

Frequently Asked Questions about Mn/DOT's Railroad Map Conversion Project

- What were the main objectives of the project? What are the results and end products?
- What can these railroad maps be used for? Who uses them?
- Why is this project important?
- What does the data provide now that the project is complete?
- Who was involved in the project?
- How current is this information?
- Where do these maps come from?
- What is the difference between a railroad valuation map, a railroad right of way map, and a railroad station plat?
- What information is shown on the maps?
- What are the earliest and most recent dated maps available?
- Is there information on abandoned railroad lines?
- What is the scale of the maps?
- Where are the typical map extents? Does a single map cover an entire railway?
- How are the maps indexed?
- Is there a charge for the maps?
- Are the maps available on a website? Is there a FTP site?
- Where can I find a railroad basemap?
- Can I get a map for a specific location? What references are needed to locate the map?
- I'm not sure of the name of the railroad. How do I find the map I'm looking for?
- How do I know if I have the most current map?
- How accurate are the images? What coordinate system do they use?
- Do you have metadata on the right of way map data?
- Are there other documents relating to these maps that are not included in the conversion project?
- Where do I go for current railroad right of way information?

Q: What were the main objectives of the project? What are the results and end products?

A: The main purpose of this project was to index and preserve the sizeable collection of Minnesota's railroad valuation, station plat, and right of way maps. These paper maps are becoming very fragile and difficult to retrieve. Applying the use of GIS technology, the project involved scanning, converting, and indexing the paper maps into digital form for use in a spatial index. Now converted, the digital maps (station plat maps not yet available online) can be found on Mn/DOT's Right of Way Mapping and Monitoring website at <http://www.dot.state.mn.us/maps/gisweb/row/>

Q: What can these railroad maps be used for? Who uses them?

A: The maps may be used to determine the alignment of abandoned railroad lines or boundary lines common with the railroad. They also help to establish Public Land Survey System (PLSS) corners and determine title ownership of current or former

railroad right of way. Users of these maps include Mn/DOT Land Management, District Land Management Sections, Surveys, Planning, and Design offices. Additionally land surveyors, attorneys, engineers, utility companies, or anyone interested in railroad maps may find the maps useful.

Q: Why is this project important?

A: The project increases the efficiency of employees trying to retrieve information relative to the location of legal rights and alignment of existing and abandoned railroads. Converting these maps into a digital, easily accessible format helps in their long term preservation by substantially reducing the amount of handling. In addition, the project provides a basis for negotiating access to other railroad company records, hard copy or electronic, and helps to foster constructive relationships with railroad companies.

Q: What does the data provide now that the project is complete?

A: The data provides a visual index map of the historic railroad map collection. The digital files of scanned and georeferenced rail maps are now viewable online and available for direct download. Historic railroad company names and other associated attributes relative to the digital maps are included. The web application enables railroad map data to be mixed and compared with other digital data sets for user reference and further analysis, thus providing customers a more comprehensive product.

Q: Who was involved in the project?

A: Mn/DOT's Office of Land Management worked in cooperation with Mn/DOT's Office of Freight and Commercial Vehicle Operations.

Q: How current is this information?

A: The time period of the maps ranges between 1918 and 1974. The Minnesota Department of Transportation received the maps from the Railroad and Warehouse Commission in 1974. For present-day information on rail ownership, do not rely on these historical maps; instead, contact the specific railroad company or the county where the rail line is located.

Q: Where do these maps come from?

A: The maps were created by surveyors and engineers in the early to middle 1900's. Mn/DOT received the actual paper maps in 1974 from the Railroad and Warehouse Commission which later became the Department of Commerce. Included in the original package of documents that Mn/DOT received from the Department of Commerce were the Land Valuation Maps and Station Plats (Mn/DOT kept these); the profile maps which Mn/DOT gave to the Minnesota Department of Natural Resources; and the ICC Accounting Reports and ICC Land and Engineering Reports which Mn/DOT gave to the Minnesota Historical Society. Another set of maps referred to as railroad right of way maps were acquired by Mn/DOT directly from the railroad companies in the early 1970's for use in developing Minnesota Transportation Data System.

Q: What is the difference between a railroad valuation map, a railroad right of way map, and a railroad station plat?

A: The major differences between the three types of maps involve scale and the type of data they provide. Valuation and right of way maps are usually smaller in scale and

cover more track than station plats. The station plat maps being of a larger scale contain much more detail for the area represented. Valuation maps contain the same type of data as the right of way maps but in addition also have detailed data that is relative to the acquisition of the railroad right of way.

Q: What information is shown on the maps?

A: The right of way maps have the following data relative to the railroad right of way: land lines (e.g. Public Land Survey section lines, quarter lines and sixteenth lines), centerline alignment including curve data used to define the right of way, land ties (e.g. distances and angles between the centerline and land lines) and the right of way width. The valuation maps contain the same data as the right of way maps plus data relative to the acquisition of the railroad right of way. This acquisition data includes: the grantor, grantee, type of acquisition (e.g. warranty deed, quit claim deed, easement, land grant, etc.), date of acquisition, purchase price and book and page where acquisition documents are recorded. The larger scale of the station plat maps enables the depiction of greater detail as such as physical improvements including utilities, buildings, and fences, with size and location measurements. If there are subdivision plats in the area, right of way is often located relative to platted lots and blocks with measurements shown.

Q: What are the earliest and most recent dated maps available?

A: Mn/DOT's 4300 railroad maps range in age from 40-90 years old. For older or more recent maps, contact the Office of Freight and Commercial Vehicle Operations.

Q: Is there information on abandoned railroad lines?

A: The Office of Land Management has developed a centerline data set showing all abandoned rail lines involved in the Railroad Map Conversion Project (see link on main project page). Also useful are statewide railroad maps which are posted on this site dated from 1917 and 1930. For additional information on abandoned railroads, contact Mn/DOT's Office of Freight and Commercial Vehicle Operations or the Minnesota Historical Society.

Q: What is the scale of the maps?

A: Valuation and right of way maps are typically scaled at 1 inch = 400 feet and station plats are scaled at 1 inch = 100 feet.

Q: Where are the typical map extents? Does a single map cover an entire railway?

A: Maps vary greatly in size across the state. Typically a valuation or right of way map will cover between 1-5 miles of track. A station plat usually covers anywhere from 1/4 mile to 1 mile of track.

Q: How are the maps indexed?

A: The original paper maps have been indexed based on a system of numbers and letters (i.e. 805D, 1361aC) adopted by the Railroad and Warehouse Commission when they administered the maps. For this project the paper maps were separated based on their original coded sheet segment and scanned as individual TIF files. Each individual map segment or section was given a number (i.e. 1384Cs1, 1384Cs2, 1384Cs3, etc.) and indexed spatially. Prior to this project the process of locating a map for a specific

location was extremely difficult and time consuming, even with finding aids and reference materials, thus the impetus for the conversion and spatial index.

Q: Is there a charge for the maps?

A: No. Each map is available for download free of charge at Mn/DOT's Right of Way Mapping and Monitoring site.

Q: Are the maps available on a website? Is there an FTP site?

A: The maps are available online but not through an FTP site. Digital maps (except station plat maps) can be found on Mn/DOT's Right of Way Mapping and Monitoring website at <http://www.dot.state.mn.us/maps/gisweb/row/>. If you are looking for station plats, visit the Railroad Map Conversion Project website and follow the link "To order railroad maps click here" to fill out the online form.

Q: Where can I find a railroad basemap?

A: A general statewide index map showing existing and abandoned railroads, valuation map footprints, and station plats included in the Railroad Map Conversion Project can be found at: <http://www.olmweb.dot.state.mn.us/lis/railroadmap/railroadfootprints.pdf>. If you are interested in obtaining the shapefiles used to create this map or would like GIS index files (.AUX & .TFW) that accompany each downloadable .TIF file on the RWMM site, contact Project Manager Mike Merrill at (651) 245-7659 or michael.merrill@dot.state.mn.us. Other sources for statewide coverage include the 1917 and 1930 editions of statewide railroad maps available on the Railroad Map Conversion Project website.

Q: Can I get a map for a specific location? What references are needed to locate the map?

A: Using the interactive viewer at <http://www.dot.state.mn.us/maps/gisweb/row/> (click "Access to Maps"), make sure you check "Rail Footprints" under the "ROW Data" folder and either zoom into the desired area or use the drop-down tool (upper left of viewer, labeled "Find") to search by county, municipality, road, etc.

Q: I'm not sure of the name of the railroad. How do I find the map I'm looking for?

A: The railroad name is not always needed to obtain the map desired. Gather as much information (county, municipality, road, PLS, etc.) and use the drop-down search tool on the RWMM viewer at <http://www.dot.state.mn.us/maps/gisweb/row/>

Q: How do I know if I have the most current map?

A: If the railroad is still in use, a more current map may exist. Contacting the railroad company directly is advisable. Any alignment shown on the map that was used to purchase the right of way may or may not still be current.

Q: How accurate are the images? What coordinate system do they use?

A: The images have been georeferenced to within approximately 200 feet of the rail line and the public land survey (PLS). All maps are georeferenced in UTM Extended Zone 15 coordinates, stored in meters, and referenced to NAD 83 and GRS 1980.

Q: Do you have metadata on the right of way map data?

A: Yes. General metadata for the railroad data and the conversion process exists online under the “Metadata” tab in the map viewer.

Q: Are there other documents relating to these maps that are not included in the conversion project?

A: The Office of Land Management has a few tables, charts, and diagrams that pertain to some of the scanned maps but they are not currently available through a web site. As far as other related documents, the Minnesota Historical Society holds the ICC (Interstate Commerce Commission) land and engineering reports and the Minnesota Department of Natural Resources holds profile maps related to Mn/DOT’s railroad maps.

Q: Where do I go for current railroad right of way information?

A: Mn/DOT’s Office of Freight and Commercial Vehicle Operations website can be found at: <http://www.dot.state.mn.us/motorcarrier/>

The mailing address for the OFCVO is:

**Minnesota Department of Transportation
Office of Freight and Commercial Vehicle Operations
395 John Ireland Blvd
St. Paul, MN 55155-1899**

Also, the primary contact regarding current railroad information is Timothy Spencer at 651-366-3702 and the secondary contact is George Thibault at 651-366-3708.