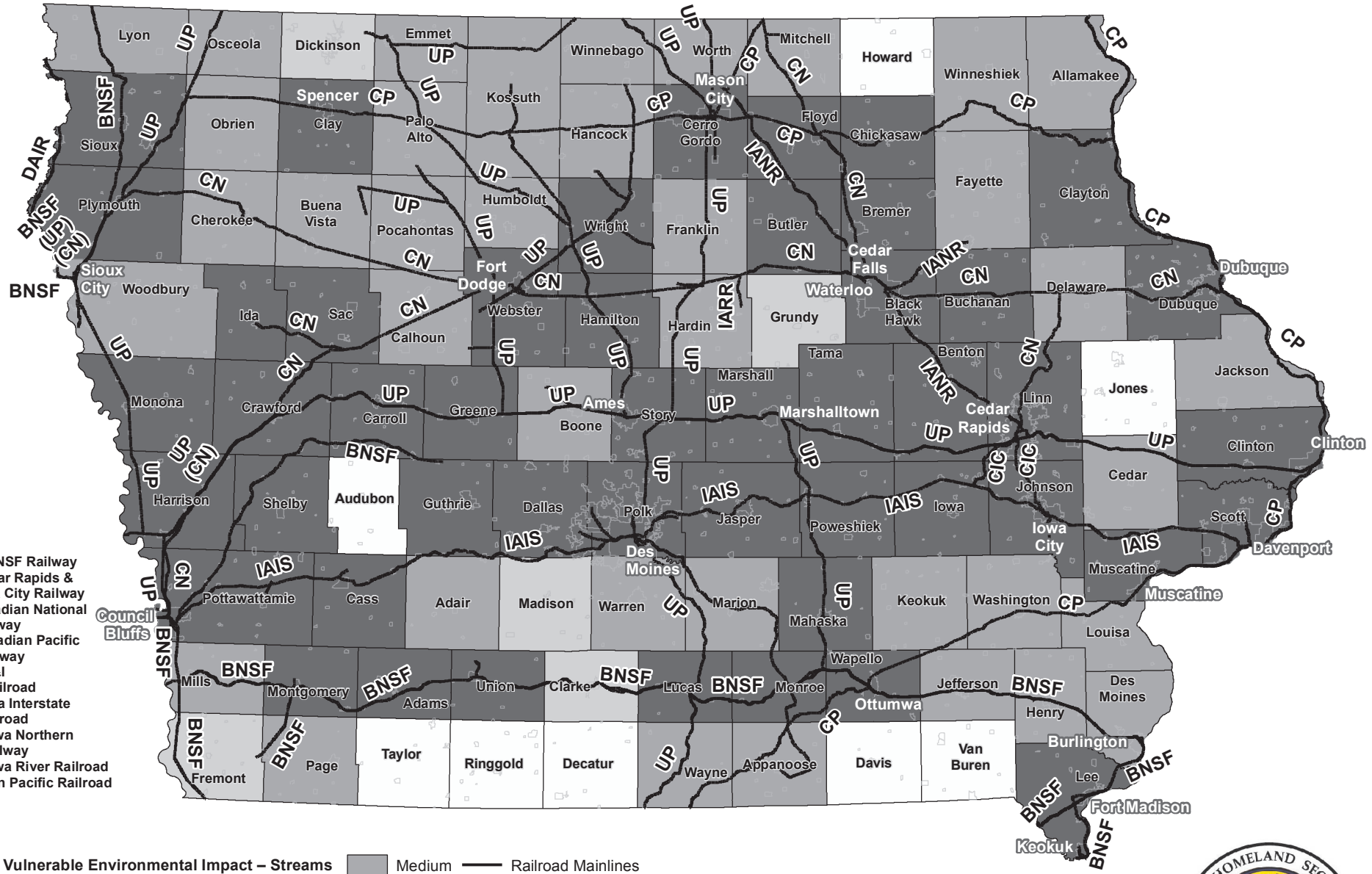
HDR

IOWA DOT

IOWA HOMELAND SECURITY AND EMERGENCY MANAGEMENT

PATH: Z:\PROJECTS\IDOT\263221_IADOT_CRUDE_BIOFUEL_TRANS_STUDY\MAP_DOCS\FINAL\FIG_8X11_VULNERABLE_POPULATION_IMPACT.MXD - USER: TTALBITZ - DATE: 3/25/2016

RAILROAD VULNERABLE ENVIRONMENTAL IMPACT – STREAMS



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IANR - Iowa Northern Railway
IARR - Iowa River Railroad
UP - Union Pacific Railroad

LEGEND

Railroad Vulnerable Environmental Impact – Streams

- None
- Low
- Medium
- High
- Railroad Mainlines
- City Boundary
- County Boundary

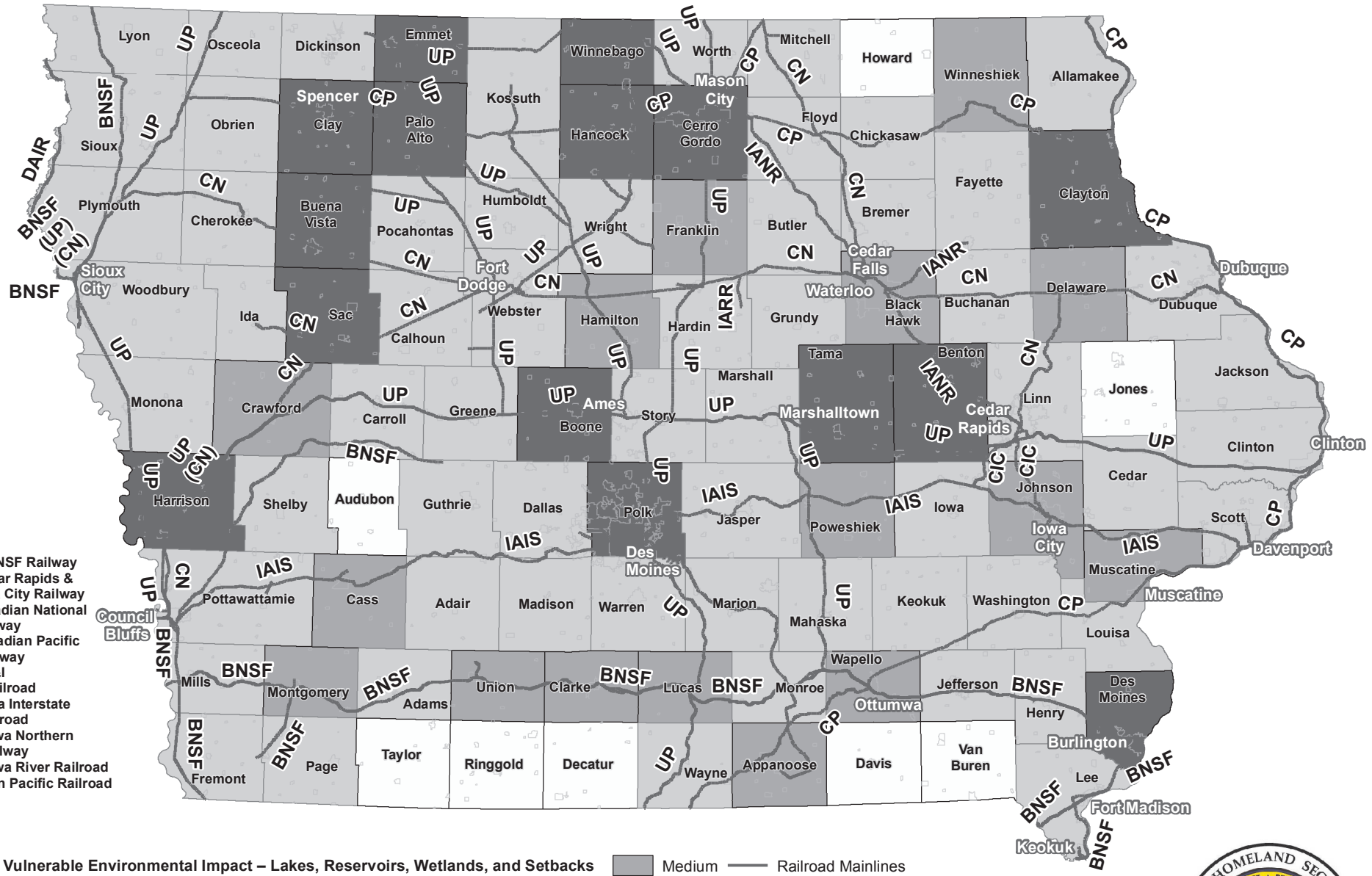
0 Miles 40

IOWADOT

IOWA HOMELAND SECURITY AND EMERGENCY MANAGEMENT

PATH: Z:\PROJECTS\IDOT\263221_IADOT_CRUDE_BIOFUEL_TRANS_STUDY\MAP_DOCS\FINAL\FIG_8X11_STREAMS_IMPACTS.MXD - USER: TTALBITZ - DATE: 3/25/2016

RAILROAD VULNERABLE ENVIRONMENTAL IMPACT – LAKES, RESERVOIRS, WETLANDS, AND SETBACKS



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DAIR - D&I Railroad
IAIS - Iowa Interstate Railroad
IANR - Iowa Northern Railway
IARR - Iowa River Railroad
UP - Union Pacific Railroad

LEGEND

Railroad Vulnerable Environmental Impact – Lakes, Reservoirs, Wetlands, and Setbacks

- None
- Low
- Medium
- High
- Railroad Mainlines
- City Boundary
- County Boundary

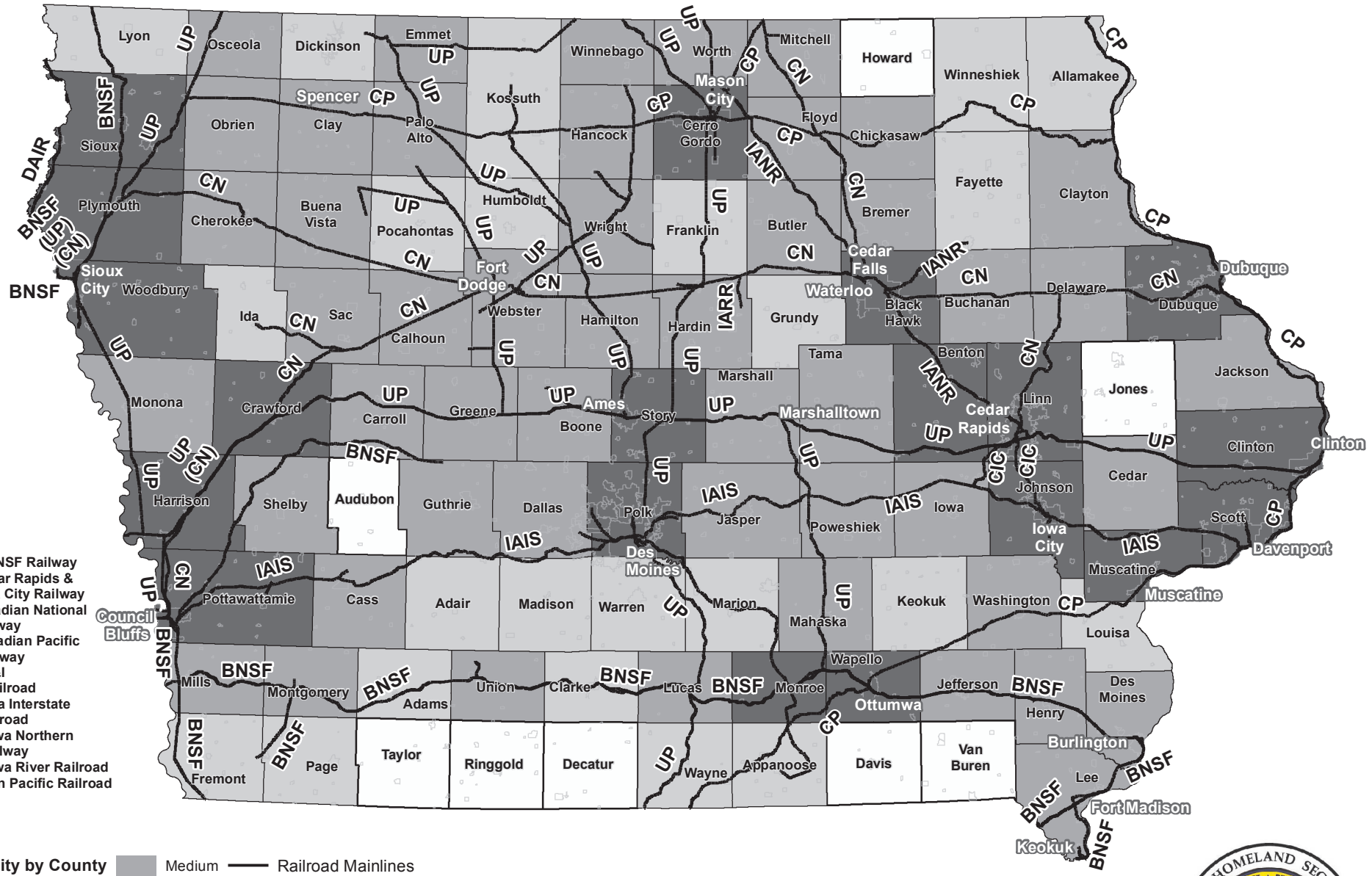
0 Miles 40

IOWA HOMELAND SECURITY AND EMERGENCY MANAGEMENT

IOWADOT

PATH: Z:\PROJECTS\IDOT\263221_IADOT_CRUDE_BIOFUEL_TRANS_STUDY\MAP_DOCS\FINAL\FIG_8X11_WATERBODY_WETLAND_IMPACTS.MXD - USER: TTALBITZ - DATE: 3/25/2016

RANKING OF CRUDE OIL AND ETHANOL RAIL TRANSPORTATION SENSITIVITY, BY COUNTY (2015)



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- IAIS - Iowa Interstate Railroad
- IANR - Iowa Northern Railway
- IARR - Iowa River Railroad
- UP - Union Pacific Railroad

LEGEND

Sensitivity by County

- None
- Low
- Medium
- High

- Railroad Mainlines
- City Boundary
- County Boundary

0 Miles 40

IOWA DOT

IOWA HOMELAND SECURITY AND EMERGENCY MANAGEMENT

PATH: Z:\PROJECTS\IDOT\263221_IADOT_CRUDE_BIOFUEL_TRANS_STUDY\MAP_DOCS\FINAL\FIG_8X11_RAILROAD_RISK.MXD - USER: TTALBITZ - DATE: 3/24/2016