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Economic Contribution of the Minnesota Valley Regional Rail Authority Rail Line

A REPORT OF THE ECONOMIC IMPACT ANALYSIS PROGRAM

Authored by Brigid Tuck, Neil Linscheid, and Gabriel Appiah



PROGRAM SPONSOR: MINNESOTA VALLEY REGIONAL RAIL AUTHORITY

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February 2016

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Executive Summary: Economic Contribution of the Minnesota Valley Regional Rail Authority (MVRRA) Rail Line

The Minnesota Valley Regional Rail Authority (MVRRA), a public entity, owns 94 miles of Class III short-line railroad in southern Minnesota. The rail track stretches from Hanley Falls in the west to Norwood Young America in the east. Operated by the Minnesota Prairie Line Inc. (MPL), the line connects with the Twin Cities and Western (TC&W), providing shippers on the line with access to all major Class I railroads operating in the Twin Cities. Shippers, by extension, have access to major markets on both U.S. coasts and internationally to Mexico and Canada. MPL also performs general maintenance and repair projects on the line.

The MVRRA views rail service as an important part of the regional economy. Thus, MVRRA commissioned University of Minnesota Extension to conduct an economic contribution analysis. The analysis used the input-output model, IMPLAN, to calculate economic contribution.

Direct Effects

The direct effect of the rail line was calculated by assessing three parts of rail activities -- the operations of the rail line itself, the value of shipper sales dependent on the rail line, and expenditures for rail line improvements.

- *Operations:* In 2014, MVRRA and MPL spent \$2.5 million to operate in the region, including \$1.2 million in labor income. The two organizations employed 18 workers.
- *Shippers:* In 2014, shippers on the MVRRA rail line made an estimated \$331.7 million in sales directly tied to the rail line. These sales are associated with an estimated 390 jobs and \$40.4 million of labor income. In total, businesses shipping on the rail line made \$1.8 billion in sales in 2014.
- *Rail Improvements:* In 2015, the MPL and MVRRA invested \$1.6 million in improvements to the rail line, including a bridge replacement, box culverts, and improved rail line.

Total Economic Contribution

In 2014, the MVRRA rail line generated an estimated total of \$447.9 million of activity in the economies of Carver, Redwood, Renville, Sibley, and Yellow Medicine counties.

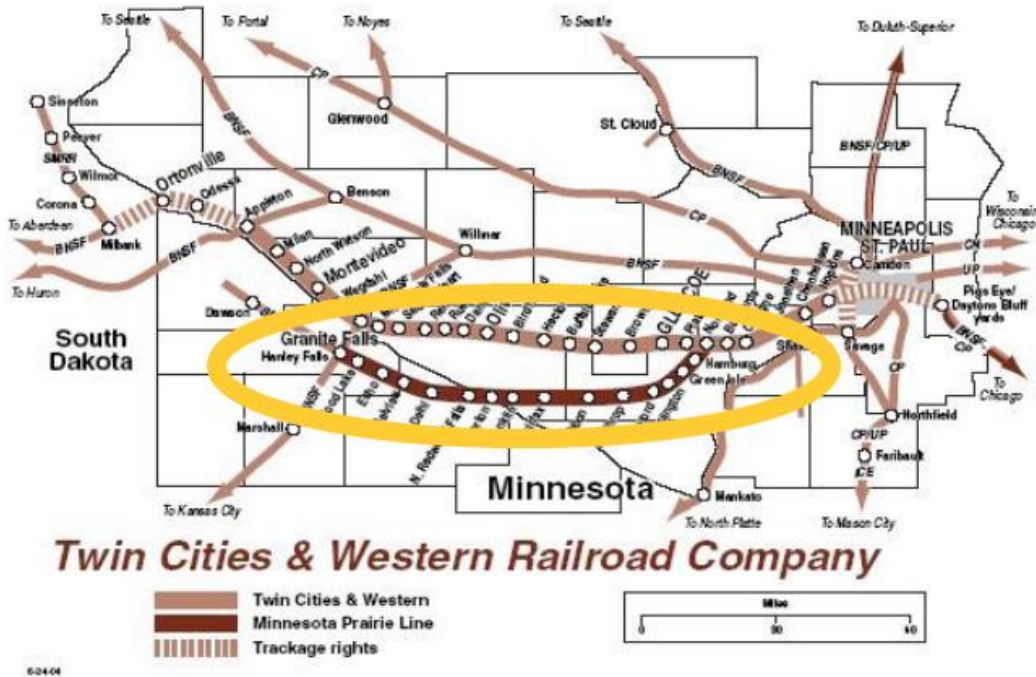
- *Operations:* In 2014, MVRRA rail line operations contributed an estimated \$3.4 million in economic activity, including 25 jobs and approximately \$1.4 million in labor income in the five-county region.
- *Shippers:* In 2014, shippers on the MVRRA rail line contributed an estimated \$444.5 million of economic activity, including 960 jobs and \$64.6 million in labor income.
- *Rail Improvements:* In 2015, investments in rail improvements contributed an estimated \$2.1 million in economic activity, including 10 jobs and \$600,000 in labor income.
- Shippers indicate, on the whole, that production would increase with rail improvements.



INTRODUCTION

The Minnesota Valley Regional Rail Authority (MVRRA), a public entity, owns 94-miles of Class III short-line railroad in southern Minnesota. The rail track stretches from Hanley Falls in the west to Norwood Young America in the east. Operated by the Minnesota Prairie Line Inc. (MPL), the line connects with the Twin Cities and Western (TC&W), providing shippers on the line with access to all major Class I railroads operating in the Twin Cities. Shippers, by extension, have access to major markets on both U.S. coasts and internationally to Mexico and Canada. MPL also performs general maintenance and repair projects on the line.

Map 1: Minnesota Prairie Line and Twin Cities and Western Rail Lines



During the past 15 years, the MVRRA has invested in improvements to the rail line. These improvements are part of a long-term effort to ensure the rail is a productive economic asset in the region. Between 2000 and 2002, the MVRRA rail line was dormant with no shipping activity. In 2002, several restoration projects were completed on the line. As a result, train reliability improved, and trains could move on the rail line at 10 miles per hour. An additional upgrade finished in 2015 -- continuous welded rail between Norwood Young America to Winthrop -- allows trains to travel at 25 miles per hour and carry heavier loads on that section of the track. The difference in speed and maximum loads means that, not only can more shipping be done on the rail line, but also those shipping can be more competitive. The old rail held railcar capacity at 263,000 pounds; the new rail allows railcar capacity of 286,000 pounds. The MVRRA also replaced several bridges on the line and bridge replacements remain a priority for future improvements.

The MVRRA knows rail service is important to the economic competitiveness of the region and that rail service is a long-term investment, involving contributions from shippers on the rail, the MPL, and state, county, local, and federal entities. Quantifying the economic contribution of the rail line



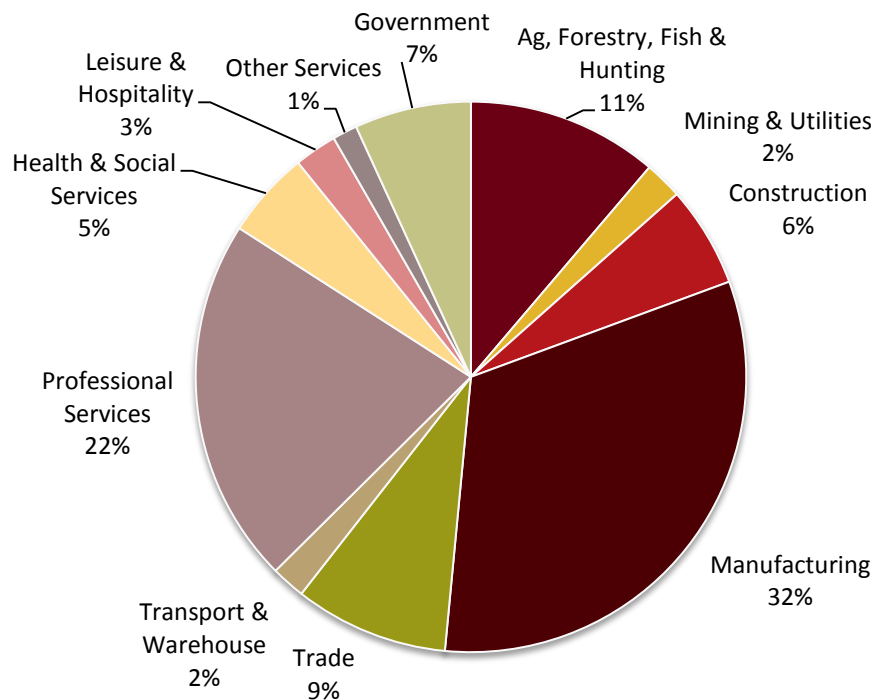
assists all partners in understanding its value. As such, MVRRA commissioned University of Minnesota Extension to conduct an economic contribution analysis. This study is an update to a study conducted in 2009 on the same topic and includes the improvements made to the rail line in the past six years.

OVERVIEW OF THE STUDY AREA ECONOMY

The primary study area for this analysis is Carver, Redwood, Renville, Sibley, and Yellow Medicine counties. This five-county region was selected because the MVRRA rail line passes through it.

In 2014, businesses and enterprises in the five-county region produced \$14.9 billion of output. Manufacturers, including several that ship on the rail line, produced 32 percent of that output (Chart 1). Professional service businesses produced 22 percent of all output. Agricultural, forestry, fishing, and hunting (an industry that relies on the rail to ship products) accounts for 11 percent of the economy.

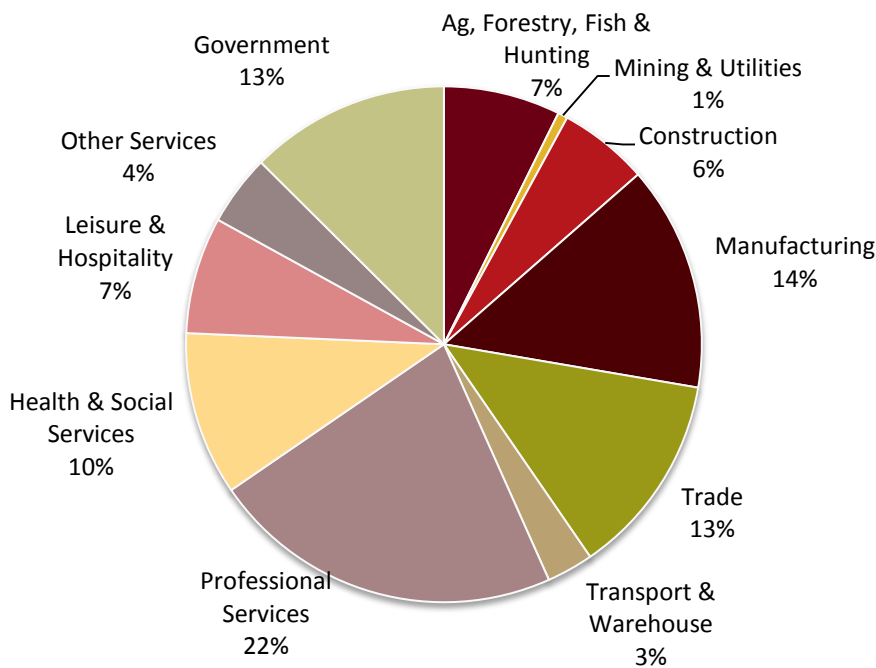
Chart 1: Output by Industry, 5-County Region, 2014



Businesses and enterprises in the five-county region provided 85,800 jobs in 2014. Of those, 22 percent were professional service businesses (Chart 2). Manufacturers employed 14 percent of all workers in 2014.

Compared to output, however, manufacturers employ a smaller percentage of employees. This can be explained by the definition of employment in the database used in this analysis. In the database, one job is one job, regardless of its status as full-time, part-time, or seasonal. Therefore, industries with a higher ratio of part-time employees have a higher number of jobs as opposed to industries with a higher ratio of full-time employees.

Chart 2: Employment by Industry, 5-County Region, 2014



RAIL IMPROVEMENTS FROM 2002-2015

As mentioned previously, the MVRRA has invested in improvements to the rail line. Investments between 2002 and 2015 are highlighted in Table 1. These investments have increased the reliability, speed, and carrying capacity of the rail line.

Table 1: Completed Upgrades to the MVRRA Rail Line 2002-2015

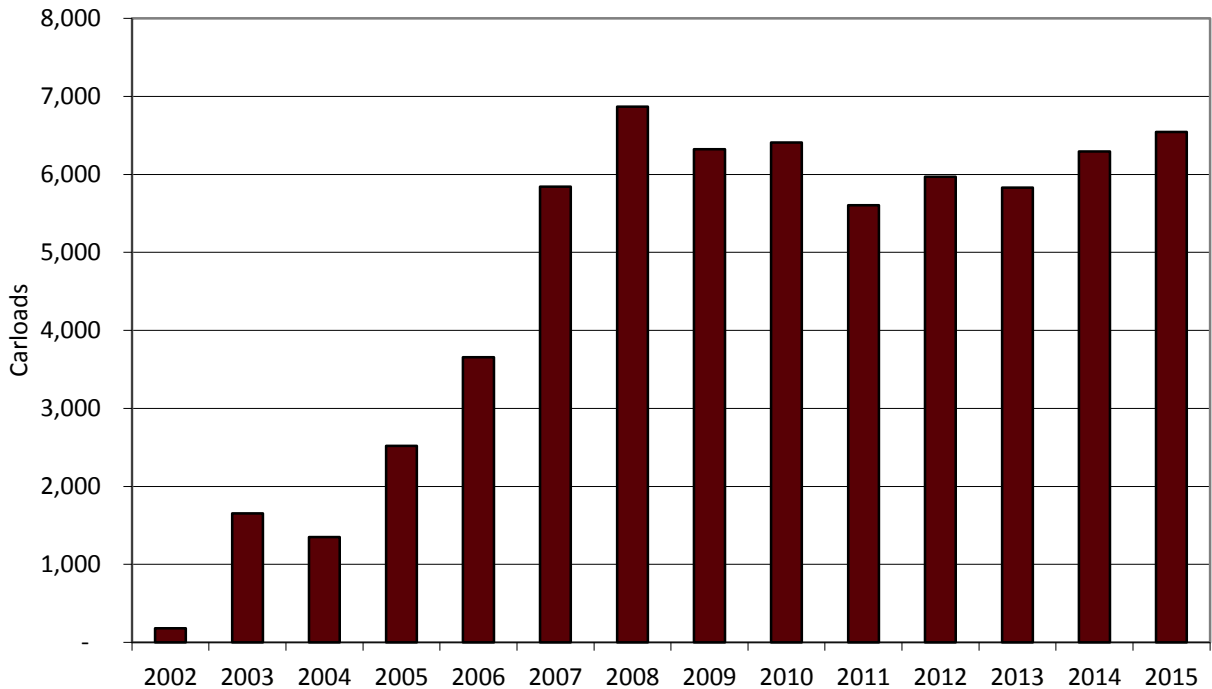
Year	Location	Type of Project	Cost	Funding Source
2002-2008	Norwood- Hanley Falls	Crossties; road crossings; surfacing	\$10,522,609	State; Federal; Shippers; Railroad
2010	Norwood- Arlington	Rail replacement	\$5,508,606	State Bonds
2011	Gaylord -Winthrop	Rail replacement	\$4,225,000	State Bonds; Federal; City
2012	Arlington-Gaylord	Rail replacement	\$4,776,600	State Bonds; Federal; City
2015	Arlington; Winthrop	Bridge work; box culverts, and track upgrades	\$1,593,064	State Bonds; MPL Inc.

Source: SEH, Track Conditions Report, May 2015 and MPL, Inc.

Shippers have taken advantage of the upgraded rail, as the number of carloads shipped on the MVRRA climbed significantly between 2002 and 2008. The upgraded rail line, however, is not the only factor affecting the number of carloads shipped. It appears the Great Recession of 2008-2009

led to a slight decline in carloads shipped between 2008 and 2011. However, since 2011's low, the number of carloads shipped increased by 17 percent through 2015, increasing gradually each year since 2013.

Chart 3: Total Carloads Shipped on the MVRRA Rail Line, 2002-2015



ECONOMIC CONTRIBUTION OF THE MVRRA RAIL LINE

Economic contribution studies include specific methods and language that is worth noting here. For example, the term “total economic contribution” is used throughout this report and is comprised of direct, indirect, and induced effects. Direct effects are those created by an industry or economic activity. In this analysis, the direct effect of the rail line is calculated by assessing three parts of rail activities -- the operations of the rail line itself (spending by both the MVRRA and MPL), the value derived from the goods moved on the rail, and expenditures for rail line improvements. The direct effects in this analysis were documented via surveys, interviews, and records.

Beyond direct effects, indirect and induced effects are the impacts on businesses and enterprises as a result of the direct effect. Indirect effects come from spending for goods and services by the MVRRA, MPL, shippers, and companies performing construction on the rail line. Induced effects come from employees of the MVRRA, MPL, the shippers, and construction companies as they spend their income in the region. The indirect and induced effects in this analysis were estimated using the

input-output model, IMPLAN. IMPLAN is a specialized type of economic model, called an input-output model, and is used in economic impact studies (see the Appendix for additional details).

Rail Line Operations 2014

Two organizations are responsible for the operation of the rail line. The MVRRA owns the line and helps support and promote it. Through a long-term contract with MVRRA, the MPL operates the line. MPL also performs general repair and maintenance on the rail. Both of these organizations make expenditures related to the rail line. These expenditures, in turn, generate economic activity. Both the MVRRA and MPL provided Extension with their operation budgets and employment figures for 2014 (the most current year available at the time of the study). The operating budgets of the organizations are the direct effect of the rail line operations.

In 2014, the MVRRA and MPL spent \$2.5 million in the region on operations. The two organizations employed 18 people and spent approximately \$1.2 on employee compensation (Table 2). In total, operations by the organizations contributed an estimated \$3.4 million in economic activity to the region, including 25 jobs and \$1.4 million in labor income.

Table 2: 2014 Economic Contribution of the Minnesota Valley Regional Rail Authority Rail Line: Operations

	Direct	Indirect	Induced	Total
Output (millions)	\$2.5	\$0.4	\$0.5	\$3.4
Employment	18	3	4	25
Labor Income (millions)	\$1.2	\$0.1	\$0.1	\$1.4

Estimates by University of Minnesota Extension

Shippers 2014

Businesses shipping products on the MVRRA rail line generate additional economic activity in the region. Shippers on the rail line can be broadly categorized into two groups -- manufacturers and wholesalers. Wholesalers are primarily grain elevators that collect and resell corn and soybeans. Manufacturing items include dairy products, ethanol, distiller’s dried grains with solubles (DDGS), softener salt, soda ash, and wood products. Shippers use the rail to both ship out final product and ship in inputs for production.

The direct effects created by the shippers are equal to the value of shipper sales dependent on the rail line. To quantify the direct effects of the shippers, University of Minnesota Extension sent an online survey to the 16 businesses currently shipping, or with potential to ship, on the line. For non-responding shippers, total sales were estimated using the Million Dollar Database (see methods section). Shippers were asked to report information for 2014, as at the time of the survey, final figures for 2015 were not available.

Shippers on the MVRRA rail line reported total sales of \$1.8 billion in 2014. Some shippers reported that a significant portion of their product (up to 90 percent) is dependent on the line. Others reported only a small fraction of their product (less than 10 percent) is dependent on the line. A few shippers reported no shipping on the line in 2014.

The economic contribution of the rail line can only include the value of shipper sales dependent on the rail line. In 2014, an estimated \$331.7 million of MVRRA shipper sales were dependent on the line (Table 3). These are the direct effects. To produce \$331.7 million of output, shippers are estimated to employ 390 workers (including part-time and full-time jobs) and pay an estimated \$40.4 million in labor income to these employees.

In total, sales dependent on the MVRRA rail line contributed \$444.5 million of economic activity in the region, including \$64.6 million of labor income. By moving product on the line, MVRRA shippers supported 960 jobs in the region.

Of note are the relatively high indirect effects, especially for employment. In comparison to other economic contribution studies, these employment effects are high and require some consideration and discussion. One reason may be due to the definition of employment since one job is one job in IMPLAN, regardless of its status as full-time, part-time, or seasonal. Jobs at grain elevators often support a significant level of seasonal employment, as much work happens around the harvest season. For example, truck haulers may be employed during the harvest season to bring crops from the field to the elevator, and these jobs are included in the indirect effects. Therefore, while these employment effects are higher compared to other studies, they can be explained.

A second consideration is the relative ties between businesses shipping on the line and local producers. The ethanol plant, for instance, purchases corn grown by producers primarily within a 35-mile radius of the plant. The input-output model captures the expenditures and economic activity generated by these growers. Of note here, related to indirect impacts, is the ownership structure of the ethanol plant. The plant is a cooperative, with farmers as owners, therefore a significant share of profits are retained in the region increasing the impact of the facility.

Table 3: Economic Contribution of Minnesota Valley Regional Rail Authority Rail Line: Shippers

	Direct	Indirect	Induced	Total
Output (millions)	\$331.7	\$89.5	\$23.3	\$444.5
Employment	390	380	190	960
Labor Income (millions)	\$40.4	\$17.9	\$6.3	\$64.6

Estimates by University of Minnesota Extension

Grain elevators, on the other hand, operate as wholesale operations. Elevators collect corn and soybeans for further resale and shipping. In this case, the model would not capture the indirect effects on the corn and soybean growers. Thus, the impact may be even higher than estimated. Also of note is that many of the grain elevators are farmer-owned cooperatives and the profits earned are retained and spent within the local economy.

Rail Improvement Projects 2015

In 2015, several improvement projects were performed on the rail line. The MVRRA replaced a bridge near Arlington and improved box culverts. The MPL also invested in improvements to the line, upgrading 4.5 miles of it to Class I track. Together, the MPL and MVRRA spent \$1.6 million on rail

line improvements in 2015. The investments generated a total of \$2.1 million in economic activity in the region. It supported employment for 10 workers and nearly \$600,000 in labor income.

The investments by MPL represent additional improvements along the line, in addition to MPL's general repair and maintenance, which are included in their operation budget.

Table 4: 2015 Economic Contribution of Minnesota Valley Regional Rail Authority Rail Line: Rail Improvement Projects

	Direct	Indirect	Induced	Total
Output (millions)	\$1.6	\$0.3	\$0.2	\$2.1
Employment	6	2	2	10
Labor Income (millions)	\$0.4	\$0.1	\$0.1	\$0.6

Estimates by University of Minnesota Extension

Total Economic Contribution 2014

In 2014, the Minnesota Valley Regional Rail Authority rail line contributed an estimated \$447.9 million in activity to the economies of Carver, Renville, Redwood, Sibley, and Yellow Medicine counties (Table 5). Of that activity, \$66.0 million was income to region residents. The rail line also supported 988 jobs in the region.

Table 5: Total 2014 Economic Contribution of Minnesota Valley Regional Rail Authority Rail Line in Carver, Renville, Redwood, Sibley and Yellow Medicine Counties (Tables 2 and 3 Combined)

	Direct	Indirect	Induced	Total
Output (millions)	\$334.2	\$89.9	\$23.8	\$447.9
Employment	408	390	190	988
Labor Income (millions)	\$41.6	\$18.0	\$6.4	\$66.0

Estimates by University of Minnesota Extension

Table 5 provides a summary of the information presented in Table 2 (operations) and Table 3 (shippers). At the time of this analysis, the 2014 data was the most current information available. Table 5 does not include the information from Table 4, as those are 2015 impacts.

POTENTIAL CHANGES IN THE RAIL LINE

MVVRA's goal is to continue improving the rail line. Shippers were asked about the role rail line improvements would play in their business model; several indicated that improvements to the rail line would lead increase its use of the line. Many shippers also indicated they would *increase production* in response.



GROWTH SINCE 2008

During 2009-2010, University of Minnesota Extension conducted an analysis of the economic contribution of the MVRRA rail line. That analysis followed similar methods and found the operation of the rail line contributed \$3.2 million in output, 21 jobs, and \$1.4 million in labor income to the study area economy in 2008. Goods shipped on the railroad contributed \$302 million in output, 671 jobs, and \$28 million in labor income.

The shipper's economic contribution increased by 48 percent between 2008 and 2015. Ultimately, several factors may have led to this increase. First is an increase in the value of the goods shipped on the rail line. The number of carloads shipped in 2014 was lower than in 2008, but shippers reported an overall increase of 48 percent in the value of the goods. This indicates a probable increase in value of the commodities shipped.

Additionally, the rail line added two new shippers to the system, thus contributing to the number of carloads and value of goods shipped. While the overall number of carloads did not increase significantly, the additional two shippers likely offset some of the Great Recession effects and the closure of a business that previously shipped on the line.

Spending by the MPL and MVRRA decreased slightly between the previous study and this report. The improved quality of the rail line increased the efficiency of operations, thus decreasing costs.

STATEWIDE ECONOMIC CONTRIBUTION

So far, this analysis has focused on the economic contribution of the MVRRA rail line in Carver, Renville, Redwood, Sibley and Yellow Medicine counties. But, the rail line also has an impact on Minnesota, as highlighted in Table 6. In 2014, it contributed an estimated \$544.0 million in activity to the Minnesota economy, including \$109.2 million in labor income and 1,538 jobs.

Table 6: Total 2014 Economic Contribution of Minnesota Valley Regional Rail Authority Rail Line, Minnesota

	Direct	Indirect	Induced	Total
Output (millions)	\$334.2	\$134.6	\$75.2	\$544.0
Employment	408	620	510	1,538
Labor Income (millions)	\$41.6	\$42.5	\$25.1	\$109.2

Estimates by University of Minnesota Extension

METHODS

This section will detail how the direct effects of the MVRRA were quantified for the analysis.

Rail Operations

The direct effect of rail operations was calculated by obtaining the operating budgets and employment for both the MVRRA and the MPL. Both organizations provided this information to Extension.



Shippers

To measure the direct effect of the value of sales supported by the rail line, Extension sent an online survey to the 16 companies with access to ship on the rail. Of those, 12 completed the survey, for a response rate of 75 percent. The major shippers on the line, as identified by MVRRA and MPL, responded to the survey. For businesses that did not respond to the survey, Extension used Dunn and Bradstreet's Million Dollar Database to access total sales by business location. Since most of these businesses were not major shippers on the rail, Extension estimated 5 percent of their sales were connected to the rail, which is a conservative assumption. Extension also received feedback from MPL on the validity of these assumptions.

The total value of sales affected by the rail line was entered into the IMPLAN model, and the model estimated the direct employment and labor income associated with the output.

Rail Line Improvements

The direct effect of rail line improvements was provided to Extension by MVRRA and MPL. The total cost of rail improvements was entered into IMPLAN, and the model estimated the direct employment and labor income.

APPENDIX 1: DEFINITION OF TERMS

Special models, called input-output models, exist to conduct economic impact analysis. There are several input-output models available. IMPLAN (IMPact Analysis for PLANning, MIG, Inc.) is one such model, and many economists use it because it can measure output and employment impacts, is available on a county-by-county basis, and is flexible to use. IMPLAN has some limitations and qualifications, but it is one of the best tools available for input-output modeling. Understanding the IMPLAN tool, its capabilities, and its limitations will help ensure the best results from the model.

One of the most critical aspects of understanding economic impact analysis is the distinction between the “local” and “non-local” economy. The local economy is identified as part of the model-building process. Either the group requesting the study or the analyst defines the local area. Typically, the study area (local economy) is a county or a group of counties that share economic linkages.

A few definitions are essential to properly read the results of an IMPLAN analysis. The terms and their definitions are provided below.

Output

Output is measured in dollars and is equivalent to total sales. The output measure can include significant “double counting.” Think of corn, for example. The value of the corn is counted when it is sold to the mill, again when it is sold to the dairy farmer, again as part of the price of fluid milk, and yet again when it is sold as cheese. The value of the corn is built into the price of each of these items, and then the sales of each are added up to get total sales (or output).

Employment

Employment includes full-time, part-time, and seasonal workers and is measured in annual average jobs, not full-time equivalents (FTE’s). IMPLAN includes total wage and salaried employees, as well as the self-employed, in employment estimates. Because employment is measured in jobs and not in dollar values, it tends to be a very stable metric.

Labor Income

Labor income measures the value added to the product by the labor component. So, in the corn example, when the corn is sold to the mill, a certain percentage of the sale goes to the farmer for his/her labor. Then when the mill sells the corn as feed to dairy farmers, it includes some markup for its labor costs in the price. When dairy farmers sell the milk to the cheese manufacturer, they include a value for their labor. These individual value increments for labor can be measured, which amounts to labor income. Labor income does not include double counting.

Labor income includes employee compensation (wages, salaries, and benefits) and proprietor income.

Direct Impact

Direct impact is equivalent to the initial activity in the economy that triggers an economic change.

Indirect Impact

The indirect impact is the summation of changes in the local economy that occur due to **spending for inputs** (goods and services) by the industry or industries directly impacted. For instance, if employment in a manufacturing plant increases by 100 jobs, this implies a corresponding increase

in output by the plant. As the plant increases output, it must also purchase more inputs, such as electricity, steel, and equipment. As the plant increases purchases of these items, its suppliers must also increase production, and so forth. As these ripples move through the economy, they can be captured and measured. Ripples related to the purchase of goods and services are indirect impacts. In this study, indirect impacts are those associated with spending by MVRRA, MPL, the shippers, and construction firms performing rail line upgrades.

Induced Impact

The induced impact is the summation of changes in the local economy that occur due to **spending by labor**. For instance, if employment in a manufacturing plant increases by 100 jobs, the new employees will have more money to spend to purchase housing, buy groceries, and go out to dinner. As they spend their new income, more activity occurs in the local economy. Induced impacts also include spending by labor generated by indirect impacts. Primarily, in this study, the induced impacts are economic changes related to spending by employees of MVRRA, MPL, the shippers, and the construction firms.

Total Impact

The total impact is the summation of the direct, indirect, and induced impacts.

Input-Output, Supply and Demand, and Size of Market

Care must be taken when using regional input-output models to ensure they are being used in the appropriate type of analysis. If input-output models are used to examine the impact, or the contribution, of an industry that is so large that its expansion or contraction results in major shifts in supply and demand that prices of inputs and labor change, input-output can overstate the impacts or contributions. While the MVRRA is an important component of the regional economy, it is not likely that its existence has an impact on national prices. Hence, the model should estimate the contributions reliably.

APPENDIX 2: HISTORY OF THE MVRRA RAIL LINE

The 2010 Extension report contained a comprehensive history of the MVRRA and explanation of its need for rail line improvements. The following eight paragraphs are extracted from the report. The full report can be viewed at: <http://www.extension.umn.edu/community/economic-impact-analysis/reports/docs/2009-EIA-MVRRA-Rail.pdf>.

“The most succinct and complete summary of the history of this line comes from the Southwest Minnesota Regional Freight Study Final Report 2007:¹

“The MPL was originally a Minneapolis and St. Louis Railroad and later a Chicago and North Western Railroad branch from Norwood, just southwest of the Twin Cities, to Hanley Falls, MN. It covers a distance of 94 miles and cuts across the northern section of District 7. The line is owned by the Minnesota Valley Regional Railroad Authority (MVRRA), a public sub-division of the state which entails five counties where the railroad transpires through. The five counties include Carver, Sibley, Renville, Redwood, and Yellow Medicine Counties. MVRRA acquired the line in 1983 when the Chicago and North Western Railroad decided to abandon the line. In 2000, after several failed attempts by short lines to operate the branch line, MVRRA sought to bring the line back into operation on behalf of the towns and businesses along the line, which included quarries, food processors, feed mills, and several grain elevators. Prior to this time, the railroad line had been embargoed, or blocked from moving traffic for safety and engineering reasons.

In 2002, the State funded a \$4.8 million rehabilitation of the line with the MVRRA providing \$600,000 and the MNRail, Inc. (the shipper’s association) providing another \$600,000. MVRRA also succeeded in securing federally assisted funding of \$1 million from the federal government. This project brought service back to the line at Class I track standards, allowing 10 mile per hour service on the line. Prior to receiving the funding, MVRRA arranged a lease to the Twin Cities and Western Railroad, a regional railroad operator, to operate the line beginning in the fall of 2002. Since the initial rehabilitation in 2002, MVRRA has succeeded in receiving an additional \$1.987 million and \$2.0 million from the Federal Government to continue further upgrades to the line.” (Southwest Minnesota Freight Study. Page 101)

The investments in the MPL are all intended to upgrade the line to a 25-mile per hour speed limit and 286,000 pound maximum per car capacity line for the length of the 94 miles.

Current Weight Capacity

The current maximum gross weight capacity for four axle freight cars on the Minnesota Prairie Line is 263,000 pounds gross weight per car. A major driving force behind many of the upgrades to the railroad revolves around increasing this maximum gross weight to 286,000 pounds per car. Upgrading the MPL to a level that allows these larger cars is not an easy task. The Southwest Minnesota Regional Freight study, released in 2007, offers an excellent summary of the potential for this type of upgrade as well as the difficulties. According to that study, changes by main line rail companies to maximum weight limits have been “...a concern for lines such as the Minnesota Prairie Line and the Minnesota Southern, already operating with marginal track and bridge structures and 10-mile per hour speed limits.” (Southwest Minnesota Regional Freight Study, Final Report, 2007, pp. 66-67) The same study also discusses the cost that upgrading to higher weight capacities will impose on railroad owners as well as shippers, noting that the required improvements will likely exceed the latent financial ability of those stakeholders. Beyond the costs to upgrading the line to the 286,000 pound per

¹ Minnesota Department of Transportation. *Southwest Minnesota Regional Freight Study Final Report*. 2007. <http://www.dot.state.mn.us/ofrw/PDF/D7FinalReport101707.pdf>

car maximum, the future may require additional upgrades to 315,000 per car maximum weight limits, which would mean significant investments beyond track and roadbed, but also to other basic operating features of the railroad. The future situation related to weight capacity is best summarized by the following from the Southwest Minnesota Freight Study:

The actual track structure may even survive at very low operating speeds and marginal conditions, but bridges in particular may be prone to catastrophic failure under the bigger cars, effectively embargoing the line and shutting down the entire rail operation for all users on that route or branch. (Southwest Minnesota Regional Freight Study, Final Report, 2007, pp. 67)

The reasoning behind increasing the maximum weight of rail cars is simple. The ability to transport more goods on each car translates to a decrease in cost to the shippers. Any decreases in cost can lead to a more competitive operating environment for each of the shippers and also allow them to compete in markets that were previously uncompetitive. As other rail lines in the geographic vicinity, with better track conditions, move to higher weight capacities, the MPL must also in order to remain competitive.

Maximum Speed

The MVRRA Rail Line has a 10-mile per hour speed limit. When transporting ethanol that limit decreases to 7-miles per hour. These limits are in place for safety purposes. The current condition of the track and roadbed isn't reliable enough to allow faster travel. There have been incidents where cars have derailed due to the rail condition. Upgrades to track, roadbed, safety signals and bridges are all needed to improve the maximum speed to 25-mile per hour. The result of faster speed will mean that more cars can be moved in a shorter period of time. It also improves the ability of the operator to respond to engine breakdowns and other issues related to the trains. Increases in the maximum speed of the line will allow shipping on the line to realize greater efficiencies."