

The Economic Impact of Amtrak's Southwest Chief Rail Service on the Colorado Economy.

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Addendum to the report submitted on February 3, 2014.

This correction to the original report (dated February 3, 2014) is based on revised out-of-state ridership information provided by Amtrak. We received the revised data on February 7, 2014. The revision affects the economic impacts for the current Southwest Chief service and for the proposed expansion of Amtrak service to Pueblo. The impacts reported for Evraz Pueblo and for possible federal funding of repair costs are not affected by the revised ridership data. The original report should be replaced with this revised report.

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Executive Summary

Amtrak's Southwest Chief extends from Chicago to Los Angeles and serves about 13,000 riders in Colorado annually. About one-quarter of these passengers are from out-of-state. BNSF Railway has informed Amtrak that capital improvements and other repairs of approximately \$200 million are necessary to continue passenger train operations through western Kansas, southeastern Colorado and northern New Mexico. It has been proposed that Amtrak, BNSF Railway, Colorado, Kansas, and New Mexico split the costs. The share of these costs for Colorado is expected to be about \$4 million per year for 10 years. Alternatives include the possible rerouting of the Southwest Chief away from Colorado by diverting the line in western Kansas to an existing route in Oklahoma and Texas.

This study examines several relevant economic impacts on the Colorado economy including the effect of the current Southwest Chief service, the extension of service to a proposed Amtrak station in Pueblo, and if rail produced by Evraz Pueblo is used in repairs to the line outside of Colorado. Additional analysis compares the costs and benefits of a new Amtrak station in Pueblo. A station in Pueblo would provide a state-wide benefit with multi-modal connectivity to other destinations in the state. For example, a station in Pueblo complements CDOT's planned state-wide transit service. Bus service from the Pueblo station would allow rail travelers to access planned passenger service in Colorado Springs. The enhanced tourism opportunities created by new Amtrak station in Pueblo are expected to increase out-of-state tourism and to increase economic activity in Colorado. The benefit is measured by the economic impact of the increase in out-of-state visitors to the new station. The costs are measured by the construction of a new station and upgrades on existing rail routes to serve Pueblo. Data from the Colorado Office of Tourism and Amtrak are used to measure the impacts. The IMPLAN economic impact software is used to measure effects on the level of economic activity, employment, and tax revenue in 2013 dollars. This summary reports the economic impact results. The methods used to obtain and develop the information needed for the impact analysis (spending, out-of-state visitation, etc.) is described in the body of the report. The study focuses on the state-level economic impacts described above and does not include all of the economic impacts and benefits associated with the Southwest Chief. For example, the benefits of increased mobility to Colorado citizens are not examined, nor are county-level economic impacts reported. The effect of current and expected Amtrak employees working on the Southwest Chief is not included. Amtrak maintains a train crew stationed in La Junta and a new station in Pueblo is expected to add about three more employees.

Economic Impact of Current Southwest Chief Service on the Colorado Economy.

Economic impact analysis is based on 'new dollars' or spending flowing into a region. New spending stimulates additional employment, income, and spending that ripples through the regional economy. The IMPLAN software measures these ripple effects. Current Southwest Chief service has an economic impact because many of the passengers arriving at stations in Colorado reside in other states. According to information provided by Amtrak, the stations in Lamar, La Junta, and Trinidad served approximately 3,200 out-of-state tourists during fiscal year 2013. These tourists visited the state for about one week. Using data from the Colorado Tourism Office, we estimate that these visitors spent an average of \$550 during their stay. This spending figure can be placed in perspective by a comparison with other per person trip data for Colorado. For example, The Colorado Tourism Office reports that average per person

expenditures for out-of-state visitors ranges as high as \$1,106 (for ski trips) to \$274 (for outdoor-oriented visits).

The economic impact of \$1.8 million (3,200 visitors x \$550 per visitor) in rail tourism spending is reported in Table E-1. The economic impact of spending by these visitors induces another \$1.1 million in economic activity for a total impact of \$2.9 million. The spending multiplier indicates that one more dollar in tourism spending is associated with a \$1.63 increase in state-level economic activity. Another way to view the economic impact is to examine the effect of visitor spending on employment in the state. The direct spending of \$1.8 million creates about 18 tourism jobs in Colorado. The spending by these employees supports an additional 10 jobs in the state. The employment multiplier indicates that each new job directly related to rail tourism supports an additional 0.55 jobs in Colorado, or one more job serving rail tourism results in the creation of 1.55 total jobs. The economic activity associated with rail tourism generates an additional \$175,000 in state and local tax revenue.

Table E-1. Economic Impact of Out-of-State Southwest Chief Visitor Spending.

Impact Category (2013 Dollars)	Direct Effect	Multiplier	Total Economic Impact
Visitor Spending	\$1,782,000	1.63	\$2,907,000
Employment	18 jobs	1.55	28 jobs
State and Local Tax Revenue	–	–	\$175,000

Source: IMPLAN. Results reported in 2013 dollars.

Costs and Benefits of the Existing Southwest Chief Service.

Colorado's share of rail repairs over 10 years is expected to be approximately \$40 million. The economic impact of out-of-state visitors over a 10-year period is about \$29 million. Benefits, measured in terms of the economic impact of current service, will equal expected repair costs in approximately 14 years.

Economic Impact of Extending Amtrak Service to Pueblo.

A new Amtrak station in Pueblo would attract additional out-of-state travelers to Colorado. A station in Pueblo would serve as a convenient transfer point to I-25 and Colorado State Highway 50 and allow travelers to easily reach other destinations in the state. We estimate that a new stop in Pueblo would attract approximately 15,700 riders annually. Our revised estimate of out-of-state ridership to a new stop in Pueblo, based on the new data from Amtrak, is approximately 3,800 passengers. Assuming that these potential visitors spend at the same rate as other train tourists, direct spending by out-of-state visitors to a new station in Pueblo is expected to be approximately \$2.1 million (3,800 out-of-state visitors x \$550 per visitor). The economic impact results are reported in Table E-2.

Table E-2. Economic Impact of a New Amtrak Station in Pueblo. Based on Expected Out-of-State Ridership and Spending.

Impact Category (2013 Dollars)	Direct Effect	Multiplier	Total Economic Impact
Visitor Spending	\$2,091,000	1.63	\$3,412,000
Employment	21 jobs	1.55	32 jobs
State and Local Tax Revenue	–	–	\$205,000

Source: IMPLAN. Results reported in 2013 dollars.

These results indicate that the effect of \$2.1 million in out-of-state visitor spending induces another \$1.3 million in economic activity for a total impact of \$3.4 million. The direct spending of \$2.1 million creates 21 tourism jobs in Colorado. The income and spending by these employees supports an additional 11 jobs. The economic activity associated with rail tourism generates an additional \$205,000 in state and local tax revenue. This is an annual impact and would be experienced every year the new station is in Pueblo.

Costs and Benefits of a New Amtrak Station in Pueblo.

The cost of extending Amtrak service to Pueblo involves upgrades to the existing BNSF freight line that travels between La Junta, Pueblo, and Trinidad (see Figure 1 below). Our estimate of upgrade cost is \$26.2 million and is based on shifting the funds needed to repair the existing Southwest Chief line between La Junta and Trinidad to upgrading the existing BNSF freight line. The cost of expanding Amtrak service to Pueblo may include the construction of a new station (about \$4.5 million), or the renovation to the existing Pueblo Union Depot. At this time it is unknown what these renovation costs will be. Our preliminary estimate is approximately \$400,000. Therefore, the total costs of expanding rail service may range between \$26.6 million and \$30.7 million (\$26.2 million + renovation costs to the Pueblo Union Depot, or the cost of a new station). Repair costs are expected to extend over 10 years. The economic impact of rail service to Pueblo is expected to be approximately \$34 million over ten years. Depending on the cost measure used, the excess of benefits over costs ranges between \$3.3 million and \$7.4 million over the ten-year period.

The cost/benefit analysis implies that the financial health of the Southwest Chief in Colorado depends on access to high-density markets. While current rail service brings visitors to the state, it does not provide easy access to other tourism destinations in Colorado. Expanding Amtrak service to Pueblo complements CDOT's planned state-wide transit service and offers greater access to tourism destinations state-wide and to high-density populations along the Front Range. The growth potential offered by a new stop in Pueblo may be associated with increased ridership at all stops along the southeast Colorado portion of the line.

Additional Economic Impact Results: Federal Funding of a New Amtrak Station in Pueblo.

The construction cost estimate, used in this study, of a new Amtrak station built in Pueblo may be as high as \$4.5 million. The estimated additional upgrades along the existing freight line from La Junta to Pueblo and Trinidad is \$26.2 million. Both of these measures are in 2013 dollars. Adjusting Colorado's share of the initial rail upgrades to 2013 dollars is \$43.5 million. Therefore, the estimated total cost of maintaining portions of the existing Southwest Chief line in

Colorado with the addition of a new station in Pueblo is \$74.2 million (\$4.5 million + \$26.2 million + \$43.5 million). If these expenditures are financed by the State of Colorado there is no economic impact for the state since these funds would be diverted to other transportation projects. However, if these projects are funded by the federal government, new dollars and spending would occur in Colorado and generate additional economic activity. Economic impact results of this scenario are reported in Table E-3. Federal funding would increase economic activity by approximately \$145 million, create about 1,040 jobs, and generate about \$4.5 million in state and local tax revenue. Unlike the impact of out-of-state visitor spending, the construction and repair costs impacts are one-time effects.

Table E-3. Economic Impact of Costs for a New Amtrak Station in Pueblo and Rail Upgrades: Impact Assumes Federal Funding.

Impact Category (2013 Dollars)	Direct Effect	Multiplier	Total Economic Impact
New and Upgraded Construction Costs	\$74.2 million	1.95	\$144.9 million
Employment	541 jobs	1.92	1,039 jobs
State and Local Tax Revenue	–	–	\$4.5 million

Source: IMPLAN. Results reported in 2013 dollars.

Economic Impact of the Use of Evraz Pueblo Rail for Out-of-State Repairs.

Information provided by Amtrak indicates that approximately 100 miles of rail on the Southwest Chief line in Kansas will be replaced. The economic impact of this rail replacement on the Colorado economy depends on how much of the rail is produced at the Evraz steel mill in Pueblo. It is important to note that the Southwest Chief cost estimate provided by BNSF is based on the use of relay, or used rail in Kansas. If this plan is followed, there will not be any benefit to the Colorado economy. We present two economic impact scenarios based on the assumption that new rail will ultimately be used in Kansas. The first scenario is based on Evraz Pueblo supplying the *entire* rail for repairs in Kansas. The results for this scenario are reported in Table E-4.

Table E-4 Economic Impact of Increase in Evraz Pueblo Revenue.

Impact Category (2013 Dollars)	Direct Effect	Multiplier	Total Economic Impact
Rail Sales from 100 Miles of Replacement in Kansas	\$17.6 million	1.88	\$33.0 million
Employment	15 jobs	6.67	100 jobs
State and Local Tax Revenue	–	–	\$837,000

Source: IMPLAN. Results reported in 2013 dollars.

This analysis indicates that the effect of \$17.6 million in out-of-state rail sales induces another \$15.4 million in economic activity for a total impact of \$33 million. We estimate that the production of \$17.6 million in rail at Evraz Pueblo would be produced by approximately 15

steel workers. The spending of these employees supports an additional 85 jobs in Colorado. The economic activity associated with the sale of Evraz rail would generate an additional \$837,000 in state and local tax revenue. The second economic impact scenario is based on the assumption that Evraz Pueblo completes a portion of this work commensurate with the company's current market share in the U. S. rail market (approximately 40 percent). Under this scenario, the overall economic impact would be approximately \$13.2 million, 40 jobs, and about \$335,000 in additional state and local tax revenue.

Need for Additional Research

This study is based on the most accurate information available at this time. The results of this report can be improved with information provided by a revenue and ridership study by Amtrak. This type of analysis would provide a more accurate estimate of ridership to a new station in Pueblo and the cost of rail upgrades. An Amtrak study requires several months to complete and a formal request by a state agency.

The study focuses on the state-level economic impacts described above and does not include all of the economic impacts and benefits associated with the Southwest Chief. For example, the benefits of increased mobility to Colorado citizens are not examined, nor are county-level economic impacts reported. The effect of current and expected Amtrak employees working on the Southwest Chief is not included. Amtrak maintains a train crew stationed in La Junta and a new station in Pueblo is expected to add about three more employees.

Introduction

Amtrak's Southwest Chief offers 2,200 miles of service between Los Angeles and Chicago. This rail line serves about 13,000 riders in Colorado annually. About one-quarter of these passengers are from out-of-state. The approximate 680 mile section of the track in western Kansas, southeast Colorado, and northern New Mexico is jeopardized by looming repair and maintenance costs.¹ BNSF Railway, who maintains this section of the line, has informed Amtrak that improvements of approximately \$200 million are necessary to continue passenger train operations. Since it is unlikely that Amtrak can fund these improvements, it has been proposed that Amtrak, BNSF Railway, Colorado, Kansas, and New Mexico split the improvement costs. The share of these costs for Colorado is expected to be about \$4 million per year for 10 years. An alternative is to divert the line in western Kansas to an existing route in Oklahoma and Texas. This diversion would end Southwest Chief service in Colorado.

This study examines the economic impact on the Colorado economy of the current Southwest Chief service. This impact is measured by the spending of out-of-state rail tourists. This impact can also be viewed as the decrease in economic activity if the service is discontinued in Colorado. The study also examines the impact on the Colorado economy if the repairs in Kansas are made with Evraz rail that is manufactured in Pueblo, Colorado. Evraz is the largest producer of rail in North America.² Finally, it has been proposed that the cost-sharing plan to maintain the Southwest Chief also includes an extension of the service to Pueblo, Colorado. The existing line travels east/west from Lamar to La Junta before heading southwest to Trinidad. See Figure 1. The proposed change would extend the service along an existing rail line that connects La Junta, Pueblo, and Trinidad.

¹ This section of the report benefits from information available in "Amtrak Southwest Chief Service to Colorado In Doubt; Background Information" by Jim Souby and Gary Carter.

² Evraz Customer Newsletter, Issue 1, 2012.

Figure 1. Maps of Existing Route of the Southwest Chief Service and to a New Amtrak Station in Pueblo.



A new Amtrak station in Pueblo would provide a state-wide benefit with multi-modal connectivity to other destinations in the state. For example, a station in Pueblo complements CDOT's planned state-wide transit service. Bus service from the Pueblo station would allow rail travelers to access planned passenger service in Colorado Springs. The enhanced tourism opportunities created by new Amtrak station in Pueblo are expected to increase out-of-state tourism and to increase economic activity in Colorado.

Understanding Economic Impact Analysis

An activity has an economic impact if it draws, or attracts "new dollars" into a region. When these funds are spent within the region, additional economic activity takes place. For example, when out-of-state travelers on Amtrak's Southwest Chief visit Colorado, economic

activity is directly affected by the spending of these tourists. Local economic activity is also indirectly influenced as supplies in tourism-related industries (restaurants, hotels, resorts, etc) are purchased. Additional economic activity is induced as tourism industry employees spend a portion of their income in the local retail and service industries. This process is often referred to as a “ripple effect” where the initial stimulus to a local economy, the direct effect of spending by out-of-state tourists, is multiplied as additional local rounds of income, spending, and job creation take place. Because of the ripple effect, the total impact of visitor spending on the Colorado economy will be larger than the initial spending by these visitors. The same process applies *if* rail, manufactured at the Evraz steel mill in Pueblo, is used in repairs to the BNSF line outside of Colorado. The possible sale of Pueblo rail for repairs in Kansas represents “new dollars” for the Colorado economy.

IMPLAN Economic Impact Software

This economic impact study uses the IMPLAN software and data for the state of Colorado to estimate the ripple, or multiplier, effect of the spending of out-of-state rail tourists and the anticipated sale of Evraz rail. Specifically, these data and software are used to estimate the impact on state-level economic activity, employment, and tax revenue. IMPLAN (IMpact analysis for PLANning) was originally developed by the U.S. Department of Agriculture to assist the Forest Service with land and resource management planning. The Minnesota IMPLAN Group (MIG) started work on the data-driven model in the mid-1980s at the University of Minnesota. The software was privatized in 1993 and made available for public use. The software contains an input-output model with data available at the zip-code, county, state, and national levels.

Input-output analysis measures the inter-industry relationships within an economy. Specifically, input-output analysis is a means of measuring the monetary, or market transactions between businesses and between businesses and consumers. This framework allows for the examination of how a change in one sector affects the entire economy. In this way, input-output analysis is able to measure the multiplier, or ripple, effect as an initial change in one industry stimulates further changes in transactions between other businesses and households. In addition to capturing market transactions within an economy, IMPLAN also measures social accounting, or non-market flows, such as tax payments by individuals and businesses, government transfers, and transfers between individuals. The benefit of these social accounts is the estimation of federal, state, and local tax revenue associated with an economic impact. Specifically, IMPLAN provides estimates of total state and local taxes from employee compensation, indirect business taxes (sales, property, etc.), households (income, property, motor vehicle, etc.), and corporations (dividends and profits). The results reported below are based on the most recent data (2012). IMPLAN deflators are used to adjust for changes in prices over time. The results are reported in 2013 dollars.

Spending and Length of Stay by Out-Of-State Southwest Chief Visitors.

Time limitations prevent us from conducting a survey of Southwest Chief ridership to determine the percent of riders from out-of-state, duration of stay, and per visitor spending. Consequently, we relied on secondary sources for this information. AMTRAK provided information on the estimated number of out-of-state riders making round trips to/from each of the stations in Colorado as well as estimated length of stay. These data are reported in Table 1 and indicate that approximately 3,200 out-of-state visitors travelled on the Southwest Chief to

visit Colorado during fiscal year 2013.³ The estimated average visit ranged from 7 to 8 days. The length of stay information provided by AMTRAK is comparable to data reported by in a visitor study by the Leeds School of Business. This study is based on a survey of tourists at visitor centers located around the state. This study reports that out-of-state tourists at the Lamar visitor center reported an average stay in Colorado of 6.4 nights. The comparable data from the Trinidad visitor center is 8.3 nights.

Table 1. Southwest Chief Ridership Originating from Outside Colorado, Fiscal Year 2013.

Colorado Station	Estimated number of riders (round trips) originating from outside Colorado	Estimated average duration of stay before departing Colorado
La Junta, CO	1,399	6.8 days
Lamar, CO	466	6.6 days
Trinidad, CO	1,370	7.9 days
Total	3,235	—

Source: AMTRAK

Data from the study by the Leeds School of Business is also used to obtain measures of visitor spending. This study reports that visitors to the Lamar welcome center reported spending an average of \$75 per night during their stay in Colorado. Visitors to the welcome center in Trinidad reported spending \$70 per night. These data apply to 2008. After adjusting the spending data for inflation and applying weights based on the number of Amtrak visitors to the Lamar and Trinidad stations, the average spending per out-of-state visitor used in this study is \$76.11 per night.⁴ The Leeds School of Business study reported a state-wide average spending rate of \$85.52 per visitor (adjusted for inflation). Using the data for Lamar and Trinidad has the advantage of capturing differences in spending for visitors who start their trip in the southeast region of Colorado.

³ Amtrak ridership in Colorado varies slightly from year to year. For example, total boardings and alightings in Trinidad were 4,535 in 2011, 4,700 in 2012, and 4,765 in 2013.

⁴ Spending data is adjusted for inflation based the percent change in the Consumer Price Index for the fiscal years ending in September of 2008 and 2013.

Applying the spending data to the visitor information reported in Table 1 provides an estimate of the level of spending in Colorado for visitors starting their stay at each of the stations in Colorado. These data are reported in Table 2. The total visitor spending information is obtained by multiplying the number of visitors at a station by the average spending per day and the duration of the stay. For example, the 1,399 out-of-state Southwest Chief visitors at the La Junta station spent an average of \$76.11 per day during their stay of 6.8 days for a total of approximately \$724,000 during fiscal year 2013. Applying this method to the other stations provides a total for out-of-state visitors for fiscal year 2013 of approximately \$1.8 million.

Table 2. Out-of-State Southwest Chief Visitor Spending. By Point of Entry.

Station	Number of Out-Of-State Visitors	Average Daily Expenditure	Visitor Spending Per Night	Total Visitor Spending
La Junta, CO	1,399	\$76.11	6.8 days	\$724,000
Lamar, CO	466	\$76.11	6.6 days	\$234,000
Trinidad, CO	1,370	\$76.11	7.9 days	\$824,000
Overall Total	3235	—	—	\$1,782,000

Source: AMTRAK and Leeds School of Business. Data for fiscal year 2013.

The data reported in Table 2 imply that out-of-state visitors traveling by the Southwest Chief spent an average of \$551 during their stay ($\$1,782,000 / 3,235$) in fiscal year 2013. This figure for train trips can be placed in perspective by a comparison with other per person trip data for Colorado. For example, Longwoods International reports that average per person expenditures for out-of-state visitors ranges as high as \$1,106 (for ski trips). On the other hand, spending per person for outdoor-oriented trips is \$274 per person. These data apply to 2012.

The Leeds School of Business study also reports data on visitor spending by category. Data from this study are used for the sample of rail visitors with weights for differences in visitation between Lamar and Trinidad. This information is reported in Table 3. About 31 percent of total visitor spending is designated to lodging, 24 percent to eating and drinking, 19 percent on transportation expenditures in Colorado and shopping, and 7 percent on recreational

activities. These category percentages are comparable to the data reported in the Longwoods International study.

Table 3. Out-of-State Visitor Spending by Category for Fiscal Year 2013.

Category	Percent for Category	Spending by Category
Lodging	31%	\$552,000
Food and Drink	24%	\$427,000
Transportation (for non-rail travel)	19%	\$339,000
Shopping	19%	\$339,000
Recreation	7%	\$125,000
Total	100%	\$1,782,000

Source: Percent by category information obtained from the Leeds School of Business study, weighted by visitation for Trinidad and Lamar.

Economic Impact of Out-of-State Southwest Chief Visitors.

The spending categories reported in Table 3 are matched with comparable categories in the IMPLAN software to calculate the economic impact of rail visitors on the Colorado economy.⁵ The economic impact results are reported in Table 4. The economic impact of spending by these visitors induces another \$1.1 million in economic activity for a total impact of \$2.9 million. The spending multiplier indicates that one more dollar in tourism spending is associated with a \$1.63 increase in state-level economic activity. Another way to view the economic impact is to examine the effect of visitor spending on employment in the state. The direct spending of \$1.8 million creates about 18 tourism jobs in Colorado. The spending by these employees supports an additional 10 jobs in the state. The employment multiplier indicates that each new job directly related to rail tourism supports an additional 0.55 jobs in Colorado, or one more job serving rail tourism results in the creation of 1.55 total jobs. The economic activity associated with rail tourism generates an additional \$175,000 in state and local tax revenue.

⁵ The impact for retail spending is not based on the total amount of spending reported in the table. Instead the impact for this category is based on the retail margin. This change recognizes that not all retail items are produced in Colorado. Hence, the impact is based on the portion of sales (the margin) that remains in Colorado. The change contributes to a more accurate and conservative economic impact.

Table 4. Economic Impact of Out-of-State Southwest Chief Visitor Spending.

Impact Category (2013 Dollars)	Direct Effect	Multiplier	Total Economic Impact
Visitor Spending	\$1,782,000	1.63	\$2,907,000
Employment	18 jobs	1.55	28 jobs
State and Local Tax Revenue	–	–	\$175,000

Source: IMPLAN. Results reported in 2013 dollars.

This is an annual impact and is experienced every year of the existing Southwest Chief service in Colorado. Colorado's share of rail repairs over 10 years is expected to be approximately \$40 million. The economic impact of out-of-state visitors over a 10-year period is about \$29 million. Benefits, measured in terms of the economic impact of current service, will equal expected repair costs in approximately 14 years.

The total economic impact of \$2.9 million is the sum of industry-level impacts. The IMPLAN software reports the impacts by industry. The results for 20 Colorado industries with the largest impacts are reported in Table 5. These results illustrate how the effect of rail tourism extends beyond the businesses that are directly related to this activity. For example, the economic activity associated with out-of-state rail tourism increases the revenue of telecommunication and electric generation utilities by approximately \$82,000 annually. The value of health services provided by physicians and private hospitals increases by approximately \$65,000 annually. Residential property values rise with the increase in economic activity as indicated by the imputed rental activity of \$85,000, if property owners were to rent their homes. The total economic impact for hotels and restaurants is larger than the direct effects listed in Table 3 because some of the increased economic activity results in more spending in these industries.

Table 5. Economic Impact of Out-of-State Southwest Chief Visitor Spending. Industry-Level Impacts.

Total	\$2,907,000
Hotels and motels, including casino hotels	\$550,000
Food services and drinking places	\$488,000
Scenic and sightseeing transportation and support activities for transportation	\$350,000
Museums, historical sites, zoos, and parks	\$126,000
Retail Stores - General merchandise	\$103,000
Real estate establishments	\$93,000
Imputed rental activity for owner-occupied dwellings	\$85,000
Wholesale trade businesses	\$55,000
Telecommunications	\$45,000
Management of companies and enterprises	\$39,000
Electric power generation, transmission, and distribution	\$37,000
Offices of physicians, dentists, and other health practitioners	\$36,000
Securities, commodity contracts, investments, and related activities	\$35,500
Insurance carriers	\$34,000
Monetary authorities and depository credit intermediation activities	\$33,000
Private hospitals	\$29,000
Services to buildings and dwellings	\$28,000
Maintenance and repair construction of nonresidential structures	\$27,500
Advertising and related services	\$24,000
Couriers and messengers	\$17,000

Source: IMPLAN. Results reported in 2013 dollars.

Expected Spending and Length of Stay: New Amtrak Station in Pueblo, Colorado.

A new Amtrak station in Pueblo would attract additional out-of-state travelers to Colorado. A station in Pueblo would serve as a convenient transfer point to I-25 and Colorado State Highway 50 and allow travelers to more easily reach other destinations in the state. We estimate that a new stop in Pueblo would attract approximately 15,700 riders.⁶ It is unknown at this time how an additional stop in Pueblo would affect ridership at the other stations in Colorado. This information can be obtained from a ridership and revenue study conducted by

⁶ This figure is based on a regression estimate of the number of riders on the Southwest Chief Service in cities in Kansas, Colorado, and New Mexico. Ridership is specified as a function of city population with controls for cities located in Kansas and if the city has an interstate transfer point. Values for Pueblo were used to estimate the ridership at a new station.

Amtrak. Using ridership data for the other Southwest Chief destination in Colorado, we estimate that about 3,800 of these riders would be from outside of Colorado. We also estimate that these out-of-state travelers would spend about 7.2 nights in Colorado.⁷ The impact results are based on these out-of-state travelers to the Pueblo station spending at the same rate as riders arriving at Lamar, La Junta, and Trinidad (\$76.11 per night). Data reported in Table 6 indicate that 3,800 anticipated out-of state travelers, spending \$76 per night, with an average stay of 7 nights would spend a total of \$2.1 million in Colorado annually.

Table 6. Expected Out-of-State Visitation, Spending, and Length of Stay for a New Amtrak Station in Pueblo.

Station	Number of Out-Of-State Visitors	Average Daily Expenditure	Visitor Spending Per Night	Total Visitor Spending
Pueblo, CO	3,815	\$76.11	7.2 days	\$2,091,000

Data reported in Table 7 indicates the allocation of out-of-state visitor spending. The percentage allocations on lodging, restaurants, etc. reported in Table 7 are the same as those reported in Table 3.

Table 7. Out-of-State Visitor Spending by Category for a New Amtrak Station in Pueblo. Fiscal Year 2013.

Category	Percent for Category	Spending by Category
Lodging	31%	\$648,000
Food and Drink	24%	\$502,000
Transportation (for non-rail travel)	19%	\$397,000
Shopping	19%	\$397,000
Recreation	7%	\$147,000
Total	100%	\$2,091,000

Source: Percent by category information obtained from the Leeds School of Business study, weighted by visitation for Trinidad and Lamar.

⁷ The estimates for the percent out-of-state visitors and number of nights are based on weighted averages for similar data for Lamar, La Junta, and Trinidad (reported in Table 2).

Economic Impact of Out-of-State Visitation to a New Amtrak Station in Pueblo.

Consistent with the impact analysis for Lamar, La Junta, and Trinidad, the spending categories reported in Table 6 are matched with comparable categories in the IMPLAN software to calculate the economic impact of rail visitors on the Colorado economy. The economic impact results are reported in Table 8. These results indicate that the effect of \$2.1 million in out-of-state visitor spending induces another \$1.3 million in economic activity for a total impact of \$3.4 million. The direct spending of \$2.1 million creates 21 tourism jobs in Colorado. The income and spending by these employees supports an additional 11 jobs. The economic activity associated with rail tourism generates an additional \$205,000 in state and local tax revenue. This is an annual impact and would be experienced every year the new station is in Pueblo.

Table 8. Table A-2. Economic Impact of a New Amtrak Station in Pueblo. Based on Expected Out-of-State Ridership and Spending.

Impact Category (2013 Dollars)	Direct Effect	Multiplier	Total Economic Impact
Visitor Spending	\$2,091,000	1.63	\$3,412,000
Employment	21 jobs	1.55	32 jobs
State and Local Tax Revenue	–	–	\$205,000

Source: IMPLAN. Results reported in 2013 dollars.

The industry-level economic impacts of a new station in Pueblo are reported in Table 9. These results illustrate how industries that are not directly related to rail tourism benefit from this activity. The total economic effects for lodging and food service industries are larger than the direct spending effects reported in Table 7 because the increase in economic activity results in additional spending in these sectors.

Table 9. Economic Impact of a New Amtrak Station in Pueblo. Based on Expected Out-of-State Ridership and Spending. Industry-Level Impacts.

Description	Total
Total	\$3,412,000
Hotels and motels, including casino hotels	\$650,000
Food services and drinking places	\$550,000
Scenic and sightseeing transportation and support activities for transportation	\$416,000
Museums, historical sites, zoos, and parks	\$150,000
Retail Stores - General merchandise	\$123,000
Real estate establishments	\$110,000
Imputed rental activity for owner-occupied dwellings	\$100,000
Wholesale trade businesses	\$65,000
Telecommunications	\$54,000
Management of companies and enterprises	\$46,000
Electric power generation, transmission, and distribution	\$44,000
Offices of physicians, dentists, and other health practitioners	\$43,000
Securities, commodity contracts, investments, and related activities	\$42,000
Insurance carriers	\$40,000
Monetary authorities and depository credit intermediation activities	\$39,000
Private hospitals	\$34,000
Services to buildings and dwellings	\$33,000
Maintenance and repair construction of nonresidential structures	\$32,500
Advertising and related services	\$28,500
Couriers and messengers	\$22,500

Source: IMPLAN. Results reported in 2013 dollars.

Cost and Benefit of a New Amtrak Station in Pueblo.

The cost of extending Amtrak service to Pueblo involves upgrades to the existing BNSF freight line that travels between La Junta, Pueblo, and Trinidad (see Figure 1 below). Estimating the cost of upgrading the existing freight line is based on a report by BNSF that was submitted to Amtrak. For example, of the approximate \$40 million needed for repairs to the Colorado portion of the Southwest Chief line over 10 years, \$28.2 million is needed for sole use maintenance including rail and signal inspection for the section of the line between La Junta and Trinidad. This section of the line stretches 81 miles. The repair costs for this section over the 10-year period is approximately \$348,000 per mile (\$28.2 million / 81 miles). If a new Amtrak station is established in Pueblo, the existing Southwest Chief line would be diverted from the present line

from La Junta to Trinidad to the existing BNSF freight line between La Junta, Pueblo, and Trinidad. This freight line is about 154 miles in length. Assuming that the cost of upgrading the existing BNSF freight line to passenger rail standards is the same as the repair costs to the Southwest Chief line between La Junta and Trinidad, the cost of upgrading the freight line is estimated to be \$53,592,000 (154 miles x \$348,000 per mile). This estimate does not include any additional costs of passing sidings or signal improvements with the upgrade from freight to passenger service.⁸ If the \$28.2 million in repair funds to be used on the existing Southwest Chief line between La Junta and Trinidad are shifted to upgrading the BNSF freight line between La Junta, Pueblo, and Trinidad, the net increase in upgrade costs needed to serve a station at Pueblo is expected to be approximately \$25.4 million (\$53,592,000 – \$28,200,000). The cost data provided by BNSF are reported in 2011 dollars. Adjusting this figure for inflation between 2011 and 2013 yields \$26,179,000 in 2013 dollars.⁹

The cost of expanding Amtrak service to Pueblo may include the construction of a new station (about \$4.5 million), or the renovation to the existing Pueblo Union Depot. At this time it is unknown what these renovation costs will be. Our preliminary estimate is approximately \$400,000. Therefore, the total costs of expanding rail service may range between \$26.6 million and \$30.7 million (\$26.2 million + renovation costs to the Pueblo Union Depot, or the cost of a new station). Repair costs are expected to extend over 10 years. The economic impact of rail service to Pueblo is expected to be approximately \$34 million over ten years. Depending on the

⁸ According to information provided by rail officials, the existing BNSF freight line between La Junta and Pueblo is a heavy coal line and is well-maintained. The line from Pueblo to Trinidad is has a Class 3 designation that only allows passenger traffic up to 60 mph. Upgrade costs on this section of the line may exceed the estimate of \$348,000 per mile. A more accurate upgrade cost estimate can be obtained once a revenue and ridership study is conducted by Amtrak.

⁹ Based on the percent change in the CPI from September 2011 to September 2013.

cost measure used, the excess of benefits over costs ranges between \$3.3 million and \$7.4 million over the ten-year period.

The cost/benefit analysis implies that the financial health of the Southwest Chief in Colorado depends on access to high-density markets. While current rail service brings visitors to the state, it does not provide easy access to other tourism destinations in Colorado. Expanding Amtrak service to Pueblo complements CDOT's planned state-wide transit service and offers greater access to tourism destinations state-wide and to high-density populations along the Front Range. The growth potential offered by a new stop in Pueblo may be associated with increased ridership at all stops along the southeast Colorado portion of the line.

Additional Economic Impact Results: Federal Funding of a New Amtrak Station in Pueblo and Impact on the Evraz Steel Mill in Pueblo.

The construction cost estimate used in this study for a new Amtrak station built in Pueblo may be as high as \$4.5 million. The estimated additional upgrades along the existing freight line from La Junta to Pueblo and Trinidad is \$26.2 million. Both of these measures are in 2013 dollars. Adjusting Colorado's share of the initial rail upgrades to 2013 dollars is \$43.5 million. Therefore, the estimated total costs of maintaining portions of the existing Southwest Chief line in Colorado, with the addition of a new station in Pueblo, is \$74.2 million (\$4.5 million + \$26.2 million + \$43.5 million). If these expenditures are financed by the State of Colorado there is no economic impact to the state since these funds would be diverted to other transportation projects. However, if these projects were funded by the federal government new dollars and spending would occur in Colorado and generate additional economic activity. Economic impact results of this scenario are reported in Table 10. Federal funding would increase economic activity by approximately \$145 million, create about 1,040 jobs, and generate about \$4.5 million in state and

local tax revenue. Unlike the impact of out-of-state visitor spending, the construction and repair costs impacts are one-time effects.

Table 10. Economic Impact of Costs for a New Amtrak Station in Pueblo and Rail Upgrades: Impact Assumes Federal Funding.

Impact Category (2013 Dollars)	Direct Effect	Multiplier	Total Economic Impact
New and Upgraded Construction Costs	\$74.2 million	1.95	\$144.9 million
Employment	541 jobs	1.92	1,039 jobs
State and Local Tax Revenue	–	–	\$4.5 million

Source: IMPLAN. Results reported in 2013 dollars.

Industry-level economic impact results are reported in Table 11. These results illustrate how the effect of federally funded construction funds ripple through the Colorado economy, affecting businesses that are not related to the construction industry.

Table 11. Economic Impact of Costs for a New Amtrak Station in Pueblo and Rail Upgrades: Impact Assumes Federal Funding. Industry-Level Impacts.

Total	\$144,851,856.1
Maintenance and repair construction of nonresidential structures	\$71,200,630.5
Architectural, engineering, and related services	\$4,656,804.9
Imputed rental activity for owner-occupied dwellings	\$4,623,960.3
Construction of other new nonresidential structures	\$4,558,216.5
Wholesale trade businesses	\$4,466,997.6
Real estate establishments	\$3,222,797.1
Food services and drinking places	\$2,533,574.2
Telecommunications	\$2,425,084.3
Monetary authorities and depository credit intermediation activities	\$2,334,427.8
Securities, commodity contracts, investments, and related activities	\$1,971,727.6
Offices of physicians, dentists, and other health practitioners	\$1,967,751.5
Private hospitals	\$1,574,875.1
Legal services	\$1,530,748.3
Transport by truck	\$1,328,309.9
Insurance carriers	\$1,214,740.8
Commercial and industrial machinery and equipment rental and leasing	\$1,142,550.2
Retail Stores - Motor vehicle and parts	\$1,112,002.8
Accounting, tax preparation, bookkeeping, and payroll services	\$1,044,382.9
Electric power generation, transmission, and distribution	\$996,108.5

Source: IMPLAN. Results reported in 2013 dollars.

Economic Impact of the Evraz Steel Mill.

Information provided by Amtrak indicates that approximately 100 miles of rail on the Southwest Chief line in Kansas will be replaced with another 50 miles of rail in Colorado. The approximate \$200 million cost estimate provided by BNSF is based on the use of relay, or used rail. We estimate the economic impact on the Colorado economy *if* new rail, produced at Evraz Pueblo, is used along the Southwest Chief line in Kansas.¹⁰ If rail produced at Evraz Pueblo is used in the repairs in Kansas, new dollars will flow into the Colorado economy stimulating additional economic activity. Based on a rail price of \$50 per yard, we estimate that the 100 miles of new rail in Kansas represents approximately \$17.6 million in additional revenue for Evraz Pueblo.¹¹ The one-time economic impact of this increase in steel industry revenue is reported in Table 12.

Table 12. Economic Impact of Increase in Evraz Pueblo Revenue.

Impact Category (2013 Dollars)	Direct Effect	Multiplier	Total Economic Impact
Rail Sales from 100 Miles of Replacement in Kansas	\$17.6 million	1.88	\$33.0 million
Employment	15 jobs	6.67	100 jobs
State and Local Tax Revenue	–	–	\$837,000

Source: IMPLAN. Results reported in 2013 dollars.

This analysis indicates that the effect of \$17.6 million in out-of-state rail sales induces another \$15.4 million in economic activity for a total impact of \$33 million. We estimate that the production of \$17.6 million in rail at Evraz Pueblo would be produced by approximately 15 steel workers. The spending of these employees supports an additional 85 jobs in Colorado. The economic activity associated with the sale of Evraz rail would generate an additional \$837,000 in

¹⁰ The use of new rail would be associated with an increase in the overall cost of rehabilitating the Southwest Chief line.

¹¹ Information on rail prices was obtained from Railway Technical Web Pages accessed at: <http://www.railway-technical.com/track.shtml>

state and local tax revenue. This estimate is based on the assumption that Evraz Pueblo wins the contract for the 100 miles of rail replacement in Kansas. If Evraz were to complete a portion of this work commensurate with the company's current market share in the U. S. rail market (approximately 40 percent), the overall economic impact would be approximately \$13.2 million, 40 jobs, and about \$335,000 in additional state and local tax revenue.¹²

The industry-level impact of \$17.6 million in rail sales is reported in Table 13 for the top 20 most affected industries. These data indicate how local suppliers of Evraz Pueblo and other industries located in Colorado are affected by rail sales.

¹² Market share information obtained from "Evraz Invests in Rail Quality and Production Capacity." International Railway Journal, September 2012.

Table 13. Economic Impact of Increase in Evraz Pueblo Revenue. Industry-Level Impacts.

Total	\$32,998,991.94
Iron and steel mills and ferroalloy manufacturing	\$19,169,271.18
Wholesale trade businesses	\$1,913,032.48
Electric power generation, transmission, and distribution	\$817,709.36
Transport by rail	\$613,725.70
Maintenance and repair construction of nonresidential structures	\$545,069.01
Imputed rental activity for owner-occupied dwellings	\$535,032.02
Management of companies and enterprises	\$485,842.76
Natural gas distribution	\$473,964.41
Transport by truck	\$459,832.46
Securities, commodity contracts, investments, and related activities	\$455,507.44
Real estate establishments	\$409,295.33
Food services and drinking places	\$334,744.97
Monetary authorities and depository credit intermediation activities	\$301,064.34
Telecommunications	\$300,349.26
Services to buildings and dwellings	\$271,494.47
Steel product manufacturing from purchased steel	\$265,304.99
Offices of physicians, dentists, and other health practitioners	\$228,958.79
Private hospitals	\$183,245.67
Legal services	\$178,004.66
Other state and local government enterprises	\$168,918.15

Source: IMPLAN. Results reported in 2013 dollars.

Need for Additional Research

This study is based on the most accurate information available at this time. The results of this report can be improved with information provided by a revenue and ridership study by Amtrak. This type of analysis would provide a more accurate estimate of ridership to a new station in Pueblo and the cost of rail upgrades. An Amtrak study requires several months to complete and a formal request by a state agency.

The study focuses on the state-level economic impacts described above and does not include all of the economic impacts and benefits associated with the Southwest Chief. For

example, the benefits of increased mobility to Colorado citizens are not examined, nor are county-level economic impacts reported. The effect of current and expected Amtrak employees working on the Southwest Chief is not included. Amtrak maintains a train crew stationed in La Junta and a new station in Pueblo is expected to add about three more employees.

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