An Analysis of the Economic, Workforce and Regional Impacts Associated with the Revitalization of the Columbus & Greenville Railroad

Prepared for:
Appalachian Regional Commission (ARC)
Delta Regional Authority (DRA)
Mississippi Department of Transportation (MDOT)
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In 2006, a team at Mississippi State University completed the Columbus & Greenville (C&G) Rail Recovery Exploratory Study. This initial study found the closure of the 93-mile section of the railroad between Greenwood and West Point Mississippi had limited economic development and increased both unemployment and logistical costs for industry in the area. In 2009, researchers from Mississippi State University and the University of Southern Mississippi completed nine tasks that examined economic, transportation, workforce, and engineering data to determine the needs and impacts of the revitalization of this 93-mile rail corridor. The study area encompasses the northern part of Mississippi stretching from the Mississippi River in the west to the Tennessee-Tombigbee Waterway in the east. The counties included in the study are Washington, Sunflower, Leflore, Carroll, Montgomery, Webster, Oktibbeha, Clay, and Lowndes (Figure 1).

Figure 1: Map of the C&G Corridor
Rail Revitalization’s Cost

Included in the scope of the revitalization cost analysis of upgrading the 93 miles of railroad between West Point and Greenwood, MS to 286,000 pounds railcar weight capacity and minimum of FRA Class 2 Track Standards were ROW clearing, rail ties, 115-pound rail, rebuilt public and private crossings, reconstructed bridge work, installation, and numerous other items required to upgrade the railroad. The engineering firm’s estimated direct cost for this project was approximately $87 million. To validate this estimated cost, existing rail lines on like-projects were polled and their estimate was within $1.4 million of the study’s engineering estimate. would be approximately $99 million in 2009 dollars.

Total Economic Impact

The researchers examined the economic impacts associated with connecting the Port of Lowndes County and the Port of Greenville as well as impacts associated with future industries and businesses that may locate along the C&G corridor. Findings indicate revitalization of the C&G rail line will induce significant economic impact in the region. The following estimate depicts the total projected impact of reestablishing rail freight service between West Point and Greenwood, MS, including new industry opportunities and the construction impacts of these new industries.

TOTAL PROJECT EMPLOYMENT, INCOME AND TAX REVENUE IMPACTS

New Direct Jobs: 1,975
New Indirect Jobs: 3,210
New Personal Income: $236.8 million annually
New State Tax Revenues: $14.42 million annually
The researchers investigated the economic impacts associated with connecting the Port of Greenville and the Port of Columbus via the C&G rail line. According to port personnel, connecting the two ports would enhance current infrastructure investment and provide additional economic impacts.

- **Port of Greenville:** Over the past two years, the Port of Greenville has invested significantly in the infrastructure of the operation due to increased demands and capacity limitations. These investments have created job opportunities and increased personal income. In 2008, the Port invested $677,000. In 2009, it invested $100,000, and in 2010 the Port will invest a total of $3.2 million. In 2011, the Port expansion project will continue investing an additional $400,000. These investments have created 55 direct and 76 indirect job opportunities.

- **Port of Columbus:** Over the past few years, the Port of Columbus has invested significantly in the infrastructure of the operation. The investments are: 2005 - $965,000; 2006 - $247,000; 2007 - $660,000; 2008 - $703,000; and 2009 - $1.39 million for a total investment of $3.965 million. These investments have created 57 direct and 84 indirect job opportunities.

Furthermore, the revitalized C&G rail scenario could reduce transportation cost by approximately 35 percent over current highway transportation cost, especially when considering those counties that are not currently served by rail. Also, for counties that are within the State of Mississippi and currently being served by rail, the added connections will help to reduce transportation costs on average of approximately 23 percent.

Both the Network Appalachia Global Opportunity Report and the Delta Regional Authority’s Multimodal Transportation Assets, Needs and Recommendations Report support the restoration of the C&G Railway Corridor. Respectively, they cite the need “to fully redevelop the cross-state Columbus and Greenville rail corridor, enhancing access to both domestic and intermodal markets for central Mississippi” and the “need to provide railroad service between the Port of Greenville on the Mississippi River and Columbus, MS on the Tennessee-Tombigbee Waterway.” These Reports were certified by the agencies full commissions which include representatives from Alabama, Arkansas, Georgia, Illinois, Kentucky, Louisiana, Maryland, Mississippi, Missouri, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, West Virginia.
The study evaluated biofuel, automotive, metal fabrication and steel, and food processing industries in the region. The following highlights the findings regarding long-term and short-term economic impacts:

### Long-Term Economic Impacts

**Feasible New Industrial Sites Dependent Upon Direct Rail Access**

- Biofuels: A $53 million biofuel investment on the closed portion of the railroad (Winona) would generate an increase of 25 direct jobs and 144 indirect jobs, increasing personal income by $7.9 million and state tax collections by $464,000 each year.

- Automotive: A new “Tier One” automotive supplier creating 240 direct jobs, 436 indirect jobs, would generate an annual total of $32.9 million in personal income and $1.9 million of additional annual tax collections.

- Steel Pipe Fabrication: A $100 million investment would result in 180 direct and 388 indirect employees, producing $25.7 million in new earnings and increasing state tax revenue by $1.5 million annually.

- Steel Processing: A $10 million investment would result in 67 direct and 190 indirect employees, producing $9.9 million in new personal earnings and increasing state tax revenue by $582,000 annually.

- Steel Processing: A $6 million investment would result in 52 direct and 145 indirect employees, producing $9.9 million in new personal earnings and increasing state tax revenue by $582,000 annually.

- Delta Western (Indianola, MS) — one of the largest feed suppliers to the catfish industry — would likely expand operations, creating 13 direct jobs, 45 indirect jobs, an annual increase of $2 million in personal income and $115,000 in new annual state tax revenues.

- USG Interiors (Greenville, MS), a subsidiary of USG Corporation, would likely expand operations, creating 40 direct jobs, 56 indirect jobs, an annual increase of $4.3 million in personal income and $255,000 in new annual state tax revenues.

- Phase II of Severstal’s three-phase expansion plan consists of two stages, totaling $500 million in new investment. In the first stage, $300 million is invested in the operation. This activity is projected to create 95 direct jobs and 491 indirect jobs. In stage II of Phase II, $200 million will be invested over a two-year period. This investment activity is projected to create 49 direct jobs and 256 indirect jobs. Together, these investments will generate $46.1 million in personal income and $2.7 million in state tax revenue annually as well as 144 direct jobs and 745 indirect jobs.

- Delta Region corn production is restrained by inadequate transportation options for corn to reach the poultry consumption markets. Assuming that approximately 65 percent of this grain is shipped by rail, the renewed rail corridor through the Delta would provide approximately $15.2 million in annual transportation cost savings to reach these markets, allowing Delta corn growers to expand their market reach and increase their production.

**Expansion of Existing Industries**

- Delta Western (Indianola, MS) — one of the largest feed suppliers to the catfish industry — would likely expand operations, creating 13 direct jobs, 45 indirect jobs, an annual increase of $2 million in personal income and $115,000 in new annual state tax revenues.

### Short-Term Economic Impacts

- Reconstruction of the rail corridor between West Point and Greenwood will create 536 direct jobs, 324 indirect jobs, a total of $39 million in personal income and increase state tax revenues by $2.3 million annually over two years.

- Construction jobs associated with the new facilities and expansions outlined above could generate 1,140 direct and indirect jobs, a total of $53.5 million in personal income and increase state tax revenues by $3.7 million annually for two years.
• Revitalizing the C&G Railroad will result in improved economic development opportunities along the corridor, an additional workforce connection, improved public safety, new competitive routes for existing products, and the retention of existing industry.

• Grain mills, biofuel refineries, steel industries, and automotive suppliers are potential industries that would be attracted to the region.

• Existing companies located on the rail line (e.g., Delta Western, USG Interiors, Severstal, Master Kraft, and Scott’s Bio-Fuels) can benefit from the rail line in terms of employment, increased freight choices for shippers, local tax revenues, increased competition, and an overall regional commitment to attract new businesses.

• The steel industry, as one of the major industries in Mississippi, continues to have a major economic impact on the state. Providing the steel industry with the requisite infrastructure is a federal, state and local government responsibility. With improved transportation options, the steel industry will contribute more direct and indirect economic benefits to the state of Mississippi.

## Table 1: Per Capita Income Levels and Unemployment Rates of Nine Corridor Counties

<table>
<thead>
<tr>
<th>County</th>
<th>Unemployment Rate 2010</th>
<th>Unemployment Rate 2009</th>
<th>Per Capita Income 2008</th>
<th>Percent of National Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Average</td>
<td>9.7%</td>
<td>9.4%</td>
<td>$40,166</td>
<td>NA</td>
</tr>
<tr>
<td>Clay</td>
<td>19.7</td>
<td>16.9</td>
<td>$28,301</td>
<td>70.46</td>
</tr>
<tr>
<td>Lowndes</td>
<td>12.8</td>
<td>10.3*</td>
<td>$31,196</td>
<td>77.67</td>
</tr>
<tr>
<td>Montgomery</td>
<td>14.6</td>
<td>14.2</td>
<td>$26,355</td>
<td>65.62</td>
</tr>
<tr>
<td>Webster</td>
<td>16.0</td>
<td>13.0</td>
<td>$23,648</td>
<td>58.88</td>
</tr>
<tr>
<td>Oktibbeha</td>
<td>10.7</td>
<td>8.1*</td>
<td>$29,068</td>
<td>72.37</td>
</tr>
<tr>
<td>Leflore</td>
<td>14.7</td>
<td>12.3</td>
<td>$26,943</td>
<td>67.08</td>
</tr>
<tr>
<td>Carroll</td>
<td>11.4</td>
<td>11.7</td>
<td>$29,753</td>
<td>74.08</td>
</tr>
<tr>
<td>Washington</td>
<td>15.0</td>
<td>13.9</td>
<td>$27,553</td>
<td>68.60</td>
</tr>
<tr>
<td>Sunflower</td>
<td>16.3</td>
<td>12.3</td>
<td>$24,624</td>
<td>61.31</td>
</tr>
</tbody>
</table>

* indicates that number does not reach threshold

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1 The two primary methods that are used to establish distressed status for a given area are 1) that area have a per capita income level 80 percent or less than that of the national average, 2) likewise, an area can qualify by having an unemployment rate at least 1 percent above the national average for the most recent 24-month period.
• All nine counties located within the C&G corridor are classified as distressed areas under the “Public Works and Economic Development Act of 1965, As Amended” (42 U.S.C.).
• Seven out of the ten largest declines in employment within the region from 2002 to 2009 can be seen in production occupations.
• Primary areas of workforce loss in production occupations can be replaced by potential new industry recruitment of steel, furniture, biofuels, and automobile suppliers.

The research team analyzed the workforce status and skills available in each of the nine counties included along the C&G rail corridor. As the workforce summary highlights, the need for the positive economic impact associated with the revitalization of the C&G rail line can not be overstated due to the high level of unemployment and economic distress in each of the nine counties.

Table 2: C&G Total Region: Employment Comparison by Sector

<table>
<thead>
<tr>
<th>Sector</th>
<th>Employment</th>
<th>Change</th>
<th>Current EPW</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>2009</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture, forestry, fishing and hunting</td>
<td>7,622</td>
<td>7,035</td>
<td>-8.0%</td>
</tr>
<tr>
<td>Mining</td>
<td>188</td>
<td>199</td>
<td>6.0%</td>
</tr>
<tr>
<td>Utilities</td>
<td>622</td>
<td>471</td>
<td>-24.0%</td>
</tr>
<tr>
<td>Construction</td>
<td>6,301</td>
<td>7,238</td>
<td>15.0%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>18,678</td>
<td>11,617</td>
<td>-38.0%</td>
</tr>
<tr>
<td>Wholesale trade</td>
<td>4,019</td>
<td>3,822</td>
<td>-5.0%</td>
</tr>
<tr>
<td>Retail trade</td>
<td>16,849</td>
<td>14,898</td>
<td>-12.0%</td>
</tr>
<tr>
<td>Transportation and warehousing</td>
<td>5,047</td>
<td>5,285</td>
<td>5.0%</td>
</tr>
<tr>
<td>Information</td>
<td>1,429</td>
<td>1,432</td>
<td>0.0%</td>
</tr>
<tr>
<td>Finance and insurance</td>
<td>3,178</td>
<td>3,205</td>
<td>1.0%</td>
</tr>
<tr>
<td>Real estate and rental and leasing</td>
<td>2,867</td>
<td>3,931</td>
<td>37.0%</td>
</tr>
<tr>
<td>Professional and technical services</td>
<td>3,658</td>
<td>4,045</td>
<td>11.0%</td>
</tr>
<tr>
<td>Management of companies and enterprises</td>
<td>841</td>
<td>819</td>
<td>-3.0%</td>
</tr>
<tr>
<td>Administrative and waste services</td>
<td>5,251</td>
<td>6,238</td>
<td>19.0%</td>
</tr>
<tr>
<td>Educational services</td>
<td>1,884</td>
<td>1,781</td>
<td>-5.0%</td>
</tr>
<tr>
<td>Health care and social assistance</td>
<td>10,524</td>
<td>12,047</td>
<td>14.0%</td>
</tr>
<tr>
<td>Arts, entertainment, and recreation</td>
<td>1,755</td>
<td>1,692</td>
<td>-4.0%</td>
</tr>
<tr>
<td>Accommodation and food services</td>
<td>8,067</td>
<td>9,181</td>
<td>14.0%</td>
</tr>
<tr>
<td>Other services, except public administration</td>
<td>6,901</td>
<td>7,595</td>
<td>10.0%</td>
</tr>
<tr>
<td>Government</td>
<td>32,795</td>
<td>33,757</td>
<td>3.0%</td>
</tr>
<tr>
<td>Total</td>
<td>138,474</td>
<td>136,290</td>
<td>-2.0%</td>
</tr>
</tbody>
</table>

Source: EMSI Complete Employment - 4th Quarter 2009

Employment in the region that encompasses the C&G corridor fell slightly from 2002 to 2009. Manufacturing was especially hard hit, losing over 7,000 jobs, a 38 percent decline. Retail trade also saw significant declines, losing over 1,000 jobs (12 percent of the total in 2002). There were some sectors which showed strong growth. For example, health care and social assistance, accommodation and food service, and real estate each added over 1,000 jobs. Table 2 displays this employment data for each sector in 2002 and 2009.
The research team determined possible homeland security benefits associated with improvements made to the C&G rail line. The objective was to investigate two C&G revitalization scenarios. In scenario 1, the research team investigated both the regional and national economic impacts and explored potential railroad traffic gains associated with restoration of the C&G Railway back to an operating condition. In scenario 2, the research team investigated both the regional and national economic impacts and explored potential railroad traffic associated with a new railroad connection from Union Pacific in Arkansas to Birmingham, Alabama. Under this scenario, a new bridge over the Mississippi River would provide a new rail corridor for the growing intermodal traffic between the Southwest and Southeast parts of the United States; it would also provide a rail alternative to highway delivery of commodities in Mississippi.

- In addition to facilitating the highway trade flows between Canada and Mexico, the completion of I-69 Charles W. Dean Bridge can significantly impact the railroad freight flow in the United States. The Columbus & Greenville Railway can connect to Union Pacific Railroad at McGehee, Arkansas, to the west with less than 20 miles of new railroad track. To the east, the C&G Railway can connect to Birmingham, Alabama, via the Alabama Southern Railroad and CSXT. After Birmingham, the freight on the C&G Railway can be transferred and go to all major cities on the east coast. This new railroad route will bring competitive freight transportation rates to many railroad freight origin and destination metropolitan areas in the nation. Consequently, it could ensure a healthy railroad transportation industry in the future. There will be enormous primary, secondary, and tertiary impacts on our national economy from this new rail corridor.

- This new rail route will also have significant benefits for national security. The new rail corridor will add redundancies in the current railroad networks. Such redundancies could make the national railroad transportation network more resilient and less vulnerable.

- Another significance of adding a railroad crossing over the Mississippi River is to accommodate traffic in case of manmade or natural disasters on current rail corridors in the region. Specifically, a closure of the strained bridges at Memphis due to an earthquake on the New Madrid Fault or a bypass in case the Vicksburg Bridge is lost to a manmade disaster.
The team at Mississippi State University assisted the nine distressed counties within the region in the form and functionality of the then recently established, but not yet operational, North Central Mississippi Regional Railroad Authority. To facilitate and help implement NCMRRA, the MSU team was instrumental in creating a culture of regionalism across the nine counties and municipalities within those counties. The goal was to help this board’s executive body become empowered as the lead organization through which revitalization options for the railroad project can proceed. MSU aided the authority in finding potential funding opportunities, including strategies for revitalization through multisource public-private partnerships.

The initial meeting of the newly formed North Central Mississippi Regional Railroad Authority Board was held in Eupora, MS, on January 29, 2009. The board has been active in helping to inform elected representatives about the economic viability and importance of the project. Efforts have included personal contacts and correspondence to members of the Mississippi legislation and to the MS Congressional delegation. In 2009, due to the efforts of the NCMRRA, $14 million in funding was initially dedicated for the project through MS HB 1713. However, at the last minute these dedicated funds were moved into a general purpose category.

NCMRRA efforts in 2010 proved more successful. Senate Bill 3181 allocated $15 million through the Mississippi Development Authority for the repair, reconstruction and improvement of the existing railroad line from the City of West Point to the City of Greenwood, Mississippi. This funding provides seed money for the revitalization project but is contingent upon obtaining an additional $65 million for the project.

Other general grant funding opportunities are available for possible funding for this revitalization project. The most promising funding opportunities are found in the U.S. Department of Transportation’s Transportation Investment Generating Economic Recovery (TIGER), which are discretionary grants for surface transportation projects. NCMRRA is currently in the application process for Tiger II grant funding.

- Participation by the authority in lobbying Mississippi legislators resulted in $15 million in seed money funding for the rehabilitation project.
- Other funding opportunities exist with the most promising being the TIGER II program.
- Potential funding could be provided as part of the transportation reauthorization bill.
- Potential funding opportunities may exist with the Department of Homeland Security.
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