

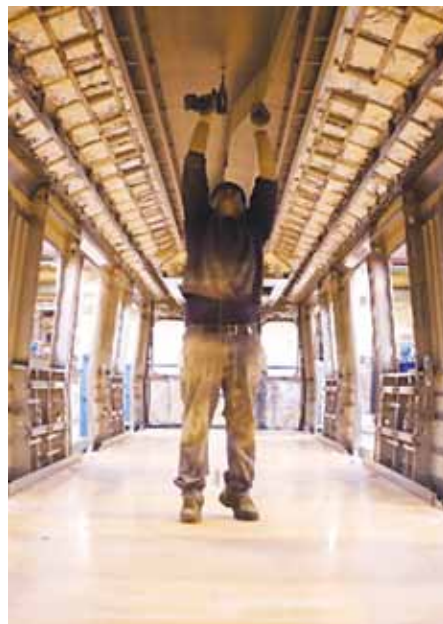


Midwest High-Speed Rail Supply Chain

Good For Manufacturing Jobs, Good for Economic Growth
and Good for Our Environment



ENVIRONMENTAL LAW & POLICY CENTER



Midwest High-Speed Rail Supply Chain

Good For Manufacturing Jobs, Good for Economic Growth and Good for Our Environment

Report Findings:

- High-speed rail manufacturing and jobs are growing in the United States.
- American rail manufacturing gets a boost from federal high-speed rail investment, which creates jobs and economic growth.
- Old-line manufacturing companies in the industrial Midwest are re-tooling to seize new business opportunities from rail growth.
- Midwest manufacturers will especially benefit from these investments.
- Rising rail ridership trends set the stage for more manufacturing growth.
- Good-paying manufacturing jobs create more wealth in communities.
- Rail investments mean job creation and economic growth and expansion.

460 Companies are in the Midwest High-Speed Rail Supply Chain

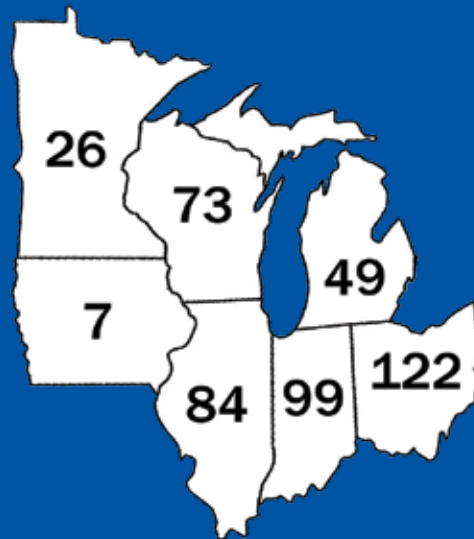


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Overview



Next generation passenger rail is picking up speed in the United States, which means business opportunities for both the Original Equipment Manufacturers (OEMs) that make the trains and the many “supply chain” companies that create the components and materials needed by the OEMs. ELPC’s study of high-speed and other new technology intercity passenger rail suppliers identified 12 OEMs and 460 supply chain companies in seven industrial Midwest states. Each job at a rail car manufacturer generates additional downstream manufacturing jobs.

High-speed rail manufacturing is growing in the United States. A combined \$782 million in federal investment is being awarded to California, Illinois, Iowa, Michigan, Missouri and Washington to purchase 33 quick-acceleration locomotives and 130 modern bi-level passenger rail cars. Amtrak is also in the midst of a multi-year purchase.

American manufacturing gets a boost from high-speed rail investment. In September 2012, contract awards for next generation rail cars were announced. This will be followed in early 2013 with awards for next generation locomotives. Each car and locomotive is the pinnacle of a large supply chain, creating jobs and economic development in diverse industries across the country. The federal “Buy America” standard will ensure that the resulting job growth will happen mostly in the United States.

Midwest manufacturers will especially benefit from these investments. ELPC’s study identified a “clustering effect” of rail supply chain businesses in the Midwest. Several major rail OEMs are located in the Midwest — including Nippon-Sharyo USA in Rochelle, IL, which won the railcar procurement bid — leading to a concentration of nearby supply chain companies. For example, Electro-Motive Diesel, a major locomotive manufacturer, says the majority of its supply chain is within 500 miles of Chicago.



Rising rail ridership trends set the stage for manufacturing growth. In FY 2012, Amtrak announced record-setting annual increases in ridership for nine of the last ten years. Ridership nationwide is now 50% higher than in 2000.

Old-line manufacturing businesses in the Industrial Midwest are re-tooling to seize opportunities from rail growth. Our study found dozens of companies that now supply rail manufacturers after years of supplying the automotive industry and other sectors. This rail growth offers opportunities to suppliers of automotive glass, seats and other components, particularly given the “Buy America” mandate for rail.

Manufacturing jobs create more wealth in communities through better wages and benefits. Manufacturing has a higher multiplier effect as the goods flow through the economy. For example, according to a 2010 study from the



Tripp Umbach research firm, GE Transportation has a larger impact on the Pennsylvania economy (\$4.6 billion) than all of the state’s professional sports teams (\$1.37 billion) and mining, oil and gas extraction industries (\$1.79 billion) combined.

Rail investments mean job creation and economic expansion. Current investments in next-generation rail provide an important “jolt in the arm” to the U.S. rail industry supply chain. A predictable, long-term demand stream is important to continue to develop the industry. Consistent funding for Amtrak and state rail equipment purchases are high-leverage investments.

Photo locations, left to right: Talgo in Milwaukee, WI (ELPC photographer Marianne Morgan); Brookville Equipment Corp. in Brookville, PA; US Railcar in Columbus, OH; and Siemens Rolling Stock Division in Sacramento, CA. All photos courtesy of the company unless otherwise noted.

Rail Car and Locomotive Manufacturers



Photo locations, top to bottom: Alstom Transport, Brookville Equipment Corporation and General Electric Transportation. Photos courtesy of the companies.

Intercity passenger rail cars and locomotives are ultimately manufactured or assembled by major Original Equipment Manufacturers (OEMs). These companies purchase component parts, such as seats, flooring and brakes, and services needed to complete a rail car or locomotive assembly from the “rail supply chain” and deliver the finished product to the customer. The 12 major rail OEMs in the U.S. market are:

Alstom Transport — Hornell, NY

Alstom Transport employs 26,000 people in 60 countries and is the largest global supplier of high- and very-high-speed rail vehicles. Alstom Transport operates the largest passenger rolling stock manufacturing facility in the U.S., is heavily involved in the freight, signaling and metro sectors, and has provided equipment for over 20% of America’s active subway cars. More than 5,000 rail vehicles currently in use throughout North America were manufactured by Alstom Transport.

Bombardier Transportation — Horsham, PA

Bombardier Transportation supplied the Acela Express passenger cars currently in use on Amtrak’s Northeast Corridor. Bombardier designs, manufactures and services complete trains, rail sub-systems and signaling equipment for high-speed trains, transit and urban light rail. The company employs about 2,500 U.S. workers across 15 states, has manufacturing sites in Plattsburgh, NY, and Pittsburgh, PA, and operates a network of fleet maintenance and service sites in 11 states. Globally, Bombardier Transportation is present in 26 countries with 36,200 employees.

Brookville Equipment Corporation — Brookville, PA

Brookville is an American manufacturer founded in 1918 that designs and builds passenger and freight locomotives. Brookville purchases 55% of its components locally in Pennsylvania.

Construcciones y Auxiliar de Ferrocarriles USA — Washington, D.C.

CAF USA is the North American subsidiary of a Spanish parent company that has operated a 400,000-square-foot facility in Elmira, NY, since 2000. The company is building 130 new single-level passenger cars for Amtrak — a contract that is expected to create 575 new manufacturing and assembly jobs. That plant has a 2,700-foot test track used for final rail car evaluation and is establishing a stainless steel shell manufacturing area. Globally, CAF is involved in rail projects on six continents.

Electro-Motive Diesel (EMD) — LaGrange, IL

A wholly owned subsidiary of Progress Rail Services Corp. (a Caterpillar Company), EMD is the second-largest manufacturer of diesel-electric locomotives in North America used for inter-city passenger rail, freight rail and industrial applications. EMD also makes diesel engines for marine and power generation use. It has built more than 72,500 engines since its founding in 1922. Progress Rail recently opened a new locomotive manufacturing facility in Muncie, IN.

General Electric Transportation — Erie, PA

More than 15,000 GE-built diesel-electric locomotives are in operation worldwide, including more than 250 with Amtrak. GE Transportation produces locomotives, communication equipment and rail management software and is currently designing hybrid diesel-electric locomotives for increased fuel efficiency. GE Transportation employs more than 11,000 workers. In May 2012, the company announced plans to move its corporate headquarters to Chicago.

Kawasaki Rail Car — Yonkers, NY

Kawasaki Rail Car has delivered more than 3,000 rail cars to American customers and more than 90,000 worldwide. Its 900 employees manufacture commuter, subway and rapid transit cars. Kawasaki recently opened a new railcar shell manufacturing facility in Lincoln, NE. Kawasaki Rail Car is a division of Kawasaki Heavy Industries, a global company



Photo locations, top to bottom: Siemens Rolling Stock Division, Talgo USA and US Railcar. Photos courtesy of the companies.

involved in industrial, robotic and transportation technology with more than 32,000 employees.

Nippon Sharyo USA — Arlington Heights, IL

This North American subsidiary of a Japanese company has delivered more than 880 cars since its founding in 1982 and opened a new factory in Rochelle, IL, in 2012. The first rolling stock built by that new plant is slated to enter service with the Chicago region's Metra system in late 2012. The firm has been awarded a contract to build 130 bi-level passenger rail cars for the Midwest and California. Nippon Sharyo's Japanese parent company has delivered more than 3,000 railcars for Japan's high-speed rail.

Siemens Rolling Stock Div. — Sacramento, CA

Siemens Rolling Stock Division has been a major provider of light rail and rapid transit vehicles in the United States since 1975. Siemens employs 850 people at its California facility, which is producing 70 new electric locomotives for Amtrak's Northeast Corridor. The plant uses on-site solar energy for 80% of its electricity needs. Siemens employs 360,000 people globally and 62,000 in the U.S.



Photo locations, top to bottom: Brookville Equipment Corp., GE Transportation and Siemens Rolling Stock. Photos courtesy of the companies.

Stadler US — Westfield, NJ

New Jersey and Texas currently use railcars produced by Stadler US's Swiss parent company, Stadler Rail Group. The company founded its North American division in 2011. Stadler Rail Group manufactures regional and light-rail vehicles and trams and is introducing fuel-efficient hybrid locomotives.

Talgo USA — Seattle, WA

Talgo USA employs 140 people and builds train sets and passenger coaches for service in the Midwest and the Pacific Northwest. The company also provides comprehensive equipment maintenance and services for its passenger cars. Talgo USA is a subsidiary of a Spanish-based company that produces high-speed, super high-speed and intercity passenger trains. Talgo employs 1,500 people and has more than 3,000 passenger cars in service worldwide.

US Railcar — Columbus, OH

US Railcar produces powered and unpowered railcars in single and bi-level designs capable of 79-90 mph and 110 mph. It is the only supplier of self-propelled intercity and commuter railcars that do not need waivers or temporal separation agreements to operate in mixed-mode freight corridors. US Railcar also markets customizable luxury "Ultradome" passenger cars for tourism and private use.

Supply Chain Company Profiles



Photo from stock.xchng.

ELPC identified 460 companies in seven industrial Midwest states that provide component parts and services to the U.S. passenger rail industry. Advancing an engaged supplier base is a vital opportunity for the American passenger rail industry.

OEMs generate downstream supply chain manufacturing jobs, which support each OEM position. For example, the American automobile manufacturing industry supports three additional jobs for each corresponding OEM employee. Accordingly, the majority of jobs associated with industrial manufacturing exist farther down the supply chain at component and materials fabrication levels. The Midwestern companies profiled in this section exemplify the breadth of sizes and capabilities of passenger rail suppliers and service providers.

Armond Cassil Railroad Construction — Warren, MI

Armond Cassil Railroad Construction designs and builds new railroad tracks across the United States. Since 1994, the company has worked on passenger rail projects. Armond Cassil is approved for rail work by 12 states and most major American railroads. The company has also built new rail lines for power plants, Class 1 Railroads and steel factories.

Bo-Mar Industries — Indianapolis, IN

Bo-Mar is a metal fabrication shop employing more than 40 people. Established in 1991, the company's founders began operations in their father's barn. Today, Bo-Mar's capabilities include laser cutting, water-jet cutting, sheet metal fabrication, prototyping and custom manufacturing. The company's experience in the passenger rail industry includes designing and producing sleeper bunks, water tanks, battery boxes and complete stainless steel kitchens. Bo-Mar also patented and fabricated a bicycle storage device for the CALTRANS Rail System in Los Angeles.

Brasco International — Madison Heights, MI

Brasco International designs and manufactures passenger shelters for rail applications. Founded in 1993, the company uses primarily aluminum and either glass or polycarbonate to build sustainable structures. Brasco International demonstrates its commitment to environmental responsibility by using sustainable materials, integrated solar panels and efficient LED lighting.

Buell Air Horns — Lyons, IL

Buell Air Horns has produced quality acoustic signaling horns since 1912. The company offers complete systems, incorporating compressors, brackets, connections and

Continued...

Supply Chain Company Profiles



horns. Buell Air Horns offers single, 3-chime and 5-chime air horns for locomotives. They also produce air horns for marine, industrial and emergency-vehicle applications.

Electro Wire — Schaumburg, IL

Electro Wire supplies and services railroad cabling and electronics. The company is the largest distributor of Exane, the transit cable used in more than 20,000 locomotives worldwide. They also offer DLO cable suited to provide power to traction motors of diesel-electric locomotives. Founded in 1978, Electro Wire has grown to provide signal, communication and traction solutions for passenger rail. The company recently moved its headquarters to a new 116,000-square-foot facility in Schaumburg, IL.

Freedman Seating Co. — Chicago, IL

Freedman was founded in 1892 and is one of the nation's largest specialty seating manufacturers. The company employs more than 550 people and provides seats and seating products for trains, buses and commercial vehicles. Freedman is reducing its carbon footprint by installing a more efficient lighting system, expanding its recycling

program and installing solar panels to reduce its demand from the electric grid.

Funk Linko – Chicago Heights, IL

This fourth-generation, woman- and minority-owned company was founded over 85 years ago and provides both design and fabrication services for the rail industry. Specifically, the company designs and manufactures for the rail industry both subframe components, such as battery boxes, oil tanks and other structural pieces that carry specific components inside the overall frame, and parts of the frame, such as air ducting and walkways. According to Funk Linko, these components help create locomotives and railcars that are capable of carrying “more freight with less fuel,” resulting in cost savings and reduced pollution. In recent years, the bulk of Funk Linko’s business has shifted to energy efficient railway products, as well as small- to medium-sized wind turbine towers.

HiRAIL Corporation — Lisbon, IA

HiRail Corporation manufactures custom rubber grade-



Photos by ELPC photographer Marianne Morgan.

crossing units. The company offers customized designs and a state-of-the-art engineering facility in Lisbon, IA. For more than 25 years, HiRAIL Corporation has used rubber recycled from old tires in full-depth railroad grade-crossing systems. Most of these tires would otherwise have been destined for a landfill.

Independent Machine Company — Gladstone, MI

Independent Machine Co. supplies a range of machined parts to the passenger rail industry, including gear cases, plows and wear plates. The company was founded in 1975 with a single lathe used to turn locomotive wheels in a garage. Independent Machine Company currently has more than 30 employees and two plant facilities totaling more than 37,000 square feet. It is capable of prototype work and uses only American-made materials and products.

Loram Maintenance of Way — Hamel, MN

Loram supplies track maintenance machinery and services to railroads both nationally and globally. Their customers include Amtrak, MTA New York, PATH and Metra Rail. The

company started in 1954 with two maintenance machines. Today, they employ more than 800 people and operate 123 machines in 16 countries. Loram offers rail grinding, ditching and track data services. The company also offers maintenance training, consulting and support.

Master Packing & Rubber Company — Cedar Rapids, IA

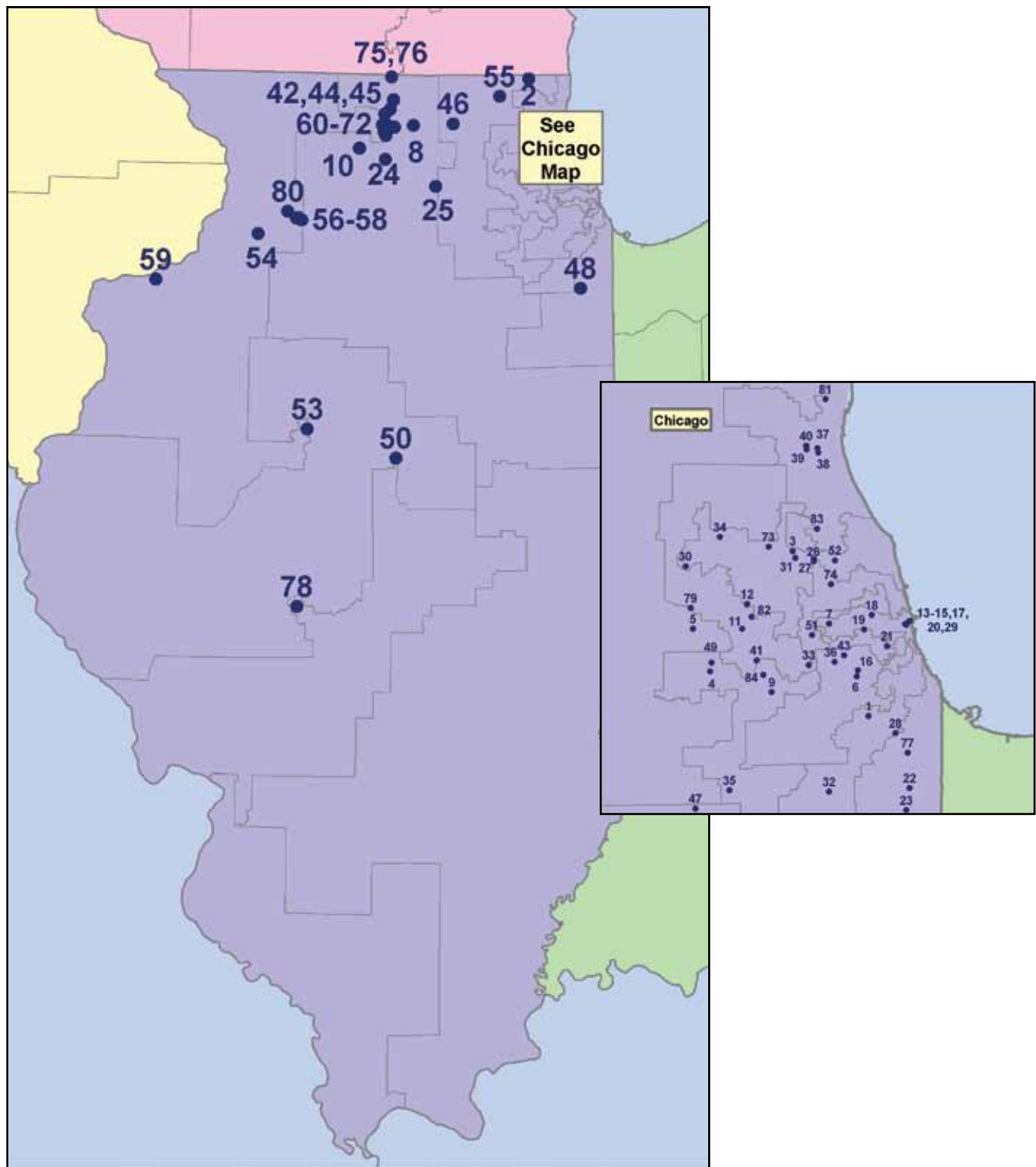
Founded in 1982, Master Packing and Rubber Company provides sealing solutions for applications involving high temperature, pressure and vibration. The company works closely with railroads and engine-rebuilders throughout its design process. Master Packing and Rubber uses computer simulations to analyze seals using polymers, ceramic, Teflon and other materials. The company also serves the power, pharmaceutical and food processing industries.

Metalcraft of Mayville — Mayville, WI

Metalcraft is a custom sheet metal fabricator that machines large weldments and castings. Metalcraft has two locations

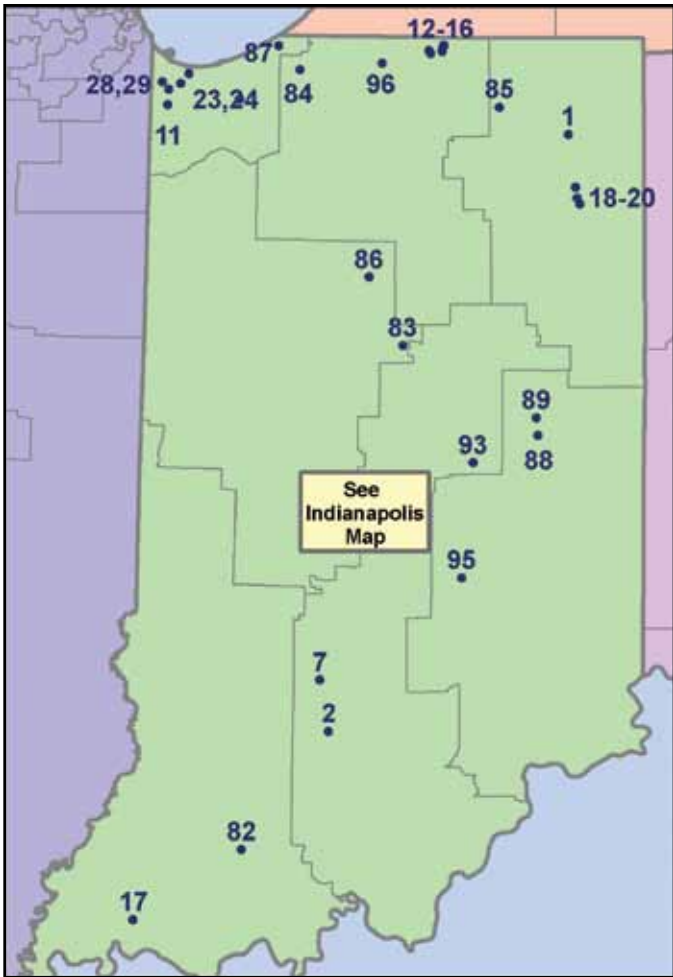
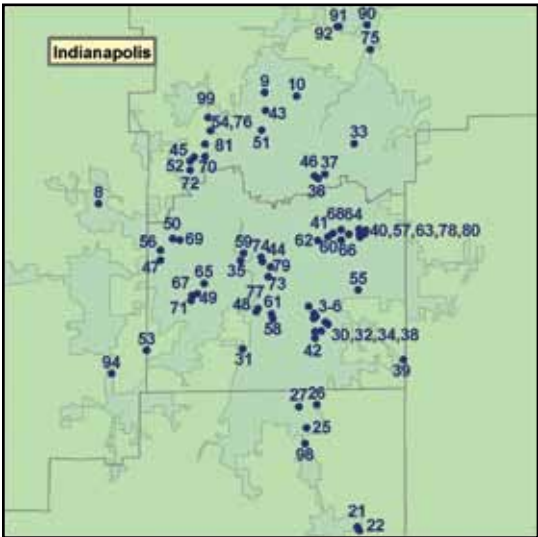
Supply Chain Company Profiles Continued on Page 21...

Illinois High-Speed Rail: 84 Supply Chain Companies



1. K&E	Alsip	43. Buell Air Horns	Lyons
2. Prestige Metal Products	Antioch	44. Powermark International	Machesney Park
3. Nippon Sharyo USA.....	Arlington Heights	45. Safeway Services of Rockford.....	Machesney Park
4. Illinois Auto Electric	Aurora	46. Marengo Valve & Foundry	Marengo
5. PPG Rail Division.....	Batavia	47. Elcon	Minooka
6. R&W Machine	Bedford Park	48. Whiting	Monee
7. Kustom Seating	Bellwood	49. Alstom Power	Naperville
8. Corrugated Metals	Belvidere	50. Bloomington-Normal Seating	Normal
9. WI-Tronix.....	Boilingbrook	51. LB Foster Rail Products	Oak Brook
10. Austin-Westran.....	Byron	52. Standard Car Truck.....	Park Ridge
11. JMA Railroad Supply	Carol Stream	53. Caterpillar.....	Peoria
12. Prince Industries	Carol Stream	54. American Gear	Prophetstown
13. Amsted Industries.....	Chicago	55. Niemeyer & Associates.....	Ringwood
14. Amsted Rail.....	Chicago	56. Hill Fastener.....	Rock Falls
15. Bowman, Barrett & Associates	Chicago	57. IFH Group	Rock Falls
16. Clements National.....	Chicago	58. R&R Metalcraft	Rock Falls
17. EJM Engineering	Chicago	59. Cummins Central Power.....	Rock Island
18. Freedman Seating.....	Chicago	60. Advanced Machine & Engineering	Rockford
19. Inter Swiss.....	Chicago	61. Dasco Pro	Rockford
20. LTK Engineering Systems.....	Chicago	62. Dixon Automatic Tools	Rockford
21. Western-Cullen-Hayes.....	Chicago	63. Fiberglass Innovations	Rockford
22. Funk Linko.....	Chicago Heights	64. Forgings & Stampings.....	Rockford
23. Holland.....	Crete	65. GFI Metal Treating	Rockford
24. Skandia.....	Davis Junction	66. Global Display Solutions.....	Rockford
25. Forge Resources Group.....	Dekalb	67. Leatherhead Tools.....	Rockford
26. La Marche	Des Plaines	68. MTE Hydraulics.....	Rockford
27. Parkway Metal Products.....	Des Plaines	69. Nelson Manufacturing.....	Rockford
28. National Railway Equipment.....	Dixmoor	70. Pyramid Plastics	Rockford
29. Burns & McDonnell.....	Downers Grove	71. SPX Hydraulic Technologies	Rockford
30. Harting.....	Elgin	72. The Caldwell Group	Rockford
31. Jet Finishers	Elk Grove Village	73. Electro Wire	Schaumburg
32. Midwest Imperial Steel Fab.....	Frankfort	74. Priority Manufacturing	Shiller Park
33. Sharma & Associates.....	Hinsdale	75. Electrol Specialties.....	South Beloit
34. Rexroth Bosch Group	Hoffman Estates	76. Meadoweld Machine	South Beloit
35. Relay Systems of America	Joliet	77. Hadady	South Holland
36. Electro-Motive Diesel	LaGrange	78. Hanson Professional Services	Springfield
37. Specialty Products.....	Lake Bluff	79. Ellcon-National.....	St. Charles
38. Kor-Pak	Lake Forest	80. Westwood Machine & Tool.....	Sterling
39. Aldridge Electric	Libertyville	81. Aldon.....	Waukegan
40. Morton Manufacturing.....	Libertyville	82. MRT Track Services	Wheaton
41. Zeman Manufacturing.....	Lisle	83. Microtech Machine	Wheeling
42. Pierce Distribution Services Co.....	Loves Park	84. Progress Rail Services	Woodridge

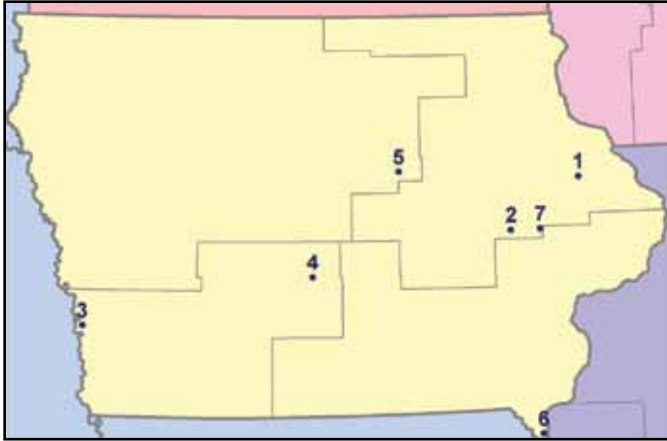
Indiana High-Speed Rail: 99 Supply Chain Companies



1. Prince Manufacturing Avilla
2. Dynamic Specialty Metal Spinning..... Bedford
3. Indianapolis Wire & Terminal..... Beech Grove
4. JP Corp Beech Grove
5. Catalyst Industrial Coatings..... Beech Grove
6. LS Mold..... Beech Grove
7. National Salvage & Service Corp. Bloomington
8. Schindler Electric..... Brownsburg
9. Allied Electronics..... Carmel
10. Industrial Specialties..... Carmel
11. Advanced Boiler Control Services Crown Point
12. ACTIA Elkhart
13. Adams & Westlake..... Elkhart
14. Dynamic Metals Elkhart
15. Hadley Products..... Elkhart
16. Primix Elkhart
17. Industrial Filter Manufacturers..... Evansville
18. Crane America Services Fort Wayne
19. Essex Group..... Fort Wayne
20. Press-Seal Gasket Fastener Div. Fort Wayne
21. Garcor Supply Co..... Franklin
22. Quality Mill Supply..... Franklin
23. Pro Pump..... Gary
24. Stanrail Gary
25. Advantage Electronics Greenwood
26. American Industrial Corp. Greenwood
27. Wessels Co Greenwood
28. Diesel Electrical Equipment..... Griffith
29. Sims Professional Engineers..... Highland
30. A & A Industrial Supply Indianapolis
31. Action Equipment Sales..... Indianapolis
32. Advantage Water Conditioning..... Indianapolis
33. Aircon Engineering Indianapolis
34. Alro Steel Indianapolis
35. American Wire Rope & Sling..... Indianapolis
36. Baker Machinery Indianapolis
37. Bisco Industries..... Indianapolis
38. Bo-Mar Industries Indianapolis
39. Burgess Mechanical Indianapolis
40. Central Supply Indianapolis
41. Colby Equipment..... Indianapolis
42. Crown Screw and Bolt Indianapolis

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|--|---|
| 43. Delta Faucet..... Indianapolis | 85. Structural Composites of Indiana Ligonier |
| 44. Duncan Supply Indianapolis | 86. Edlo Sales & Engineering Logansport |
| 45. E-A-R Specialty Composites Indianapolis | 87. Dwyer Instruments..... Michigan City |
| 46. Electrical Equipment..... Indianapolis | 88. Lift-a-Loft Muncie |
| 47. Elliott Equipment..... Indianapolis | 89. Warner Supply Muncie |
| 48. Ellis Mechanical..... Indianapolis | 90. Gaylor..... Noblesville |
| 49. Fairbanks Scales..... Indianapolis | 91. Inohva Pneumatics..... Noblesville |
| 50. Fiberglass Engineering & Design Indianapolis | 92. Sidener Engineering..... Noblesville |
| 51. Firestone Industrial Products Indianapolis | 93. Capital Machinery Systems..... Pendleton |
| 52. Gexpro Indianapolis | 94. Hoosier Equipment Service..... Plainfield |
| 53. Graybar Electric..... Indianapolis | 95. B&H Electric & Supply Shelbyville |
| 54. Grunau..... Indianapolis | 96. Watcon..... South Bend |
| 55. High Voltage Maintenance Indianapolis | 97. Fairway Industries Valparaiso |
| 56. Hydra Air Indianapolis | 98. Certa Craft..... Whiteland |
| 57. IDS Blast Finishing Indianapolis | 99. Accurate Laser Systems Zionsville |
| 58. Kennedy Tank & Manufacturing..... Indianapolis | |
| 59. Kirby Risk..... Indianapolis | |
| 60. Koorsen Protection Indianapolis | |
| 61. Lauck Mfg..... Indianapolis | |
| 62. Lawler Manufacturing Indianapolis | |
| 63. Loy Instrument..... Indianapolis | |
| 64. MacAllister Machinery Indianapolis | |
| 65. McGinty Conveyors Indianapolis | |
| 66. Mile Rail Indianapolis | |
| 67. ORR Safety Indianapolis | |
| 68. OTP Industrial Solutions Indianapolis | |
| 69. PEI Genesis Indianapolis | |
| 70. R S Hughes Indianapolis | |
| 71. Rocore..... Indianapolis | |
| 72. S&K Air Power Tool..... Indianapolis | |
| 73. Service Pipe & Supply Indianapolis | |
| 74. South Central Indianapolis | |
| 75. Standard Electric Supply Indianapolis | |
| 76. System Scale..... Indianapolis | |
| 77. Tarpenning-Lafollette Indianapolis | |
| 78. Unistrut Indianapolis Indianapolis | |
| 79. Universal Tool & Supply..... Indianapolis | |
| 80. Worldwide Filters..... Indianapolis | |
| 81. Wurth Service Supply Indianapolis | |
| 82. NAP GLADU Tools..... Jasper | |
| 83. Pepka Spring..... Kokomo | |
| 84. ATI Casting Service LaPorte | |

Iowa High-Speed Rail: 7 Supply Chain Companies

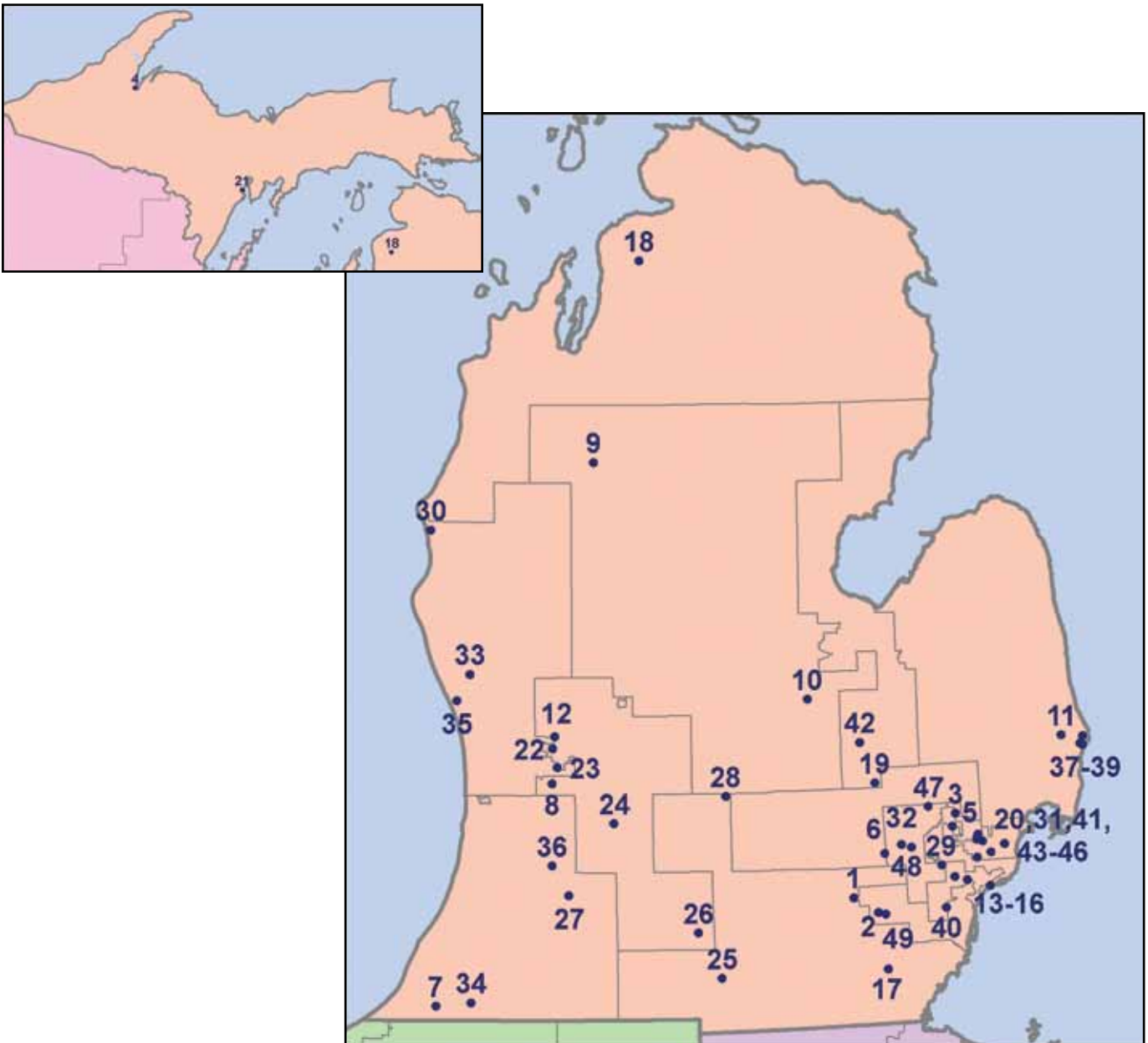


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|--|----------------|
| 1 Rail-Way Inc..... | Cascade |
| 2 Master Packing & Rubber Company..... | Cedar Rapids |
| 3 Red Giant Oil Companies..... | Council Bluffs |
| 4 Products Inc | Des Moines |
| 5 Environmental Lubricants Mftrg..... | Grundy Center |
| 6 Matrix Metals LLC..... | Keokuk |
| 7 HiRAIL Corporation..... | Lisbon |

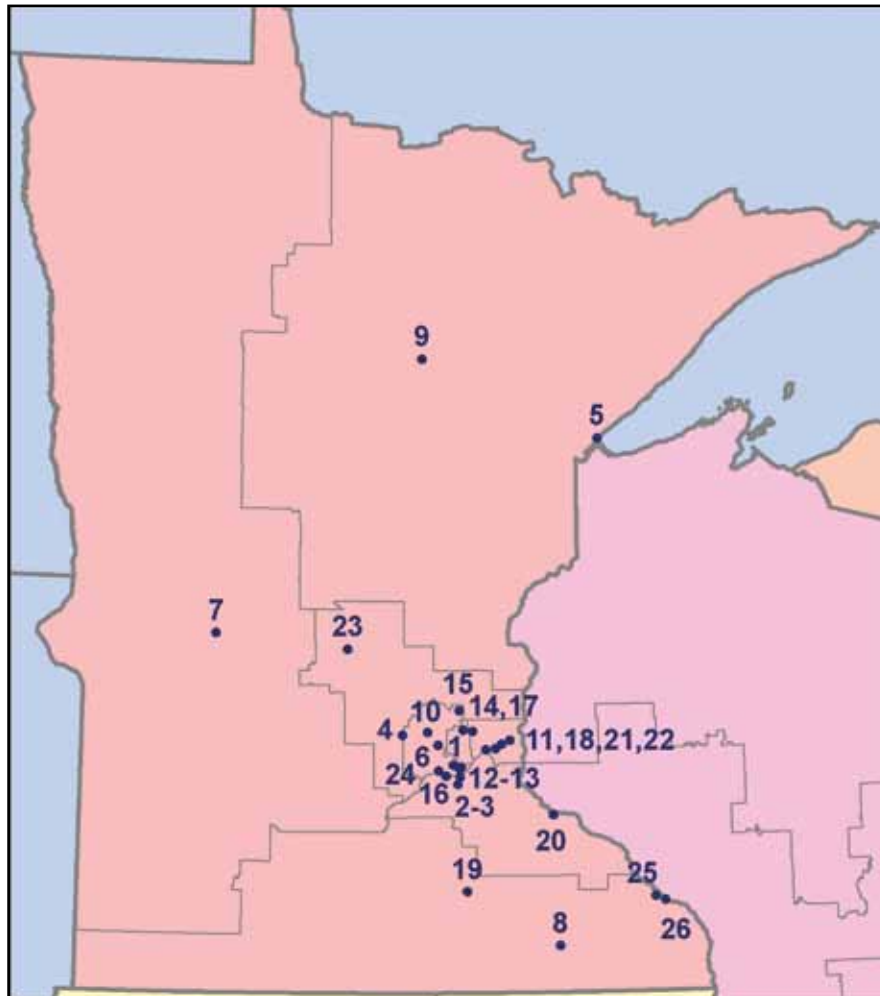
Michigan High-Speed Rail: 49 Supply Chain Companies

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|---------------------------------------|------------------|--|-----------------|
| 1. Dexter Stamping..... | Ann Arbor | 20. Powertran..... | Ferndale |
| 2. Schnorr | Ann Arbor | 21. Independent Machine | Gladstone |
| 3. Custom Service & Design | Auburn Hills | 22. American Seating | Grand Rapids |
| 4. Pettibone Michigan..... | Baraga | 23. Suspa..... | Grand Rapids |
| 5. Sandpoint Consulting | Bloomfield Hills | 24. Hastings Fiber Glass..... | Hastings |
| 6. Peaker Services | Brighton | 25. Alsons..... | Hillsdale |
| 7. Aalfs Petroleum..... | Buchanan | 26. Steel Products (MCS Industries)..... | Homer |
| 8. Pathfinder Engineering | Byron Center | 27. Total Plastics | Kalamazoo |
| 9. Borg Warner Cooling..... | Cadillac | 28. Alcoa | Lansing |
| 10. Hehr International..... | Chesaning | 29. G4S Secure Solutions USA..... | Livonia |
| 11. Hess Asphalt Paving & Const. | Clyde | 30. Harsco Rail | Ludington |
| 12. Dubric Packing & Seals | Comstock Park | 31. Brasco International | Madison Heights |
| 13. Chemcoa..... | Detroit | 32. General Bearing | Milford |
| 14. Compuware..... | Detroit | 33. Trinity Equipment | Muskegon |
| 15. Detroit Diesel..... | Detroit | 34. Kenneth Smith Inc..... | Niles |
| 16. Tognum America | Detroit | 35. Omnicast..... | Norton Shores |
| 17. Mitchell Equipment..... | Dundee | 36. Peleton | Otsego |
| 18. East Jordan Iron Works..... | East Jordan | 37. Bach-Simpson | Port Huron |
| 19. FMC Rail | Fenton | 38. Dymac..... | Port Huron |

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- | | | | |
|---|--------------|--|-----------|
| 39. Michigan Petroleum Technology | Port Huron | 45. Schaeffler Group North America | Troy |
| 40. RKA Petroleum | Romulus | 46. Armond Cassil Railroad Const. | Warren |
| 41. Spencer Oil | Roseville | 47. Hadley-Transmatic | Waterford |
| 42. Hougen Manufacturing | Swartz Creek | 48. NLB Corporation | Wixom |
| 43. HOV Services | Troy | 49. Interclean Equipment | Ypsilanti |
| 44. Mentor Group | Troy | | |

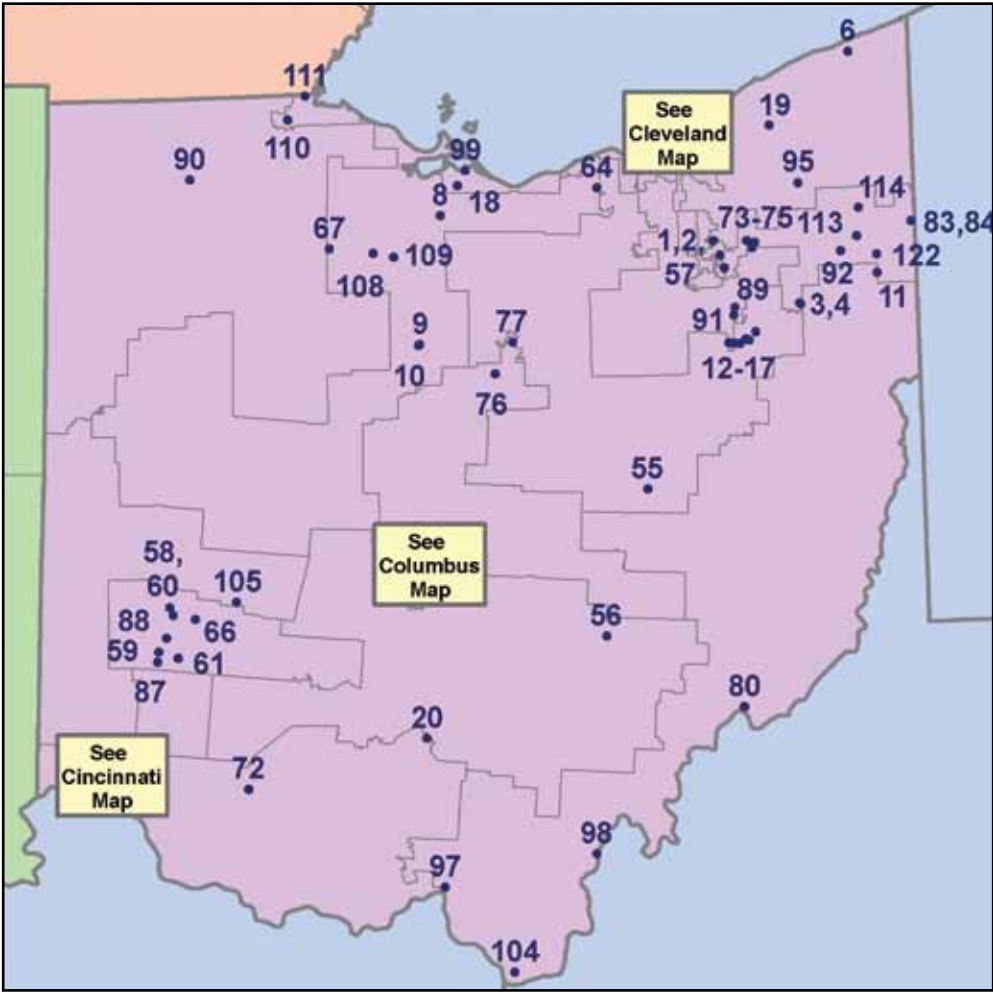


Minnesota High-Speed Rail: 26 Supply Chain Companies

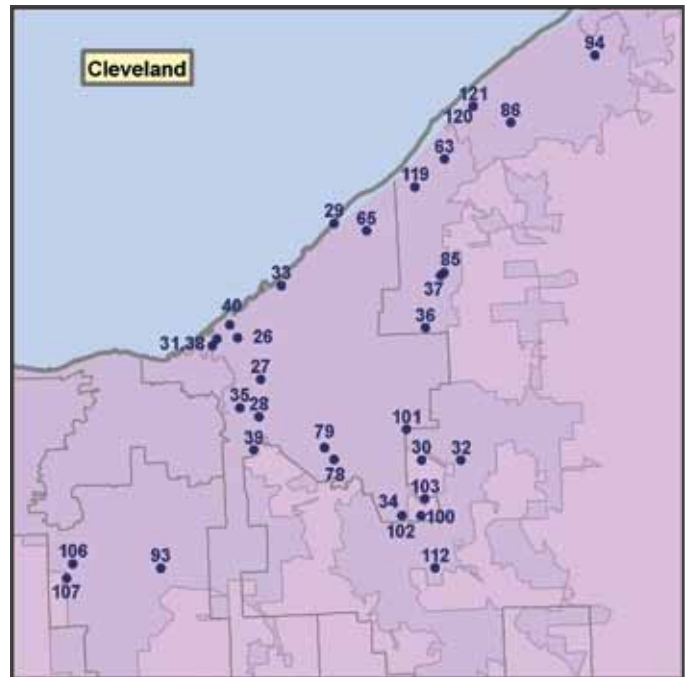
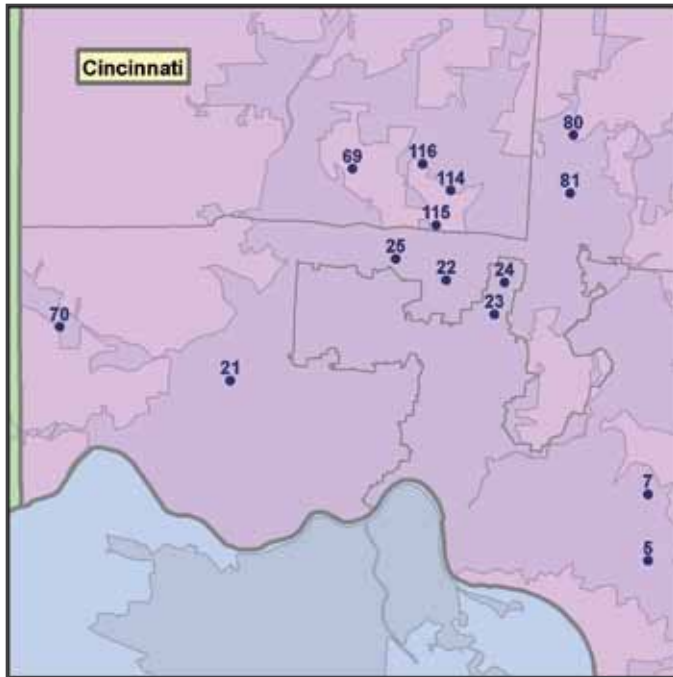


1 Burns & McDonnell.....	Bloomington	14 Spiral Manufacturing.....	Minneapolis
2 Edward Kraemer and Sons	Burnsville	15 ZTR Control Systems.....	Minneapolis
3 Northern Tool & Equipment	Burnsville	16 Thermo King Corp.....	Minneapolis
4 Reco Railway Equipment Co	Delano	17 Accustream Inc	New Brighton
5 Krech Ojard & Associates	Duluth	18 Oakdale Communications Solutions.....	Oakdale
6 CH Robinson Worldwide	Eden Prairie	19 Modern Metal Products	Owatonna
7 Wasp Inc.	Glenwood	20 Railway Research Inc	Red Wing
8 Andy's Electrical Service	Grand Meadow	21 3M Traffic Safety Systems	St. Paul
9 Industrial Lubricant	Grand Rapids	22 Vomela Specialty Co.....	St. Paul
10 Loram.....	Hamel	23 McDowall Co	Waite Park
11 Telemetry & Process Controls Inc	Lake Elmo	24 Lewis Bolt & Nut Co.....	Wayzata
12 Donaldson Company	Minneapolis	25 Fastenal Co.....	Winona
13 Reviva Inc.....	Minneapolis	26 Miller Felpax Corporation.....	Winona

Ohio High-Speed Rail: 122 Supply Chain Companies

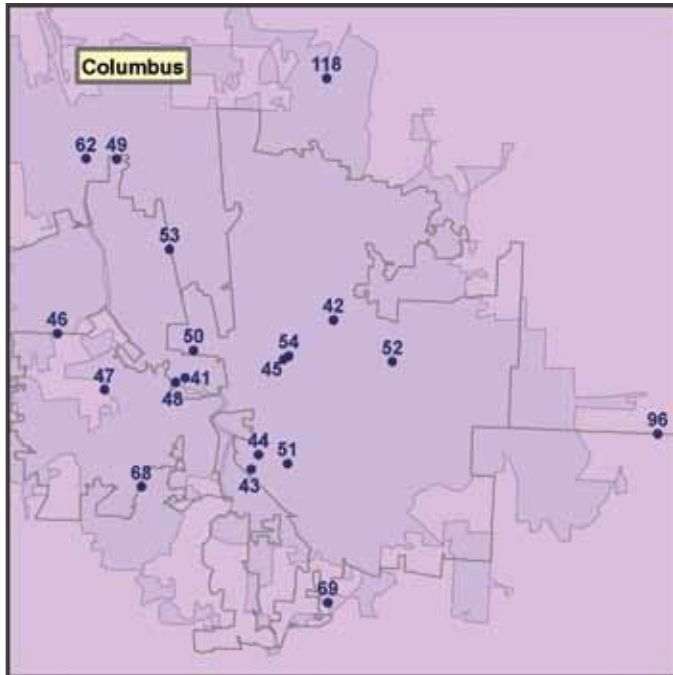


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|--|--|
| 1. Ace Precision Industries..... Akron | 14. Ralph C. Williams Canton |
| 2. RCA Rubber..... Akron | 15. Sperling Railway Services..... Canton |
| 3. Alliance Casting..... Alliance | 16. Timken Canton |
| 4. Filnor Alliance | 17. United Grinding..... Canton |
| 5. Solutions Plus Amelia | 18. Stacy Builders Castalia |
| 6. Delta Railroad Construction Ashtabula | 19. Solon Manufacturing..... Chardon |
| 7. Batavia & Ohio Railways Svcs..... Batavia | 20. Union Spring & Manufacturing..... Chillicothe |
| 8. Seneca Railroad & Mining..... Bellevue | 21. Cliffe Metal Products..... Cincinnati |
| 9. American & Ohio Locomotive CraneBucyrus | 22. Crown Lift Trucks..... Cincinnati |
| 10. W.E. Lott Bucyrus | 23. Fechheimer Brothers..... Cincinnati |
| 11. Morrison Metalweld Process..... Canfield | 24. Piedmont Plastics..... Cincinnati |
| 12. Midwest Industrial Supply Canton | 25. Siemens Cincinnati |
| 13. Ohio Gratings Canton | 26. Applied Industrial Technologies..... Cleveland |



- 27. Cleveland Track Material Cleveland
- 28. CR Construction Cleveland
- 29. Crowd Control Depot..... Cleveland
- 30. Demag Cranes & Components Cleveland
- 31. Eaton..... Cleveland
- 32. Erico Products Cleveland
- 33. Hickok Cleveland
- 34. N. T. Ruddock..... Cleveland
- 35. Park Ohio Cleveland
- 36. Parker Hannifin..... Cleveland
- 37. Performed Line Product..... Cleveland
- 38. Sherwin-Williams..... Cleveland
- 39. SIFCO Selective Plating Cleveland
- 40. State Industrial Products Cleveland
- 41. Bearing Distributors Columbus
- 42. Capital Spring Division Columbus
- 43. Columbus Steel Castings Columbus
- 44. Fritz Rumer Cooke Columbus
- 45. Keyser Powell Equipment..... Columbus
- 46. Kimball Midwest..... Columbus
- 47. Laird Plastics..... Columbus

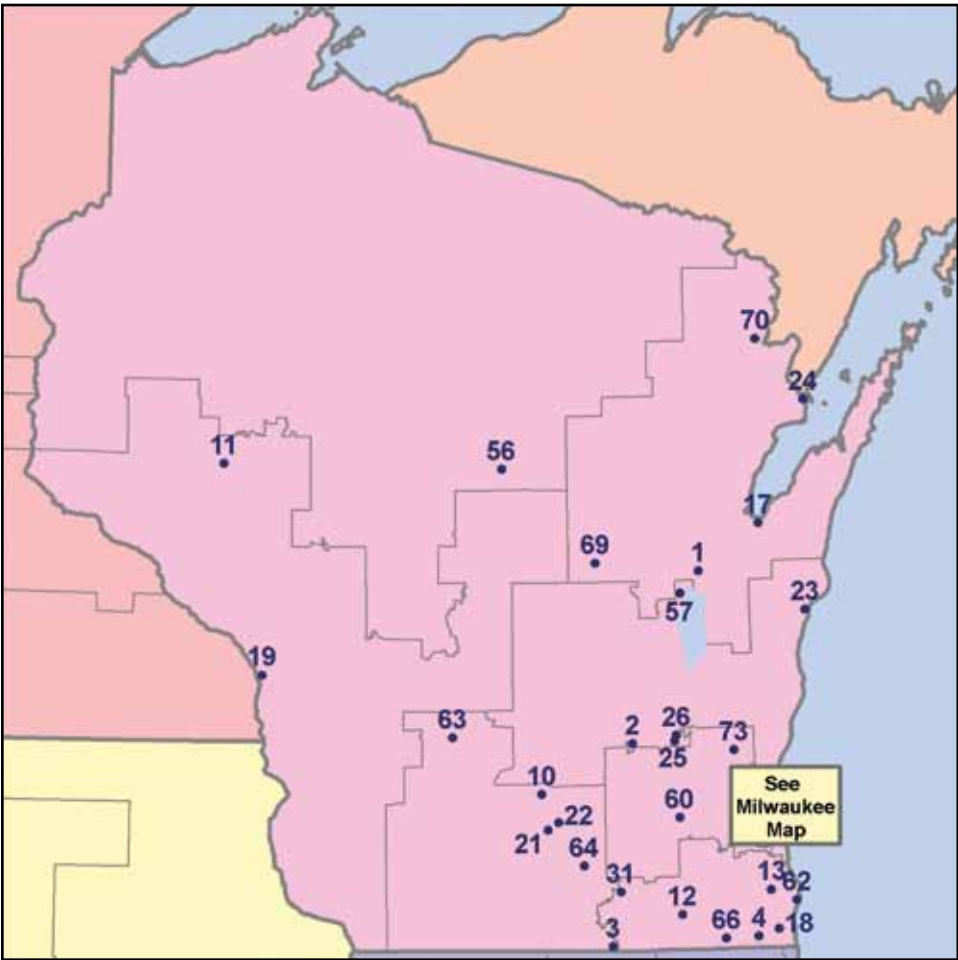
- 48. Ohio Power Tool..... Columbus
- 49. Parsons Brinckerhoff..... Columbus
- 50. Rail Products International..... Columbus
- 51. Spirit Services..... Columbus
- 52. Tri Palm International..... Columbus
- 53. US Railcar..... Columbus
- 54. Yenkin Majestic Columbus
- 55. Sancast..... Coshocton
- 56. Nationwide Express Crooksville
- 57. Becker Pumps..... Cuyahoga Falls
- 58. Dayton-Phoenix Group..... Dayton
- 59. Precision Gage & Tool..... Dayton
- 60. Sabic Polymershapes Dayton
- 61. Stromag Dayton
- 62. Salient Systems..... Dublin
- 63. Spectrum Infrared..... Eastlake
- 64. Master Bolt Manufacturing Elyria
- 65. PPG Industries Euclid
- 66. Lockheed Martin..... Fairborn
- 67. Morgan AM&T..... Fostoria
- 68. Advance Machining Grove City



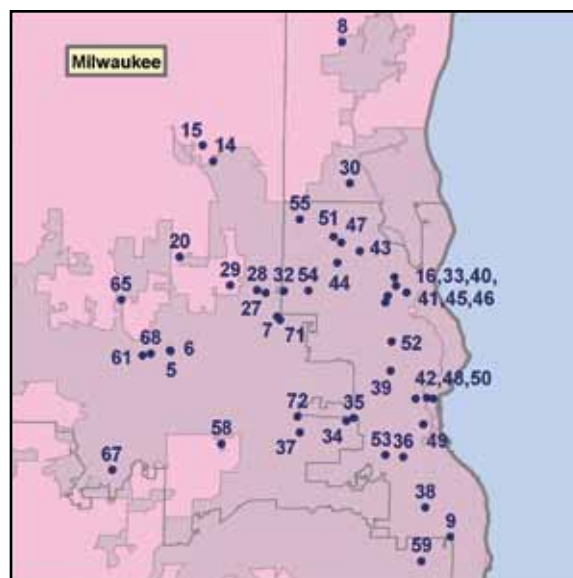
69. Safety Today..... Groveport
70. Tri State Testing Laboratories Hamilton
71. Cincinnati..... Harrison
72. Railroad Tools & Solutions Hillsboro
73. Ametek Rotron Products..... Kent
74. Ohio Railway Supply Kent
75. Schneller Kent
76. AECOM Los Angeles
77. ADTrans..... Mansfield
78. D&A International Casting Mansfield
79. Clifton Steel..... Maple Heights
80. Ohio Magnetics..... Maple Heights
81. Hi-Vac..... Marietta
82. Cincinnati Industrial Mason
83. Motion Savers Mason
84. Roemer..... Masury
85. Roemer Industries..... Masury
86. Mayfran International Mayfield Village
87. M & F Technology Mentor
88. Com Net Software Miamisburg
89. International Display Systems..... Moraine

90. Powell Electrical Systems N. Canton
91. Railtech Boutet..... Napoleon
92. Provantage Superstore North Canton
93. Railworks Track Services..... North Jackson
94. Quest..... North Royalton
95. SAS Rubber..... Painesville
96. Iron Horse Engineering Parkman
97. Redhawk Energy Systems..... Pataskala
98. KSA Portsmouth
99. Ohio Valley Track work..... Rio Grande
100. Industrial Nut..... Sandusky
101. Acme Construction Solon
102. Chromate Industrial..... Solon
103. RELAM Solon
104. Tameran Graphic Systems Solon
105. McSweeny..... South Point
106. TPI Composites Springfield
107. Chemical Methods..... Strongsville
108. Safety Sign Company..... Strongsville
109. Seves USA..... Tiffin
110. Tiffin Palfinger Tiffin
111. A & K Railroads Materials..... Toledo
112. Kay Toledo Tag..... Toledo
113. Visual Marking Systems..... Twinsburg
114. L.B. Foster Warren
115. Schaefer Warren
116. Contech Construction Products West Chester
117. Newberry Construction..... West Chester
118. TSS Technology West Chester
119. RWC..... Westerville
120. Stevenson Oil & Chemical Wickliffe
121. Kottler Metal Products..... Willoughby
122. Transit Fittings of North America Youngstown

Wisconsin High-Speed Rail: 73 Supply Chain Companies



- | | |
|---|---|
| 1. L&S Electric.....Appleton | 14. Airgas SafetyGermantown |
| 2. Apache Stainless EquipmentBeaver Dam | 15. J.W. Speaker Global Headquarters.....Germantown |
| 3. Automation Solutions of America.....Beloit | 16. Sedia.....Glendale |
| 4. ANDERSON MFGBristol | 17. Northern Electric.....Green Bay |
| 5. Engineering SpecialistsBrookfield | 18. Mahar Tool Supply.....Kenosha |
| 6. Evans TransportationBrookfield | 19. Compass Group.....La Crosse |
| 7. Milwaukee Insulation.....Butler | 20. D & B Tool & Mfg.....Lannon |
| 8. Doig CorporationCedarburg | 21. HNTB.....Madison |
| 9. KM Logistics.....Cuahy | 22. MohawkMadison |
| 10. E80 Plus ConstructorsDeForest | 23. Heavy Metal Fabricators.....Manitowoc |
| 11. Krech Ojard & AssociatesEau Claire | 24. Silvan IndustriesMarinette |
| 12. MTL Manufacturing.....Elkhorn | 25. Mayville EngineeringMayville |
| 13. Fiber-TechFranksville | 26. Metalcraft of MayvilleMayville |



27. Certified Scale.....	Menomonee Falls	51. Talgo	Milwaukee
28. Ingersoll Rand	Menomonee Falls	52. Technical Metal Specialties.....	Milwaukee
29. Universal Metrics	Menomonee Falls	53. United P&H Supply.....	Milwaukee
30. Sullivan Manufacturing	Mequon	54. Wagner	Milwaukee
31. R & M Mfg.....	Milton	55. Wisconsin & Southern Railroad	Milwaukee
32. Allied Insulation Supply.....	Milwaukee	56. Arrow Global.....	Mosinee
33. Atlas Copco	Milwaukee	57. Bent Tubes.....	Neenah
34. Avalon Rail.....	Milwaukee	58. A & A Manufacturing.....	New Berlin
35. Bay Insulation Supply of Mil	Milwaukee	59. Milwaukee Composites	Oak Creek
36. Braun.....	Milwaukee	60. Premold.....	Oconomowoc
37. BSIS.....	Milwaukee	61. Midwest Engineering Systems	Pewaukee
38. Burns & McDonnell.....	Milwaukee	62. HFI Fluid Power Products	Racine
39. Capitol Stampings.....	Milwaukee	63. Seats	Reedsburg
40. General Electric	Milwaukee	64. Stoughton Trucking	Stoughton
41. General Plastics	Milwaukee	65. Liberty Elec	Sussex
42. Key Engineering Group	Milwaukee	66. Five Star Fabricating.....	Twin Lakes
43. Kracor	Milwaukee	67. Weldall.....	Waukesha
44. Monarch.....	Milwaukee	68. Wieland Engineering.....	Waukesha
45. Motive Equipment.....	Milwaukee	69. Dura Glass Industries.....	Waupaca
46. NRE Wheel Works	Milwaukee	70. Wausaukee Composites	Wausaukee
47. Res Manufacturing	Milwaukee	71. American Paper Packaging.....	Wauwatosa
48. Rockwell Automation.....	Milwaukee	72. Northern Tool & Equipment	West Allis
49. Securitas	Milwaukee	73. The Sign Shop of West Bend	West Bend
50. Super Steel Products	Milwaukee		

Continued from P. 8...

Supply Chain Company Profiles



in Wisconsin and employs 772 people. The company directly supplies many components to passenger railcar OEMs, including coach ceiling parts and gangway assemblies.

Milwaukee Composites — Cudahy, WI

Milwaukee Composites manufactures patented lightweight, fire-safe, moisture-resistant phenolic composite products. These parts are predominantly applied as floor and ceiling panels for use in mass transit vehicles. Milwaukee Composites customers include global railcar companies such as Kawasaki, Nippon Sharyo, Bombardier, Alstom, Siemens and others. A recent project included floors for 600 New York City Metropolitan Transportation Authority cars. Milwaukee Composite is currently supplying an aftermarket project directly to the Chicago area's Regional Transit Authority to overhaul older Metra commuter rail cars and will supply an aftermarket floor project for New York City. The company has approximately 50 employees and has been in business since 1996.

Press-Seal Gasket Fastener Division — Fort Wayne, IN

Press-Seal Gasket is North America's leading producer of nylon anchors for concrete ties. The company has developed a range of related products that enable railroad and transit systems to anchor rails to concrete ties. It also manufactures rail maintenance equipment capable of repairing concrete ties after derailments. The company is a division of Press-Seal Gasket Corp., founded in 1954. The company's core capabilities include rubber and plastic molding, stainless steel fabrication and water jet cutting.

R&W Machine — Bedford Park, IL

R&W Machine was founded in 1946 with an engine lathe purchased from a Walgreens Drug Store. Today, it is a precision machine shop that produces rail parts, including axles, wheel sets and traction motors. The company also provides aftermarket remanufacturing and rebuilding in their 120,000-square-foot facility. R&W's operations are fully computerized through CNC equipment. The company

also serves the wind, marine and mining industries.

Rocore — Indianapolis, IN

Rocore designs and manufactures heat transfer products for power generation, military equipment and the rail and marine industries. Rocore was founded in Greendale, WI, in 1984. The company has five domestic manufacturing facilities and currently supplies little to the intercity passenger rail industry, but has the capabilities to gain business from an increase in demand from train OEMs.

SAS Rubber Company — Painesville, OH

SAS makes rubber components for passenger rail applications. Their products include insulating window gaskets, headlamp seals and door closure strips. Nearly all of their operations, including injection moldings and extrusions, are performed in-house in their Painesville facility. Founded over 72 years ago, the company also serves the automotive, industrial and military markets.

Seneca Railroad and Mining — Bellevue, OH

Seneca was founded in 1981 and provides polyurethane insulated rail joints for passenger, mining and freight railroads. Their one-piece polyurethane-steel structure ensures reliable circuit insulation and maintains electrical and physical stability in the face of heavy rail traffic. The joints require little to no maintenance. Seneca Railroad and Mining also offers insulated tie plates and tie pads.

ZTR Control Systems — Minneapolis, MN

ZTR specializes in locomotive modernization and remote equipment monitoring services. Its modernization process can extend the useful life of a diesel-electric locomotive by 10-20 years. The company, founded in 1987, also offers unique locomotive idle reduction systems and advanced locomotive controls for the passenger rail industry. Their SmartStart IIe idle system can save up to \$20,000 in wasted fuel annually from a single locomotive.



Photos by ELPC photographer Marianne Morgan.

The Midwest Regional Rail Network Moving from Vision to Reality



Map by ELPC.

The Midwest Regional Rail Initiative is the culmination of a decade's work by nine Midwestern state departments of transportation to improve the region's transportation network. They recommend a 3,000-mile hub-and-spoke system of trains radiating out from Chicago to serve the large and mid-sized cities within a 400-mile radius. On primary routes, modern new trains will operate at 110 mph on upgraded tracks incorporating advanced signaling, positive train control and safer grade-crossings.

The new network will have more trains running at more times of the day. Travel times between major cities will be reduced by 30%-50%. Nine Midwestern states will benefit from improved right-of-ways, which will continue to be shared with freight rail lines. Multi-modal stations will improve connectivity to transit, road and bicycle traffic. The entire network is expected to attract 13.6 million passengers annually by 2025, four times more than if existing service continued unchanged.

The Chicago-hubbed Midwest network reaches 27 million people, including seven metro regions of at least 1 million people. Europe's Paris-hubbed network reaches about 28 million people, including five metro regions of at least 1 million people. With a \$2.5 trillion GDP, the Midwest region is the world's 7th largest economy.

The modern passenger rail system will provide economies of scale for maintenance, along with improved equipment and crew utilization. Compared to the current system, future operating costs will be reduced by the use of advanced locomotives and rail cars and faster equipment turnarounds. The system will offer competitive fares and travel times for short- and medium-distance trips. An integrated bus feeder system, with schedules coordinated to passenger rail timetables, will enable rail access for less-populated areas. The network is mostly owned by freight railroads, and network improvements will preserve the operability of freight and commuter networks.

Construction is already underway. The Midwest is now home to the first high-speed rail service outside the Northeast. In February 2012, Amtrak began 110 mph revenue service on 97 miles of the Chicago - Detroit corridor owned by Amtrak. The speed increase was enabled by the installation of a positive train control system and track improvements along the route between Porter, IN, and Kalamazoo, MI. The federal government is investing over \$600 million for new infrastructure and signaling along the corridor, which will allow for 110 mph operation on 77% of the Wolverine route. It will also place 70% of the Wolverine line into public ownership.

Work is also underway on track and safety improvements to the Chicago - St. Louis corridor. By the end of 2014, the line is expected to operate at a sustained speed of 110 mph for 75% of its route. New trains set to operate between Chicago and Milwaukee have been purchased and are scheduled for delivery this year. Construction will soon begin on improved passenger rail service between Chicago and the Quad Cities, with a potential extension to Iowa City, Des Moines and Omaha.

A National Commitment to High-Speed Passenger Rail



Map from U.S. Department of Transportation.

Modern, fast, comfortable and convenient high-speed rail will improve mobility, reduce pollution, create jobs and spur economic growth. High-speed rail development is good for jobs, good for economic growth and good for our environment.

The Midwest intercity passenger rail network and supplier base are parts of a national movement to modernize rail infrastructure and change the way we travel. President Barack Obama and the U.S. Congress jump-started the industry by including \$8 billion for intercity passenger rail in the 2009 American Recovery and Reinvestment Act (the “Economic Stimulus” legislation). Congress has since made an additional \$2.1 billion available through annual appropriations, bringing total funding to \$10.1 billion, plus additional funds from other programs. State governors from both major political parties made \$55 billion worth of requests for the funds in a reflection of latent demand. In 2011, Vice President Joe Biden announced a further \$53 billion plan for high-speed intercity passenger trains. President Obama has set a national goal of 80% of Americans having access to high-speed rail service by 2035.

President Obama devoted significant attention to high-speed passenger rail in his 2010 and 2011 State of the Union addresses. His vision to build a national network is akin to President Eisenhower’s drive to construct the interstate highway system. President Obama’s plan today encounters many of the same opposing arguments (system costs, this issue should be left to the states, the status quo is sufficient, etc.) that President Eisenhower faced in the 1950s. Despite its initial speed bumps, it is hard to imagine the United States without the benefits of the national highway system over the past 60 years.

Railroads, highways and airports have spurred America’s economic growth. Traffic congestion already costs the country more than \$130 billion annually, and America’s population is expected to grow by 100 million people before 2050. No economy should grow faster than its transportation network can carry it. Supporting our economy and manufacturing base with a long-term federal and state government investment in a modernized intercity passenger rail network will advance continued growth in the Midwest regional economy.



Environmental Law & Policy Center

The Environmental Law & Policy Center is the Midwest's leading public interest environmental legal advocacy and eco-business innovation organization. We develop and lead successful strategic advocacy campaigns to improve environmental quality and protect our natural resources. We are public interest environmental entrepreneurs who engage in creative business dealmaking with diverse interests to put into practice our belief that environmental progress and economic development can be achieved together. ELPC's multidisciplinary staff of talented and experienced public interest attorneys, environmental business specialists, public policy advocates and communications specialists brings a strong and effective combination of skills to solve environmental problems.

ELPC's vision embraces both smart, persuasive advocacy and sustainable development principles to win the most important environmental cases and create positive solutions to protect the environment. ELPC's teamwork approach uses legal, economic and public policy analysis, and communications advocacy tools to produce successes. ELPC's strategic advocacy and business dealmaking involves proposing solutions when we oppose threats to the Midwest environment. We say "yes" to better solutions; we don't just say "no."

ELPC was founded in 1993 and has achieved a strong track record of successes on national and regional clean energy development and pollution reduction, transportation and land use reform, including high-speed rail development, and natural resources protection issues. ELPC's creative public advocacy effectively links environmental progress and economic development together and improves the quality of life in our Midwestern communities.

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