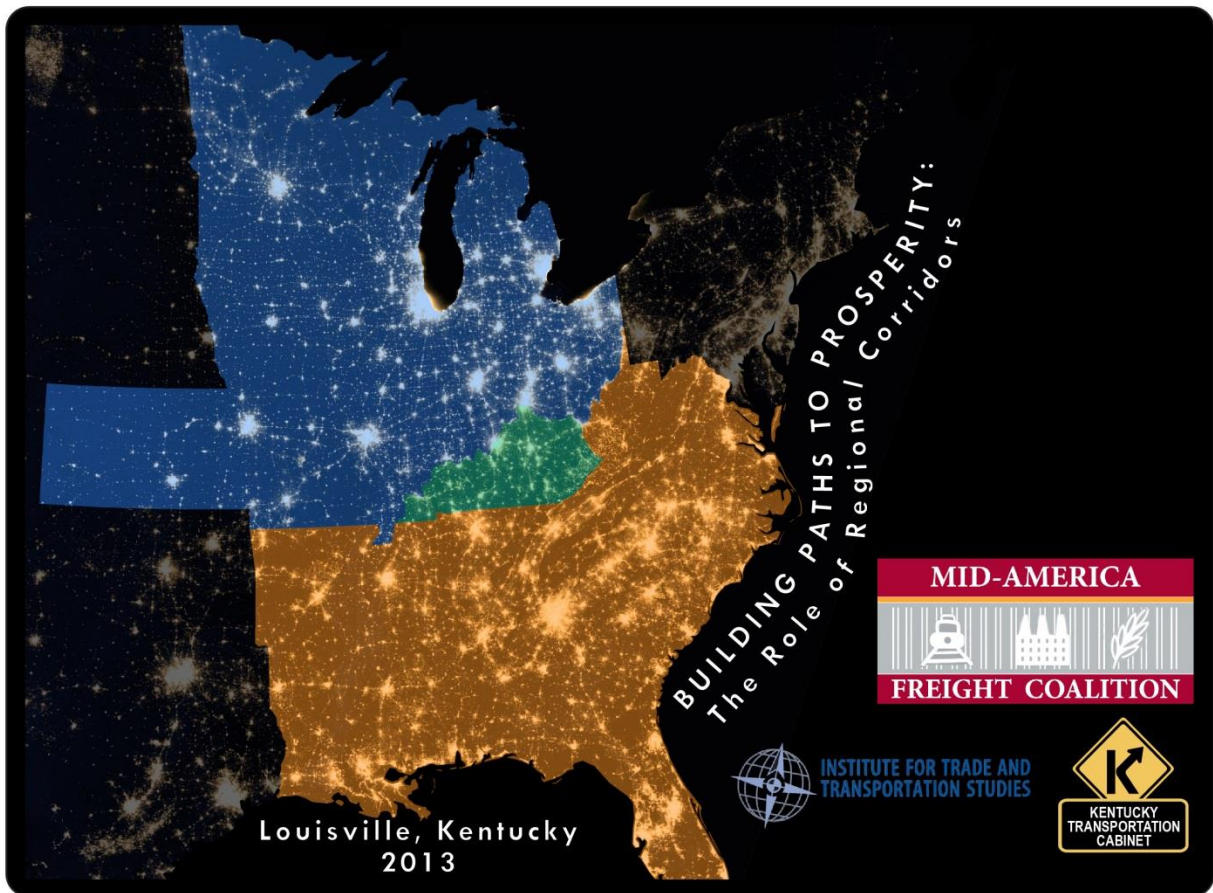


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# MAP-21 Primary Freight Network Criteria: Top Corridor Status and Criteria Values in MAASTO Region States



<http://midamericafreight.org/>

April 19, 2013



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## - FHWA Primary Freight Network Designation -

In a February 6, 2013 Federal Register Notice, the Federal Highway Administration released table 1 identifying factors, data sources, and parameters that may be used to designate corridors for the primary freight network. CFIRE is currently collecting those data sources, and creating a geodatabase for dissemination to state DOTs. The state tables that follow contain a 'rough draft' inventory for three corridors within each MAFC state selected based on annual average daily truck travel (AADTT). While FHWA guidance suggests that HPMS be used for AADTT, our initial analysis uses FAF 3.4 AADTT as a starting point to prepare states for USDOTs announcement of the Primary Freight Network.



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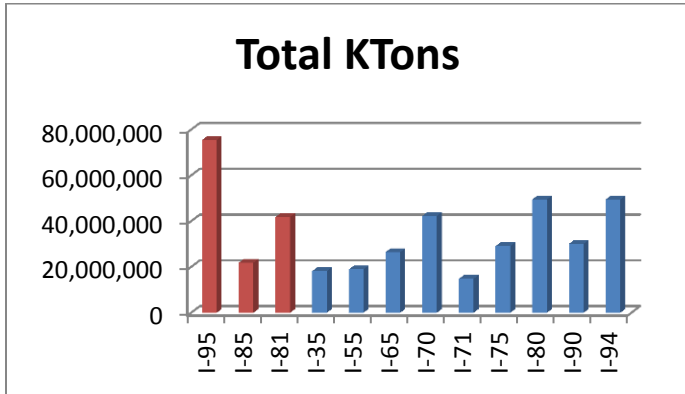
Table 1: Primary Freight Network Factors, Sources, and Parameters

| Factor   | Data Source               | Parameter  |
|--|---------------------------|--|
| Origins/Destinations of Freight Movements  | FAF 3.4                   | Connect Top Origins/Destinations   |
| Freight Tonnage and Value by Highways  |                           | Include Top Routes by Weight of Freight Transported (Ktons)  |
|  |                           | Include Top Routes by Value of Commodity Transported   |
| Percentage of AADTT on principal Arterials   | HPMS 2010 AADTT           | Include Top Routes by Percentage of AADTT on principal Arterials   |
| AADTT on principal Arterials   |                           | Include Top Routes by AADTT on principal Arterials   |
| Land & Maritime Ports of Entry   | USACE                     | Connect Top Water Ports Ranked by Weight and Values  |
|  | MARAD                     | Connect Top Water Ports Ranked by Number of TEUs   |
|  | BTS Transborder Data      | Connect Top Land Points of Entry by Weight and Values  |
| Access to Energy Exploration, Development, Installation or Production Areas  | EIA                       | Include Access to coal basins, top coal mines, coalbed methane fields, natural gas production locations, gas and oil plays (exploration areas) |
|  | Pennwell Mapsearch Data   | Include access to oil refineries and distribution centers  |
|  |                           | Include access to biodiesel and ethanol plants   |
| Population Centers   | 2010 Census               | Connect top urbanized areas; utilize Census Urbanized Area Boundary for geographical areas   |
| Network Connectivity   | FAF 3.4                   | In order to reduce gaps in the network, connect PFN segments to one another, to the interstate system, or begin/end at access point.           |
| Major Intermodal Connectors  | NHS Intermodal Connectors | Connect major airport facilities, rail hubs, pipeline terminals, and port terminals  |
| Air Ports of Entry   | FAA                       | Connect top air ports of entry by landed weight  |
|  |                           | Connect top air ports of entry by value  |
| For routes off the Interstate System, designation on the National Network of highways that can safely and efficiently accommodate the large vehicles authorized by the State | FAF 3.4                   | Where there are parallel routes to consider, avoidance of routes on the National Network that are 'restricted' or 'low clearance'              |
| For routes off the Interstate System, availability of truck facilities   | FHWA Research Report      | Where there are parallel routes as alternatives, consider presence of truck stops, rest areas, and weigh stations as factors                   |

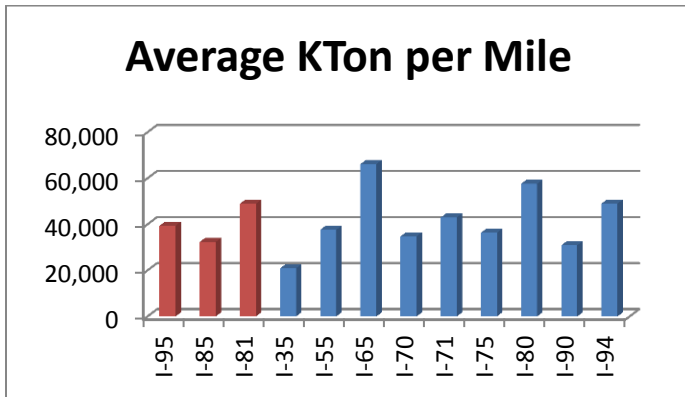
Source: <http://www.gpo.gov/fdsys/pkg/FR-2013-02-06/html/2013-02580.htm>



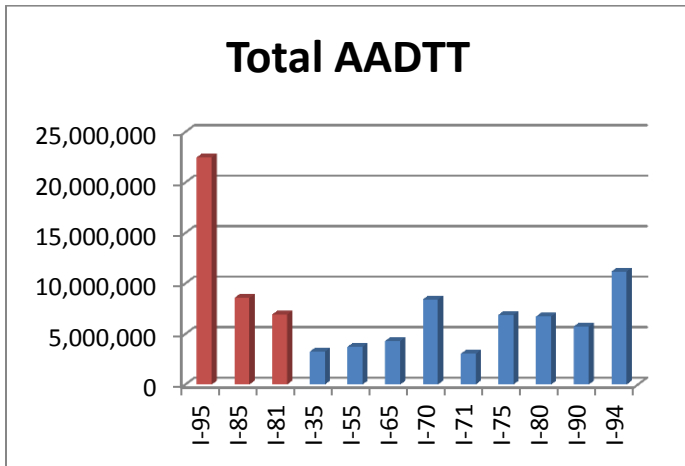
Comparison of MAASTO Freight Corridors to Eastern Corridors



While the East coast corridors to the left include the entire corridor, the MAFC corridors end at the MAFC border. Despite this fact, the MAFC corridors are comparable in total kilo tons to the East coast corridors. I-95 moves the most freight by weight.



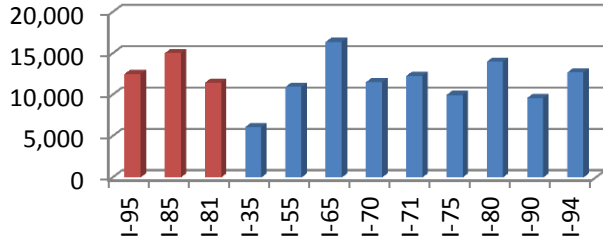
The chart to the left takes into consideration the number of miles within a corridor. Again the MAFC corridors are comparable. I-95 no longer stands out, and I-65 moves the most weight per mile.



Again, when not considering the number of miles, I-95 has considerably more trucks on its corridor than the rest. The MAFC corridors again are comparable.



### Average AADTT per Segment



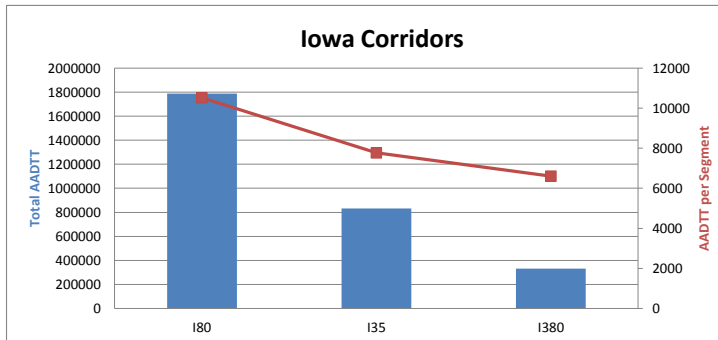
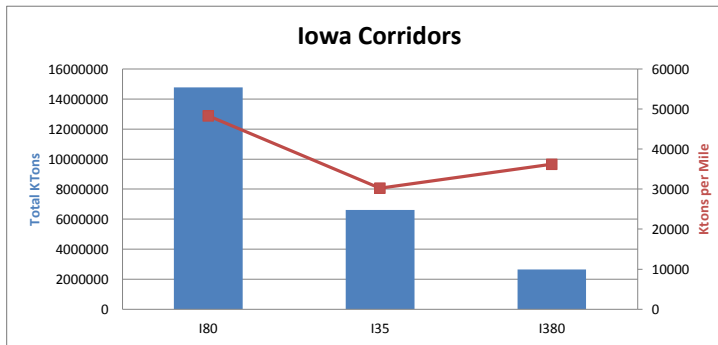
The last figure to the left takes into consideration the number of segments found within the corridor and divides the AADTT by those segments to get at an average AADTT for segments within the corridor.



# MAASTO State Corridor Status

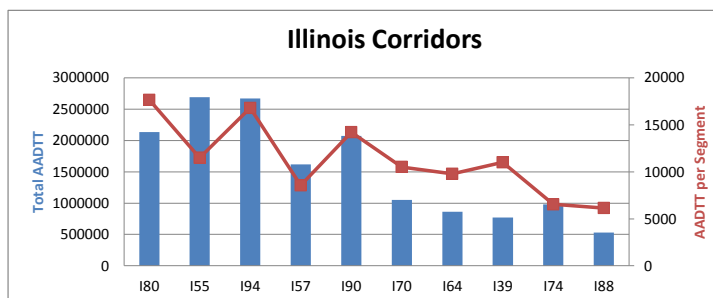
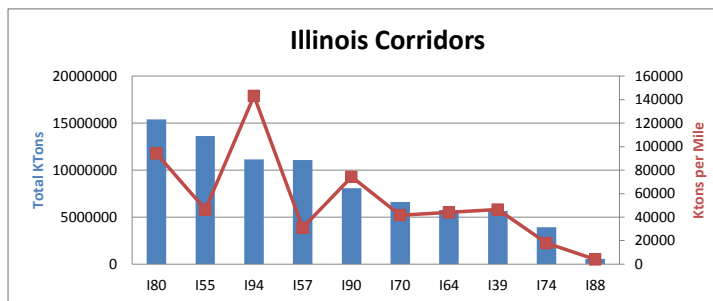
## IOWA

| Factor   | Parameter  | I80  | I35   | I380   |
|--|--|--|---|--|
| Origins/Destinations of Freight Movements  | Connect Top Origins/Destinations   | Spans the US from New York city to San Francisco passing thru Chicago. | Runs from top Southern land port of entry in Laredo, TX (1,695,916 thru Dallas, KC, Iowa, Minneapolis, up to Duluth, MN (port). | Begins at the southeast corner of Waterloo and runs south until Interstate 80. |
| Freight Tonnage and Value by Highways  | Include Top Routes by Weight of Freight Transported (Ktons)  | 14,781,347   | 6,606,378   | 2,651,589  |
|  | Include Top Routes by Value of Commodity Transported   |  |   |  |
| Percentage of AADTT on principal Arterials   | Include Top Routes by Percentage of AADTT on principal Arterials   |  |   |  |
| AADTT on principal Arterials   | Include Top Routes by AADTT on principal Arterials   |  |   |  |
| Land & Maritime Ports of Entry   | Connect Top Water Ports Ranked by Weight and Values  | none   | none  | none   |
|  | Connect Top Water Ports Ranked by Number of TEUs   | none   | none  | none   |
|  | Connect Top Land Points of Entry by Weight and Values  |  |   |  |
| Access to Energy Exploration, Development, Installation or Production Areas  | Include Access to coal basins, top coal mines, coalbed methane fields, natural gas production locations, gas and oil plays (exploration areas) | 2 CBM Basins and 1 shale play basin                                    | 1 CBM Basin and 1 Shale Basin   | none   |
|  | Include access to oil refineries and distribution centers  | none   | none  | none   |
|  | Include access to biodiesel and ethonal plants   | 7 ethanol and 2 biodiesel  | 6 ethanol and 2 biodiesel   | 4 ethanol  |
| Population Centers   | Connect top urbanized areas; utilize Census Urbanized Area Boundary for geographical areas   | 6 MSAs w/ combined population of 2,314,741 and GDP of \$134.7 billion  | 2 MSAs w/ combined population of 659,175 and GDP of \$44.9 billion  | 3 MSAs w/combined population of 578,345 and GDP of \$31.1 billion              |
| Network Connectivity   | In order to reduce gaps in the network, connect PFN segments to one another, to the interstate system, or begin/end at access point.           |  |   |  |
| Major Intermodal Connectors  | Connect major airport facilities, rail hubs, pipeline terminals, and port terminals  | 26   | 7   | 2  |
| Air Ports of Entry   | Connect top air ports of entry by landed weight  | 2: CID and DSM   | 1: CID  | 1: CID   |
|  | Connect top air ports of entry by value  |  |   |  |
| For routes off the Interstate System, designation on the National Network of highways that can safely and efficiently accommodate the large vehicles authorized by the State | Where there are parallel routes to consider, avoidance of routes on the National Network that are 'restricted' or 'low clearance'              |  |   |  |
| For routes off the Interstate System, availability of truck facilities   | Where there are parallel routes as alternatives, consider presence of truck stops, rest areas, and weigh stations as factors                   |  |   |  |



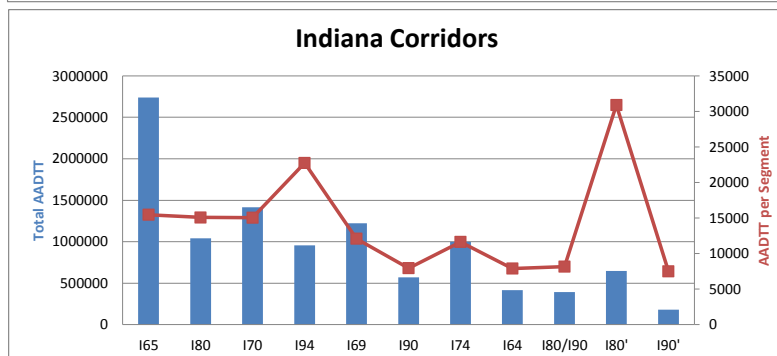
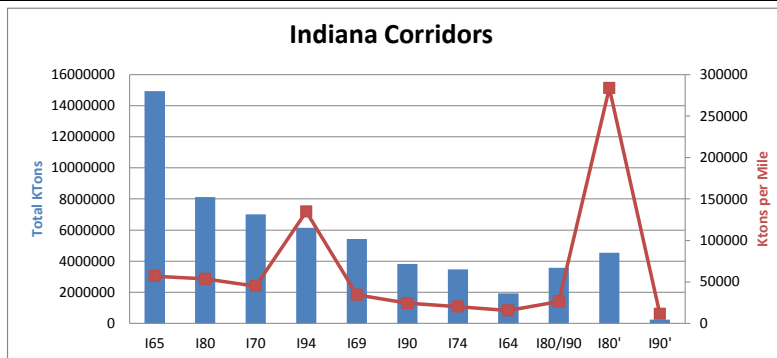
# ILLINOIS

| Factor   | Parameter  | I80   | I55   | I94   |
|--|--|---|---|---|
| Origins/Destinations of Freight Movements  | Connect Top Origins/Destinations   | Spans the US from New York city to San Francisco passing thru Chicago.  | From the heart of Chicago to St. Louis via Joliet, Bloomington, and Springfield | From the Indiana/Illinois border to the Wisconsin/Illinois border thru Chicago. |
| Freight Tonnage and Value by Highways  | Include Top Routes by Weight of Freight Transported (Ktons)  | 15,387,060  | 13,631,647  | 11,138,678  |
|  | Include Top Routes by Value of Commodity Transported   |   |   |   |
| Percentage of AADTT on principal Arterials   | Include Top Routes by Percentage of AADTT on principal Arterials   |   |   |   |
| AADTT on principal Arterials   | Include Top Routes by AADTT on principal Arterials   |   |   |   |
| Land & Maritime Ports of Entry   | Connect Top Water Ports Ranked by Weight and Values  | 7 water ports   | 9 water ports   | 7 ports   |
|  | Connect Top Water Ports Ranked by Number of TEUs   |   |   |   |
|  | Connect Top Land Points of Entry by Weight and Values  | none  | none  | none  |
| Access to Energy Exploration, Development, Installation or Production Areas  | Include Access to coal basins, top coal mines, coalbed methane fields, natural gas production locations, gas and oil plays (exploration areas) | 1 CBM basin, 2 shale basins   | 3 gassy coal mines, 6 CBM fields, 1 CBM Basin, 2 shale basins                   | 1 shale basin   |
|  | Include access to oil refineries and distribution centers  | 3 oil refineries and 2 natural gas distribution centers                 | 4 oil refineries and 2 natural gas distribution centers                         | 1 oil refinery  |
|  | Include access to biodiesel and ethonal plants   | 4 ethanol and 3 biodiesel   | 2 ethanol and 3 biodiesel   | none  |
| Population Centers   | Connect top urbanized areas; utilize Census Urbanized Area Boundary for geographical areas   | 4 MSAs w/ a combined population of 9,461,105 and GDP of \$589.3 billion | 8 MSAs w/ a combined population of 13,489,037 and GDP of \$737.3 billion        | 3 MSAs w/ a combined population of 9,769,962 and GDP of \$557,648               |
| Network Connectivity   | In order to reduce gaps in the network, connect PFN segments to one another, to the interstate system, or begin/end at access point.           |   |   |   |
| Major Intermodal Connectors  | Connect major airport facilities, rail hubs, pipeline terminals, and port terminals  | 182   | 285   | 257   |
| Air Ports of Entry   | Connect top air ports of entry by landed weight  | 1: MDW  | 3: ORD, STL, and MDW  | 2: ORD and MDW  |
|  | Connect top air ports of entry by value  |   |   |   |
| For routes off the Interstate System, designation on the National Network of highways that can safely and efficiently accommodate the large vehicles authorized by the State | Where there are parallel routes to consider, avoidance of routes on the National Network that are 'restricted' or 'low clearance'              |   |   |   |
| For routes off the Interstate System, availability of truck facilities   | Where there are parallel routes as alternatives, consider presence of truck stops, rest areas, and weigh stations as factors                   |   |   |   |



# INDIANA

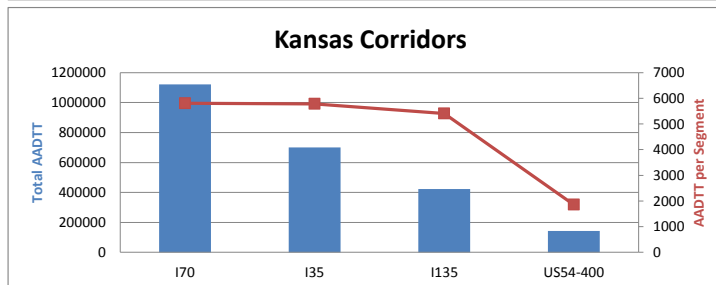
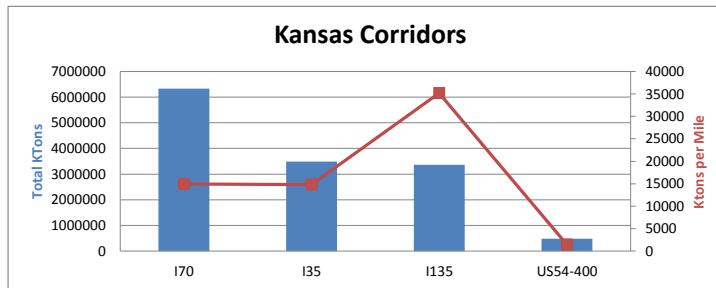
| Factor   | Parameter  | I65  | I80/90   | I70   |
|--|--|--|--|---|
| Origins/Destinations of Freight Movements  | Connect Top Origins/Destinations   | NW Indiana to Louisville, KY thru Indianapolis                           | Indiana/Ohio border to Indiana/Illinois border                         | Runs through the central part of the state including Indianapolis       |
| Freight Tonnage and Value by Highways  | Include Top Routes by Weight of Freight Transported (Ktons)  | 14,931,737   | 8,354,509  | 7,015,191   |
|  | Include Top Routes by Value of Commodity Transported   |  |  |   |
| Percentage of AADTT on principal Arterials   | Include Top Routes by Percentage of AADTT on principal Arterials   |  |  |   |
| AADTT on principal Arterials   | Include Top Routes by AADTT on principal Arterials   |  |  |   |
| Land & Maritime Ports of Entry   | Connect Top Water Ports Ranked by Weight and Values  | 7 ports  | 6 ports  | none  |
|  | Connect Top Water Ports Ranked by Number of TEUs   |  |  |   |
|  | Connect Top Land Points of Entry by Weight and Values  | none   | none   | none  |
| Access to Energy Exploration, Development, Installation or Production Areas  | Include Access to coal basins, top coal mines, coalbed methane fields, natural gas production locations, gas and oil plays (exploration areas) | 1 shale play, 2 shale basins   | 1 shale play, 2 shale basins   | 3 CBM fields, 1 CBM basin, 1 shale play, 1 shale basin                  |
|  | Include access to oil refineries and distribution centers  | 1 oil refinery   | 1 oil refinery   | none  |
|  | Include access to biodiesel and ethonal plants   | 3 ethanol and 2 biodiesel  | 1 ethanol and 1 biodiesel  | 1 ethanol and 1 biodiesel   |
| Population Centers   | Connect top urbanized areas; utilize Census Urbanized Area Boundary for geographical areas   | 7 MSAs w/ a combined population of 12,991,632 and GDP of \$730.4 billion | 6 MSAs w/ a combined population of 10,359,617 and GDP of \$582 billion | 6 MSAs w/ a combined population of 3,212,189 and GDP of \$156.4 billion |
| Network Connectivity   | In order to reduce gaps in the network, connect PFN segments to one another, to the interstate system, or begin/end at access point.           |  |  |   |
| Major Intermodal Connectors  | Connect major airport facilities, rail hubs, pipeline terminals, and port terminals  | 44   | 197  | 9   |
| Air Ports of Entry   | Connect top air ports of entry by landed weight  | 2: IND and SDF   | 1: MDW   | 1: IND  |
|  | Connect top air ports of entry by value  |  |  |   |
| For routes off the Interstate System, designation on the National Network of highways that can safely and efficiently accommodate the large vehicles authorized by the State | Where there are parallel routes to consider, avoidance of routes on the National Network that are 'restricted' or 'low clearance'              |  |  |   |
| For routes off the Interstate System, availability of truck facilities   | Where there are parallel routes as alternatives, consider presence of truck stops, rest areas, and weigh stations as factors                   |  |  |   |





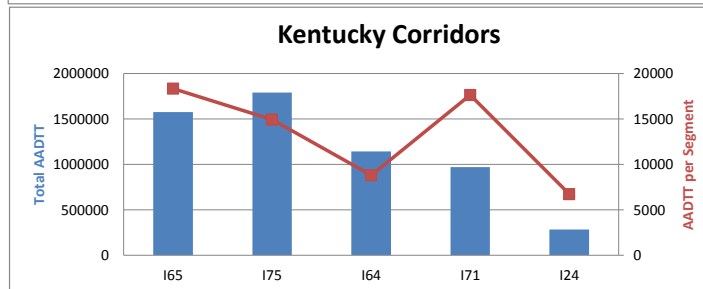
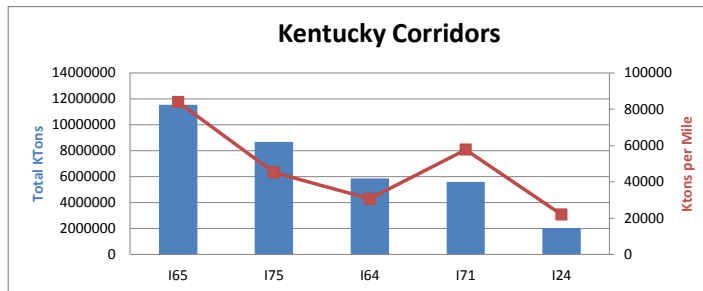
# KANSAS

| Factor   | Parameter  | I70  | I35   | I135  |
|--|--|--|---|---|
| Origins/Destinations of Freight Movements  | Connect Top Origins/Destinations   |  |   |   |
| Freight Tonnage and Value by Highways  | Include Top Routes by Weight of Freight Transported (Ktons)  | 6,333,708  | 3,485,167   | 3,369,219   |
|  | Include Top Routes by Value of Commodity Transported   |  |   |   |
| Percentage of AADTT on principal Arterials   | Include Top Routes by Percentage of AADTT on principal Arterials   |  |   |   |
| AADTT on principal Arterials   | Include Top Routes by AADTT on principal Arterials   |  |   |   |
| Land & Maritime Ports of Entry   | Connect Top Water Ports Ranked by Weight and Values  | 1  | 1   | none  |
|  | Connect Top Water Ports Ranked by Number of TEUs   |  |   |   |
|  | Connect Top Land Points of Entry by Weight and Values  | none   | none  | none  |
| Access to Energy Exploration, Development, Installation or Production Areas  | Include Access to coal basins, top coal mines, coalbed methane fields, natural gas production locations, gas and oil plays (exploration areas) | 1 CBM field, 8 CBM Basins, 2 shale basins, 1 tight gas play, 1 tight gas basin | 7 CBM fields, 2 CBM Basins, 1 shale play, 2 shale basins                | none  |
|  | Include access to oil refineries and distribution centers  | none   | 1 oil   | 1 oil   |
|  | Include access to biodiesel and ethonal plants   | 2 ethanol and 1 biodiesel  | 2 ethanol and 4 biodiesel   | 1 ethanol and 1 biodiesel                                   |
| Population Centers   | Connect top urbanized areas; utilize Census Urbanized Area Boundary for geographical areas   | 4 MSAs w/ a combined population of 2,507,111 and GDP of \$127.7 billion        | 4 MSAs w/ a combined population of 3,003,091 and GDP of \$148.6 billion | a MSAs w/ a population of 623,061 and GDP of \$27.4 billion |
| Network Connectivity   | In order to reduce gaps in the network, connect PFN segments to one another, to the interstate system, or begin/end at access point.           |  |   |   |
| Major Intermodal Connectors  | Connect major airport facilities, rail hubs, pipeline terminals, and port terminals  | 31   | 34  | 3   |
| Air Ports of Entry   | Connect top air ports of entry by landed weight  | 1: MCI   | 2: MCI and ICT  | 1: ICT  |
|  | Connect top air ports of entry by value  |  |   |   |
| For routes off the Interstate System, designation on the National Network of highways that can safely and efficiently accommodate the large vehicles authorized by the State | Where there are parallel routes to consider, avoidance of routes on the National Network that are 'restricted' or 'low clearance'              |  |   |   |
| For routes off the Interstate System, availability of truck facilities   | Where there are parallel routes as alternatives, consider presence of truck stops, rest areas, and weigh stations as factors                   |  |   |   |



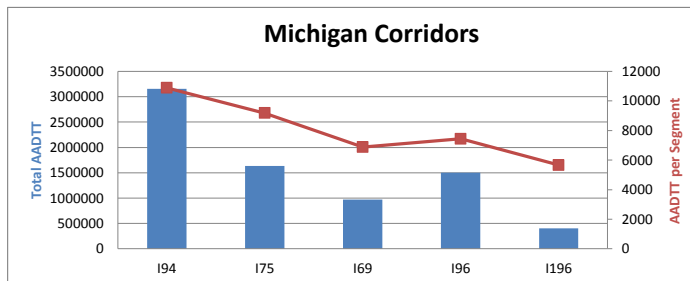
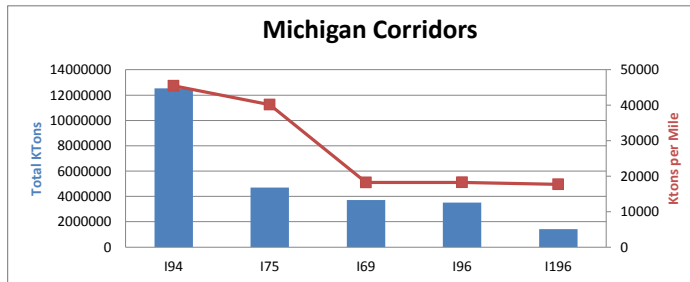
# KENTUCKY

| Factor   | Parameter  | I65  | I71   | I75   |
|--|--|--|---|---|
| Origins/Destinations of Freight Movements  | Connect Top Origins/Destinations   | Runs north to south from Louisville (Indianapolis to the north) to Franklin (Nashville to the south) | Connects Cincinnati to Louisville   | Connects Cincinnati to Lexington and follows south into Knoxville         |
| Freight Tonnage and Value by Highways  | Include Top Routes by Weight of Freight Transported (Ktons)  | 11,535,028   | 5,587,385   | 8,668,601   |
|  | Include Top Routes by Value of Commodity Transported   |  |   |   |
| Percentage of AADTT on principal Arterials   | Include Top Routes by Percentage of AADTT on principal Arterials   |  |   |   |
| AADTT on principal Arterials   | Include Top Routes by AADTT on principal Arterials   |  |   |   |
| Land & Maritime Ports of Entry   | Connect Top Water Ports Ranked by Weight and Values  | 2  | 3   | 1   |
|  | Connect Top Water Ports Ranked by Number of TEUs   |  |   |   |
|  | Connect Top Land Points of Entry by Weight and Values  | none   | none  | none  |
| Access to Energy Exploration, Development, Installation or Production Areas  | Include Access to coal basins, top coal mines, coalbed methane fields, natural gas production locations, gas and oil plays (exploration areas) | 1 CBM basin, 1 shale play, 2 shale basins, 1 tight gas basin   | 1 shale play, 1 shale basin   | 1 CBM basin, 1 shale play, 1 shale basin, 1 tight gas basin               |
|  | Include access to oil refineries and distribution centers  | none   | none  | none  |
|  | Include access to biodiesel and ethonal plants   | 1 ethanol  | 1 ethanol, 1 biodiesel  | 2 biodiesel   |
| Population Centers   | Connect top urbanized areas; utilize Census Urbanized Area Boundary for geographical areas   | 4 MSAs with a combined population of 3,119,189 and GDP of \$154.9 billion                            | 2 MSAs with a combined population of 3,413,717 and GDP of \$161.5 billion | 4 MSAs with a combined population of 3,300,280 and GDP of \$157.7 billion |
| Network Connectivity   | In order to reduce gaps in the network, connect PFN segments to one another, to the interstate system, or begin/end at access point.           |  |   |   |
| Major Intermodal Connectors  | Connect major airport facilities, rail hubs, pipeline terminals, and port terminals  | 11   | 34  | 29  |
| Air Ports of Entry   | Connect top air ports of entry by landed weight  | SDF  | SDF, CVG  | CVG, LEX  |
|  | Connect top air ports of entry by value  |  |   |   |
| For routes off the Interstate System, designation on the National Network of highways that can safely and efficiently accommodate the large vehicles authorized by the State | Where there are parallel routes to consider, avoidance of routes on the National Network that are 'restricted' or 'low clearance'              |  |   |   |
| For routes off the Interstate System, availability of truck facilities   | Where there are parallel routes as alternatives, consider presence of truck stops, rest areas, and weigh stations as factors                   |  |   |   |



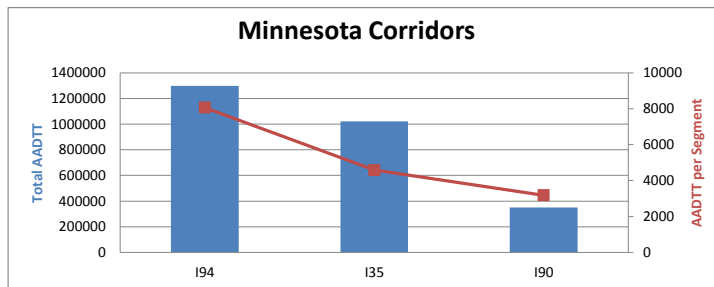
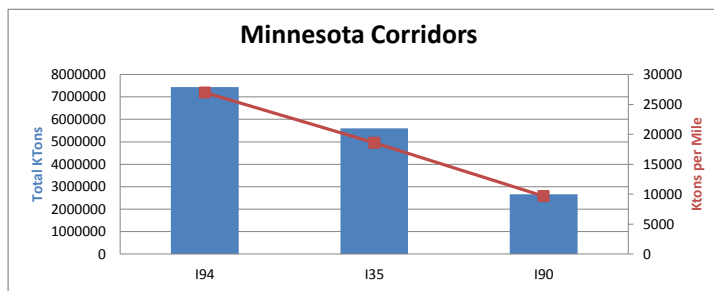
# MICHIGAN

| Factor   | Parameter  | I96  | I94   | I75  |
|--|--|--|---|--|
| Origins/Destinations of Freight Movements  | Connect Top Origins/Destinations   | An east-west route from Detroit to Grand Rapids                          | Begins at the Canadian border (Port Huron) and continues south thru Detroit, and then heads west and south west into Indiana and then on to Chicago | Runs north to south from the Canadian border at Sault Ste. Marie to the Ohio border (Toledo) |
| Freight Tonnage and Value by Highways  | Include Top Routes by Weight of Freight Transported (Ktons)  | 3,507,844  | 12,534,223  | 4,688,851  |
|  | Include Top Routes by Value of Commodity Transported   |  |   |  |
| Percentage of AADTT on principal Arterials   | Include Top Routes by Percentage of AADTT on principal Arterials   |  |   |  |
| AADTT on principal Arterials   | Include Top Routes by AADTT on principal Arterials   |  |   |  |
| Land & Maritime Ports of Entry   | Connect Top Water Ports Ranked by Weight and Values  | 5  | 4   | 7  |
|  | Connect Top Water Ports Ranked by Number of TEUs   |  |   |  |
|  | Connect Top Land Points of Entry by Weight and Values  | Detroit  | Detroit, Port Huron   | Sault Ste. Marie   |
| Access to Energy Exploration, Development, Installation or Production Areas  | Include Access to coal basins, top coal mines, coalbed methane fields, natural gas production locations, gas and oil plays (exploration areas) | 1 CBM Basin, 1 Shale Play, and 1 shale basin                             | 1 CBM Basin, 1 Shale Play, and 1 shale basin  | 1 CBM Basin, 1 Shale Play, and 1 shale basin   |
|  | Include access to oil refineries and distribution centers  | 1 oil refinery, and 1 natural gas distribution center                    | 1 oil refinery, and 1 natural gas distribution center   | 1 oil refinery, and 1 natural gas distribution center  |
|  | Include access to biodiesel and ethonal plants   | 2 ethanol and 2 biodiesel  | 3 ethanol and 4 biodiesel   | 1 ethanol and 2 biodiesel  |
| Population Centers   | Connect top urbanized areas; utilize Census Urbanized Area Boundary for geographical areas   | 10 MSAs w/ a combined population of 7,189,431 and GDP of \$309.7 billion | 12 MSAs w/ a combined population of 16,702,850 and GDP of \$866.7 billion   | 7 MSAs w/ a combined population of 6,178,221 and GDP of \$270.8 billion                      |
| Network Connectivity   | In order to reduce gaps in the network, connect PFN segments to one another, to the interstate system, or begin/end at access point.           |  |   |  |
| Major Intermodal Connectors  | Connect major airport facilities, rail hubs, pipeline terminals, and port terminals  | 57   | 56  | 94   |
| Air Ports of Entry   | Connect top air ports of entry by landed weight  | DTW, GRR, and LAN  | DTW   | DTW and FNT  |
|  | Connect top air ports of entry by value  |  |   |  |
| For routes off the Interstate System, designation on the National Network of highways that can safely and efficiently accommodate the large vehicles authorized by the State | Where there are parallel routes to consider, avoidance of routes on the National Network that are 'restricted' or 'low clearance'              |  |   |  |
| For routes off the Interstate System, availability of truck facilities   | Where there are parallel routes as alternatives, consider presence of truck stops, rest areas, and weigh stations as factors                   |  |   |  |



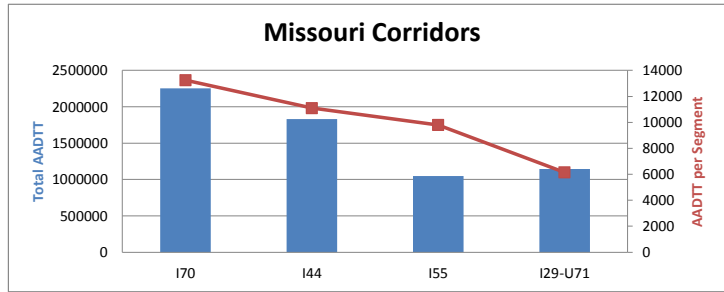
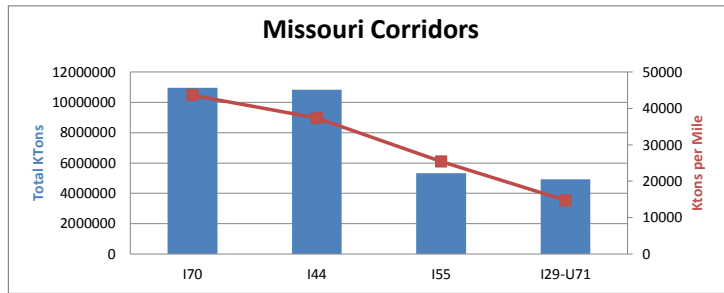
# MINNESOTA

| Factor   | Parameter  | I94   | I90  | I35  |
|--|--|---|--|--|
| Origins/Destinations of Freight Movements  | Connect Top Origins/Destinations   | East-west route with Minneapolis the main origin/destination. Connects to Chicago via Wisconsin | East-west route running from Wisconsin border at La Crosse to South Dakota border at Sioux Falls | North-south route from Iowa border around Albert Lea to Duluth, MN |
| Freight Tonnage and Value by Highways  | Include Top Routes by Weight of Freight Transported (Ktons)  | 7,440,903   | 2,666,634  | 5,601,073  |
|  | Include Top Routes by Value of Commodity Transported   |   |  |  |
| Percentage of AADTT on principal Arterials   | Include Top Routes by Percentage of AADTT on principal Arterials   |   |  |  |
| AADTT on principal Arterials   | Include Top Routes by AADTT on principal Arterials   |   |  |  |
| Land & Maritime Ports of Entry   | Connect Top Water Ports Ranked by Weight and Values  | 2   | 1*   | 4  |
|  | Connect Top Water Ports Ranked by Number of TEUs   |   |  |  |
|  | Connect Top Land Points of Entry by Weight and Values  | none  | None   | none   |
| Access to Energy Exploration, Development, Installation or Production Areas  | Include Access to coal basins, top coal mines, coalbed methane fields, natural gas production locations, gas and oil plays (exploration areas) | 0   | 0  | 0  |
|  | Include access to oil refineries and distribution centers  | 2 oil   | 0  | 3 oil  |
|  | Include access to biodiesel and ethanol plants   | 1 ethanol and 1 biodiesel   | 10 ethanol and 1 biodiesel   | 3 ethanol and 2 biodiesel  |
| Population Centers   | Connect top urbanized areas; utilize Census Urbanized Area Boundary for geographical areas   | 3 MSAs w/ a combined population of 3,677,703 and GDP of \$228 billion                           | 4 MSAs w/ a combined population of 644,677 and GDP of \$35.2 billion                             | 3 MSAs w/ a population of 3,745,615 and GDP of \$227.3 billion     |
| Network Connectivity   | In order to reduce gaps in the network, connect PFN segments to one another, to the interstate system, or begin/end at access point.           |   |  |  |
| Major Intermodal Connectors  | Connect major airport facilities, rail hubs, pipeline terminals, and port terminals  | 1   | 5  | 16   |
| Air Ports of Entry   | Connect top air ports of entry by landed weight  | MSP and FAR   | none   | MSP  |
|  | Connect top air ports of entry by value  |   |  |  |
| For routes off the Interstate System, designation on the National Network of highways that can safely and efficiently accommodate the large vehicles authorized by the State | Where there are parallel routes to consider, avoidance of routes on the National Network that are 'restricted' or 'low clearance'              |   |  |  |
| For routes off the Interstate System, availability of truck facilities   | Where there are parallel routes as alternatives, consider presence of truck stops, rest areas, and weigh stations as factors                   |   |  |  |



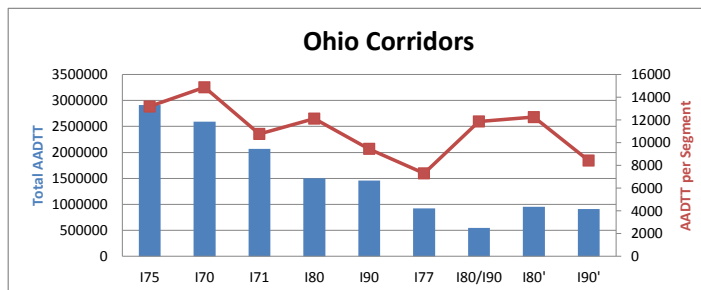
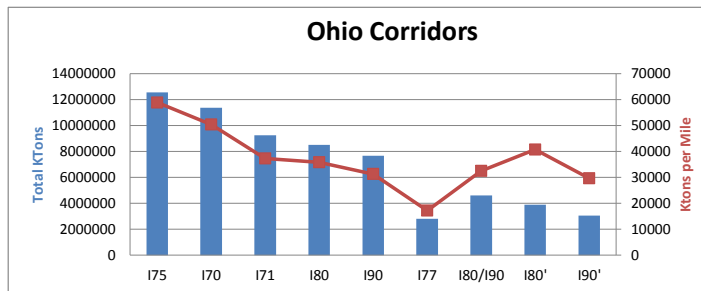
# MISSOURI

| Factor   | Parameter  | I44   | I55   | I70   |
|--|--|---|---|---|
| Origins/Destinations of Freight Movements  | Connect Top Origins/Destinations   | St. Louis to Joplin (Tulsa OK)  | St. Louis to Memphis  | St. Louis to KC   |
| Freight Tonnage and Value by Highways  | Include Top Routes by Weight of Freight Transported (Ktons)  | 10,830,533  | 5,331,463   | 10,961,188  |
|  | Include Top Routes by Value of Commodity Transported   |   |   |   |
| Percentage of AADTT on principal Arterials   | Include Top Routes by Percentage of AADTT on principal Arterials   |   |   |   |
| AADTT on principal Arterials   | Include Top Routes by AADTT on principal Arterials   |   |   |   |
| Land & Maritime Ports of Entry   | Connect Top Water Ports Ranked by Weight and Values  | 2   | 5   | 4   |
|  | Connect Top Water Ports Ranked by Number of TEUs   |   |   |   |
|  | Connect Top Land Points of Entry by Weight and Values  | none  | none  | none  |
| Access to Energy Exploration, Development, Installation or Production Areas  | Include Access to coal basins, top coal mines, coalbed methane fields, natural gas production locations, gas and oil plays (exploration areas) | 2 CBM Basins, 2 shale basins  | 2 CBM basins, 1 shale basin   | 2 CBM basins, 2 shale basins  |
|  | Include access to oil refineries and distribution centers  | 1 oil   | 1 oil   | 1 oil   |
|  | Include access to biodiesel and ethonal plants   | 2 ethanol, 1 biodiesel  | 2 ethanol and 4 biodiesel   | 3 ethanol and 3 biodiesel   |
| Population Centers   | Connect top urbanized areas; utilize Census Urbanized Area Boundary for geographical areas   | 5 MSAs w/ a combined population of 4,038,137 and GDP of \$179.3 billion | 2 MSAs w/ a combined population of 2,909,171 and GDP of \$135.6 billion | 4 MSAs w/ a combined population of 5,170,823 and GDP of \$253 billion |
| Network Connectivity   | In order to reduce gaps in the network, connect PFN segments to one another, to the interstate system, or begin/end at access point.           |   |   |   |
| Major Intermodal Connectors  | Connect major airport facilities, rail hubs, pipeline terminals, and port terminals  | 28  | 29  | 58  |
| Air Ports of Entry   | Connect top air ports of entry by landed weight  | STL and SGF   | STL   | STL and MCI   |
|  | Connect top air ports of entry by value  |   |   |   |
| For routes off the Interstate System, designation on the National Network of highways that can safely and efficiently accommodate the large vehicles authorized by the State | Where there are parallel routes to consider, avoidance of routes on the National Network that are 'restricted' or 'low clearance'              |   |   |   |
| For routes off the Interstate System, availability of truck facilities   | Where there are parallel routes as alternatives, consider presence of truck stops, rest areas, and weigh stations as factors                   |   |   |   |



# OHIO

| Factor   | Parameter  | I70   | I71   | I75   |
|--|--|---|---|---|
| Origins/Destinations of Freight Movements  | Connect Top Origins/Destinations   | East to west route thru Columbus onto Indianapolis  | Cleveland to Cincinnati   | Toledo to Cincinnati  |
| Freight Tonnage and Value by Highways  | Include Top Routes by Weight of Freight Transported (Ktons)  | 11,369,111  | 9,242,030   | 12,553,584  |
|  | Include Top Routes by Value of Commodity Transported   |   |   |   |
| Percentage of AADTT on principal Arterials   | Include Top Routes by Percentage of AADTT on principal Arterials   |   |   |   |
| AADTT on principal Arterials   | Include Top Routes by AADTT on principal Arterials   |   |   |   |
| Land & Maritime Ports of Entry   | Connect Top Water Ports Ranked by Weight and Values  | 0   | 2   | 3   |
|  | Connect Top Water Ports Ranked by Number of TEUs   |   |   |   |
|  | Connect Top Land Points of Entry by Weight and Values  | none  | none  | none  |
| Access to Energy Exploration, Development, Installation or Production Areas  | Include Access to coal basins, top coal mines, coalbed methane fields, natural gas production locations, gas and oil plays (exploration areas) | 4 gassy coal mines, 5 CBM fields, 1 CBM basin, 3 shale plays, 1 shale basin, 3 tight gas plays, and 1 tight gas basin | 1 CBM basin, 2 shale plays, 1 shale basin, 2 tight gas plays, and 1 tight gas basin | 1 shale basin   |
|  | Include access to oil refineries and distribution centers  | 0   | 1 natural gas distribution center   | 3 oil and 1 natural gas distribution center                             |
|  | Include access to biodiesel and ethonal plants   | 2 ethanol and 1 biodiesel   | 2 ethanol and 2 biodiesel   | 4 ethanol and 2 biodiesel   |
| Population Centers   | Connect top urbanized areas; utilize Census Urbanized Area Boundary for geographical areas   | 7 MSAs w/ a combined population of 7,450,757 and GDP of \$357.5 billion*  | 8 MSAs w/ a combined population of 8,255,859 and GDP of \$385.6 billion             | 6 MSAs w/ a combined population of 4,019,767 and GDP of \$176.6 billion |
| Network Connectivity   | In order to reduce gaps in the network, connect PFN segments to one another, to the interstate system, or begin/end at access point.           |   |   |   |
| Major Intermodal Connectors  | Connect major airport facilities, rail hubs, pipeline terminals, and port terminals  | 33  | 130   | 64  |
| Air Ports of Entry   | Connect top air ports of entry by landed weight  | CMH**, DAY, LCK   | CVG, CLE, CMH*, and LCK   | CVG, DAY, TOL, and LCK  |
|  | Connect top air ports of entry by value  |   |   |   |
| For routes off the Interstate System, designation on the National Network of highways that can safely and efficiently accommodate the large vehicles authorized by the State | Where there are parallel routes to consider, avoidance of routes on the National Network that are 'restricted' or 'low clearance'              |   |   |   |
| For routes off the Interstate System, availability of truck facilities   | Where there are parallel routes as alternatives, consider presence of truck stops, rest areas, and weigh stations as factors                   |   |   |   |



# WISCONSIN

| Factor   | Parameter  | U41   | I90  | I94  |
|--|--|---|--|--|
| Origins/Destinations of Freight Movements  | Connect Top Origins/Destinations   | Green Bay - Fox Valley - Milwaukee                                      | Illinois/Wisconsin border north of Rockford to Minnesota/Wisconsin border at La Crosse | Chicago - Milwaukee - Madison - Minneapolis                              |
| Freight Tonnage and Value by Highways  | Include Top Routes by Weight of Freight Transported (Ktons)  | 1,490,826   | 7,883,163  | 13,402,606   |
|  | Include Top Routes by Value of Commodity Transported   |   |  |  |
| Percentage of AADTT on principal Arterials   | Include Top Routes by Percentage of AADTT on principal Arterials   |   |  |  |
| AADTT on principal Arterials   | Include Top Routes by AADTT on principal Arterials   |   |  |  |
| Land & Maritime Ports of Entry   | Connect Top Water Ports Ranked by Weight and Values  | 2   | 1*   | 4  |
|  | Connect Top Water Ports Ranked by Number of TEUs   |   |  |  |
|  | Connect Top Land Points of Entry by Weight and Values  | none  | none   | none   |
| Access to Energy Exploration, Development, Installation or Production Areas  | Include Access to coal basins, top coal mines, coalbed methane fields, natural gas production locations, gas and oil plays (exploration areas) | none  | none   | none   |
|  | Include access to oil refineries and distribution centers  | none  | none   | 1 oil  |
|  | Include access to biodiesel and ethanol plants   | 1 ethanol   | 3 ethanol and 3 biodiesel  | 3 ethanol and 2 biodiesel  |
| Population Centers   | Connect top urbanized areas; utilize Census Urbanized Area Boundary for geographical areas   | 6 MSAs w/ a combined population of 2,471,949 and GDP of \$130.6 billion | 5 MSAs w/ a combined population of 10,673,125 and GDP of \$607.9 billion               | 8 MSAs w/ a combined population of 15,515,994 and GDP of \$903.6 billion |
| Network Connectivity   | In order to reduce gaps in the network, connect PFN segments to one another, to the interstate system, or begin/end at access point.           |   |  |  |
| Major Intermodal Connectors  | Connect major airport facilities, rail hubs, pipeline terminals, and port terminals  | 90  | 21   | 80   |
| Air Ports of Entry   | Connect top air ports of entry by landed weight  | MKE   | none   | MKE  |
|  | Connect top air ports of entry by value  |   |  |  |
| For routes off the Interstate System, designation on the National Network of highways that can safely and efficiently accommodate the large vehicles authorized by the State | Where there are parallel routes to consider, avoidance of routes on the National Network that are 'restricted' or 'low clearance'              |   |  |  |
| For routes off the Interstate System, availability of truck facilities   | Where there are parallel routes as alternatives, consider presence of truck stops, rest areas, and weigh stations as factors                   |   |  |  |

