

Memorandum of Agreement

between

Norfolk Southern Railway Company

and the

State of Tennessee Department of Transportation

and the

United States Department of Transportation,

Federal Highway Administration,

Eastern Federal Lands Highway Division

for the

**The Crescent Corridor Project - Memphis Regional Intermodal
Facility**

PURPOSE OF THE AGREEMENT

The purpose of this Memorandum of Agreement (“Agreement”) is to establish the roles and responsibilities of the Norfolk Southern Railway Company (“Railroad”), the Tennessee Department of Transportation (“TDOT”), and the United States Department of Transportation, Federal Highway Administration, Eastern Federal Lands Highway Division (“EFLHD”) (hereinafter known as the “Parties”). The Parties will jointly participate in the Crescent Corridor Project – Memphis Regional Intermodal Facility (“Project”) further described in the provisions of FHWA TIGER Grant No. 31 (“Grant Agreement”). The FHWA TIGER Grant No. 31 is included as part of this Agreement by reference and is attached and incorporated hereto as Attachment A.

BACKGROUND

WHEREAS, Title XII of the American Recovery and Reinvestment Act of 2009 (“Recovery Act”), Pub. L. No. 111-5, provides that “...the Secretary of Transportation shall distribute funds provided...as discretionary grants to be awarded to State and local governments or transit agencies on a competitive basis for projects that will have a significant impact on the Nation, a metropolitan area, or a region.” The Recovery Act also provides that “...projects eligible for funding provided under this heading shall include, but not be limited to, highway or bridge projects eligible under title 23, United States Code, including interstate rehabilitation, improvements to the rural collector road system, the reconstruction of overpasses and interchanges, bridge replacements, seismic retrofit projects for bridges, and road realignments; public transportation projects eligible under chapter 53 of title 49, United States Code, including investments in projects participating in the New Starts or Small Starts programs that will expedite the completion of those projects and their entry into revenue service; passenger and freight rail transportation projects; and port infrastructure investments, including projects that connect ports to other modes of transportation and improve the efficiency of freight movement.”

WHEREAS, the Recovery Act provides that the authority to award a grant under the Transportation Investment Generating Economic Recovery (“TIGER”) Discretionary Grant

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Program and perform oversight may be transferred from the Secretary of Transportation to the Administrators of the Federal Highway Administration, the Federal Transit Administration, the Federal Railroad Administration and the Maritime Administration.

WHEREAS, pursuant to the Recovery Act, the Secretary of Transportation awarded a fifty-two million five hundred thousand dollar (\$52,500,000) TIGER grant (“TIGER funds” or “TIGER funding”) to TDOT to assist in carrying out the Project, which consists of construction and improvements to an intermodal facility in Rossville, Fayette County, Tennessee (“Memphis Regional Intermodal Facility” or “MRIMF”), and which will also require related improvements to State Route 57 (“SR-57 Improvements”);

WHEREAS, as contemplated by Railroad’s agreement for the acquisition of the site for the MRIMF, Railroad entered into a site development agreement dated December 30, 2009 (the “Development Agreement”) with William C. Adair Development Company LLC (“Adair”), whereby Adair agreed to clear, grade and fill the site, to construct an access road, and to perform other duties as detailed in the Development Agreement (the “Adair Work”);

WHEREAS, the Adair Work is outside the scope of the Project for purposes of this Agreement;

WHEREAS, construction and improvements to the MRIMF within the scope of the Project for purposes of this Agreement will include pad tracks, support tracks, paved trailer parking spaces, a double lead track connecting the facility to the Railroad main line, a loop track to allow trains to reverse direction after entering the facility, ancillary modular buildings and operating equipment, and an automated gate system, including hardware, software, building and other structures, and related appurtenances, all of which is further described in the provisions of FHWA TIGER Grant No. 31 (“Grant Agreement”). The FHWA TIGER Grant No. 31 is included as part of this Agreement by reference and is attached and incorporated hereto as Attachment A;

WHEREAS, the SR-57 Improvements will include a grade separation over the Railroad’s proposed tracks;

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WHEREAS, portions of the Project will also be funded with Title 23 funds and Railroad funds distinct from the TIGER grant;

WHEREAS, TDOT signed a Term Sheet covering this Project on July 16, 2010;

WHEREAS, TDOT has authority to participate in the Project by the legislative authority given by State law and Title 23 of the United States Code;

WHEREAS, 23 U.S.C. § 308(a) authorizes the United States Secretary of Transportation to perform engineering or other services in connection with the survey, design, construction, and improvements of highways for other Federal or State cooperating agencies, and "highways" has been interpreted to include surface transportation projects such as this one;

WHEREAS, the Federal Highway Administration Division Offices in Tennessee and the Federal Railroad Administration ("FRA") have led federal environmental review for the Project;

WHEREAS, certain portions of the work will be paid for with federal funds, as noted in the Grant Agreement, and EFLHD will be responsible for coordinating and facilitating of the overall schedule for the Project and managing the federal funds transferred to EFLHD for the Project;

WHEREAS, the design and construction of the MRIMF part of the Project will be done by the Railroad, the design of the SR-57 Improvements will be done by the Railroad, and the construction of the SR-57 Improvements will be done by TDOT, under the terms of this Agreement;

WHEREAS, the Railroad has authority to design and construct renovations to its rail corridor;

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WHEREAS, the Railroad is not providing EFLHD any services or any property in exchange for such federal funds, but will abide by the terms of this Agreement as a condition of receipt of the federal funds; and

WHEREAS, the Parties intend to be fully bound by the terms and conditions set forth herein.

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NOW THEREFORE, the Railroad, TDOT, and EFLHD do hereby mutually agree as follows:

ARTICLE I: SCOPE OF WORK (Obligations, Responsibilities, and Funding)

A. TDOT agrees to:

1. Upon execution of the Grant Agreement, initiate and comply with the procedures needed to transfer all fifty-two million five hundred thousand dollars (\$52,500,000) in TIGER funds and nine million four hundred thousand (\$ 9,400,000) in Congestion Mitigation and Air Quality (CMAQ) funds directly to the EFLHD, as authorized by 23 U.S.C. § 132.
2. Obligate four million eight hundred thousand dollars (\$4,800,000) in CMAQ funds for the SR-57 Improvements and administer the construction of the SR-57 Improvements needed for the Project, and accept the SR-57 Improvements for maintenance.
3. Comply, and ensure that the Railroad complies, with the applicable provisions of FHWA TIGER Grant No. 31 (“Grant Agreement”); provided, that such compliance may be implemented in part as provided in this Agreement. The FHWA TIGER Grant No. 31 is included as part of this Agreement by reference and is attached and incorporated hereto as Attachment A; and in the case of a discrepancy between the Grant Agreement and this Agreement, the Grant Agreement shall govern.
4. Ensure that the Railroad complies with all applicable TIGER grant reporting requirements specified in the Grant Agreement, including, but not limited to, reports related to the performance measures identified in Attachment I to the Grant Agreement and reports specified in Section 6 of the Grant Agreement and Attachment D to the Grant Agreement. The Railroad shall prepare and submit to EFLHD and TDOT all aforesaid reports at least ten (10) days prior to their due date as specified by the Grant Agreement. EFLHD will review the reports submitted by the Railroad and will concur in writing at least five (5) days before TDOT's submission of each report specified by the Grant Agreement.

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5. Cooperate with EFLHD and the Railroad to the extent necessary where State involvement is required to advance the Project.

6. Participate in public involvement activities as may be required in the environmental review process. Cooperate in the efforts of FHWA division offices and FRA to obtain the required environmental approvals.

7. Participate in any EFLHD review of design and construction plans, specifications, and estimates ("Plans") for the Project to the extent that the facility impacts state-owned roadways or bridges.

8. Acquire the remaining parcels of rights-of-way, which have already not been acquired by the Railroad, needed for the SR-57 Improvements. These rights-of-way shall be acquired in accordance with all applicable federal and state specifications, regulations, statutes, or policy.

9. Record any conveyance of right-of-way from the Railroad to TDOT in connection with the SR57 Improvements in the appropriate government office and be responsible for any recording fees and transfer taxes.

10. Coordinate or provide for the relocation of utility facilities in accordance with state law as needed to allow for construction of the SR-57 Improvements.

11. Contract to construct the SR-57 Improvements and monitor activities related to the construction for compliance with applicable federal and state statutes, regulations, and policies. This includes conducting construction inspections, if necessary, for any activity related to the construction of the SR-57 Improvements.

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12. At the discretion of TDOT, serve on any consultant selection panel convened by EFLHD and the Railroad.
 13. Participate in the final inspection of the constructed MRIMF facility to the extent that the facility impacts state-owned roadways or bridges. TDOT employees shall coordinate such inspection with EFLHD and agree to comply with any safety requirements imposed by the Railroad for review of its facilities.
 14. Continue to comply with all Recovery Act requirements, including reporting requirements.
 15. Accept from the Railroad one million two hundred thousand dollars (\$1,200,000) and transfer to EFLHD for the sole purpose of funding the expenses of EFLHD to administer the entire Crescent Corridor Intermodal Freight Rail TIGER funds in both Tennessee and Alabama.
 16. Receive from EFLHD an itemized receipt of its oversight costs together with a refund of any difference between the one million two hundred thousand dollars (\$1,200,000) paid to EFLHD and the actual amount of EFLHD's oversight costs, and deliver both the itemized receipt and the refund to the Railroad within forty-five (45) days of receipt from EFLHD.
- B. The EFLHD agrees to:
1. Issue the decision document required by the National Environmental Policy Act ("NEPA") and other related statutes.
 2. Coordinate the overall schedule for the Project and facilitate cooperation among the Parties.

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3. Accept and manage federal funds transferred from TDOT to EFLHD for the MRIMF (rather than the SR-57 Improvements) part of the Project, including both TIGER funds and CMAQ funds, and reimburse Railroad for its eligible costs in accordance with this Agreement.

4. Select consulting services, as appropriate, using procurement procedures in accordance with the Federal Acquisition Regulation (“FAR”) and the Transportation Acquisition Regulation (“TAR”).

5. Provide a quarterly status report to the Parties on the overall management of the Project. The report will detail, at a minimum, the financial status, schedule, and current and upcoming contracting activities of the Project, as well as any specific issues that have arisen.

6. Provide a Special Project Manager to coordinate day-to-day administration, including technical issues and federal compliance requirements, of the MRIMF part of the Project. Issues will be discussed between the Parties as they arise.

7. Review the Financial Plan to be prepared by the Railroad for the Project.

8. Serve as the representative of the Parties to this Agreement on any consultant selection panel convened by the Railroad.

9. Ensure to the maximum extent possible that:
 - a. construction work will be contracted out, except work that is normally done by the Railroad's internal staff; provided, however, it is recognized that decisions regarding whether to contract for construction engineering and inspection must be made by the Railroad;

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- b. contracting is done competitively and in accordance with federal requirements and that the contracts contain all federally required contract language and no clauses related to local hiring or local hiring preferences;
 - c. solicitations are posted on the TDOT website and linked to a federal website as allowed;
 - d. contractors meet State licensing and insurance requirements to the extent such requirements can be met after bid opening but prior to award of the contract;
 - e. contracts contain small business subcontracting provisions in compliance with the requirements of the Federal Acquisition Regulations (“FAR”), including the submission of a small business and disadvantaged business subcontracting plan, as required by Part 19 of the FAR; and
 - f. the Railroad complies with the applicable provisions of FHWA TIGER Grant No. 31 (“Grant Agreement”). The FHWA TIGER Grant No. 31 is included as part of this Agreement by reference and is attached and incorporated hereto as Attachment A.
10. Receive from the Railroad and provide to TDOT, when requested, for review as appropriate the plans, specifications, and estimates, along with other necessary design documents for review and comment at the normally scheduled milestone completion percentages.
11. Require its employees, contractors, and agents to comply with any job site safety training and safety requirements of the Railroad.
12. Ensure that the Railroad complies with all applicable TIGER grant reporting requirements specified in the Grant Agreement during the construction phase of the MRIMF, including , but not limited to, reports related to the performance measures identified in Attachment I to the Grant Agreement and reports specified in Section 6 of the Grant Agreement and Attachment D to the Grant Agreement. The Railroad shall prepare and submit to EFLHD and TDOT all aforesaid reports at least ten (10) days prior to their due date as specified by the Grant Agreement. EFLHD will review the reports submitted by the Railroad and will concur in writing at least five (5) days before TDOT's submission of each report specified by the Grant Agreement.

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13. Submit to TDOT within one hundred twenty (120) days of completion of the Project an itemized receipt of its oversight costs together with a refund of any difference between the one million two hundred thousand dollars (\$1,200,000) paid to EFLHD and the actual amount of EFLHD's oversight costs, which TDOT will deliver to the Railroad within forty five (45) days of receipt from EFLHD.

C. The Railroad agrees to:

1. Comply with the applicable provisions of FHWA TIGER Grant No. 31 ("Grant Agreement"). The FHWA TIGER Grant No. 31 is included as part of this Agreement by reference and is attached and incorporated hereto as Attachment A.
2. Participate in the environmental process and cooperate in the efforts of FHWA and the Federal Railroad Administration (FRA) to obtain the required environmental approvals.
3. Develop, in coordination with EFLHD, a Financial Management Plan consisting of (i) estimated component costs for the Project, (ii) estimated rate of spending by component, and (iii) funding source by component, in order to clarify financial commitments and procedures.
4. Comply with the applicable provisions of FHWA TIGER Grant No. 31 ("Grant Agreement"), including, but not limited to, all TIGER grant reporting requirements related to the performance measures identified in Attachment I to the Grant Agreement and reports specified in Section 6 of the Grant Agreement and Attachment D to the Grant Agreement. The Railroad shall prepare and submit to EFLHD and TDOT all aforesaid reports at least ten (10) days prior to their due date as specified by the Grant Agreement. EFLHD will review the reports submitted by the Railroad and will concur in writing at least five (5) days before TDOT's submission of each report specified by the Grant Agreement.
5. Participate in and provide for field reviews when requested by the EFLHD. Allow employees of EFLHD and TDOT or their duly appointed representatives to have access to

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the Project throughout the design and construction process in order to participate in field reviews, onsite inspections, records reviews or project oversight activities, provided that such employees follow Railroad's instructions and comply with Railroad's safety requirements when entering upon the property.

6. Award and administer contracts for the construction or contract administration of those portions of the Project that the Railroad does not normally perform with its own forces. The Railroad will be responsible for the administrative settlement or adjudication of any claims arising from contracts awarded by the Railroad. Reimbursement for any such costs will be subject to the availability of Project funds. The Railroad shall conform to all applicable federal specifications, regulations, statutes, or policy in its awarding and administering the aforesaid contracts.
7. Prepare design and construction plans, specifications, and estimates ("Plans") for the Project. The Plans shall conform to all applicable federal and state regulatory standards. For projects utilizing federal funding, the Plans shall be submitted to EFLHD for review. EFLHD will coordinate review of the Plans with TDOT. For projects utilizing federal funding, the Railroad shall also submit Final Plans to EFLHD for approval. When Final Plans are approved by EFLHD, the Railroad will submit the bid package for posting, as set forth below. For projects utilizing federal funding, the Railroad shall not proceed with construction advertisement until it receives written approval to proceed from EFLHD. Any work commenced prior to the receipt of written approval from the EFLHD shall be at the risk of the Railroad, including the risk of non-payment of Federal funds for unapproved work. The Plans may be amended by the Railroad upon request to and written approval from EFLHD.
8. Utility Relocation Costs – The Railroad shall be solely responsible for any utility relocation costs and such costs are not eligible for reimbursement with TIGER funds. EFLHD recognizes that the Railroad may require utilities to relocate facilities at their expense, or may be required to reimburse the Railroad for the cost of relocating these facilities, as required by law or as set forth in agreements that may exist between the Railroad and the utilities.

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9. Grade Crossings - The Railroad certifies that it will conform to all applicable federal and state specifications, regulations, statutes, or policy in its work on any public grade crossings, to the satisfaction of EFLHD.

10. Certify that, prior to the commencement of construction of the MRIMF part of the Project, it has obtained any and all rights-of-way necessary for construction in accordance with all applicable federal and state specifications, regulations, statutes, and policy. Also, certify that the parcels it has obtained for the right-of-way for construction of the SR-57 Improvements part of the Project were obtained in accordance with all applicable federal and state specifications, regulations, statutes, and policy. The Railroad shall donate and convey the right-of-way parcels necessary for construction of the SR-57 Improvements to TDOT at no cost to TDOT subject to whatever permanent easements or additional real property interests Railroad needs to operate over or through those parcels in order to serve the MRIMF. The Railroad shall execute TDOT's standard donation form. TDOT will be responsible to record any conveyance of right-of-way in the appropriate government office and be responsible for any recording fees and transfer taxes.

11. The Railroad shall obtain from the appropriate governmental agencies all necessary and applicable clearances, permits, licenses, and other approvals necessary to proceed with the construction phase of the Project prior to the commencement of the Project construction, except for any approvals that EFLHD agrees to obtain pursuant to this Agreement.

12. In selecting construction contractors, the Railroad will ensure that:
 - a. contracting is done competitively in accordance with the Federal Acquisition Regulation (48 CFR Part 1 et seq.);
 - b. the contracts will conform to all applicable federal specifications, regulations, statutes, or policy, and contain no clauses related to local hiring or local hiring preferences;
 - c. bid packages are sent to EFLHD so that solicitations may be posted on the TDOT website and linked to a federal website as allowed;
 - d. contractors meet state licensing and insurance requirements to the extent such requirements can be met after bid opening but prior to award of the contract;

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- e. the total cost of contracts awarded will not exceed the sum of Railroad's total capital improvement budget authorization for the Project, plus any reimbursement pursuant to this Agreement.
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- 13. Construction Inspection - The Railroad, with its own forces or by contract, shall provide staff to adequately inspect and supervise all construction work for the Project. Proper supervision and construction inspection must be provided to ensure that all Project work is completed in accordance with the Plans and in compliance with applicable federal and state specifications, regulations, statutes, or policy.

 - 14. Buy America Act – The Railroad shall comply with 23 U.S.C. § 313 and 23 CFR § 635.410 (Buy America).

 - 15. Davis Bacon Act – The Railroad shall comply with Section 1606 of the Recovery Act (Davis-Bacon Act Wage Rate Requirements (regulations at 2 CFR Part 176.190)).

 - 16. The Railroad shall comply with section 902 of the Recovery Act, requiring that each contract awarded using Recovery Act funds must include a provision that provides the U.S. Comptroller General and his representatives with the authority to: 1) examine any records of the contractor or any of its subcontractors, or any State or local agency administering such contract, that directly pertain to, and involve transactions relating to, the contract or subcontract; and 2) to interview any officer or employee of the contractor or any of its subcontractors, or of any State or local government agency administering the contract, regarding such transactions.

 - 17. The Railroad shall comply with section 1515 of the Recovery Act, authorizing the DOT Office of the Inspector General to: 1) examine any records of the contractor or Grantee, any of its subcontractors or subgrantees, or any State or local agency administering such contract, that pertain to, and involve transactions relating to, the contract, subcontract, grant or subgrant; and 2) interview any officer or employee of the contractor, Grantee, subgrantee, or agency regarding such transactions.

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18. **Small Business Participation** - The Railroad shall ensure that construction contracts contain small business subcontracting provisions in compliance with the requirements of the Federal Acquisition Regulation (FAR), including the submission for approval of a small business and disadvantaged business subcontracting plan, as required by Part 19 of the FAR.

19. **Maintenance Requirements** – The Railroad shall assume all future maintenance and liability for improvements to Railroad-owned facilities and property, including, but not limited to, structures carrying Railroad facilities, signalization (signals), crossing surfaces, and any other maintenance responsibilities as may be assigned in connection with utilities.

20. **Records** - The Railroad and its consultant(s) and/or contractor(s) shall maintain all records maintained pursuant to this Project, including, but not limited to, books, documents, papers, records, supporting cost proposals, account records, electronic employee payroll records, and other evidence pertaining to the Project, and shall make such materials available to the Parties to this Agreement or their designees for inspection and audit at all reasonable times during the contract period and for three (3) years after the date of final payment to any contractor, whichever is later in time. For hourly employees of Railroad, a complete record shall also be kept for personnel assigned part-time to the Project, which record shall include such personnel's time dedicated to work outside of the Project. In addition, the computation of overhead costs will be supported by audit.

21. The Railroad will provide one million two hundred thousand dollars (\$1,200,000) to TDOT for the sole purpose of funding the expenses of EFLHD to administer the entire Crescent Corridor Intermodal Freight Rail TIGER funds in both Tennessee and Alabama. TDOT will accept from the Railroad the aforesaid one million two hundred thousand dollars (\$1,200,000) and transfer to this amount to EFLHD for the sole purpose of funding the expenses of EFLHD to administer the entire Crescent Corridor Intermodal Freight Rail TIGER funds in both Tennessee and Alabama. Within one hundred twenty (120) days of completion of the Project, TDOT will receive from EFLHD an itemized receipt of its oversight costs together with a refund of any difference between the one million two hundred thousand dollars (\$1,200,000) paid to EFLHD and the actual amount of EFLHD's oversight costs, and TDOT will deliver both the itemized receipt and the refund to the Railroad within forty-five (45) days of receipt from EFLHD.

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22. The Railroad is assumed to be familiar with and observe and comply with those federal, state, and local laws and regulations in any manner applicable to the Project. The Railroad shall comply with those aforesaid applicable laws and regulations. The Parties agree that failure of the Railroad to comply with applicable laws may result in damages to TDOT and/or EFLHD for which Railroad shall be responsible. The Railroad further agrees that if at any time any agency of the Federal government determines that previously reimbursed costs for the Project are ineligible for Federal funding, the Railroad shall be liable to pay or reimburse all such ineligible costs in their entirety.

D. Responsibility of the Parties to Cooperate:

1. All Parties to this Agreement agree to cooperate with each other and with their respective contractor(s) so as to coordinate their respective schedules in an effort to not delay the completion of the Project.
2. All Parties to this Agreement will be afforded the opportunity to inspect, review and comment on, at any time, work in progress, the financial records, and any other supporting documentation and will be afforded the opportunity to participate in all meetings and field reviews related to the Project.
3. All Parties to this Agreement agree to comply with the provisions of FHWA TIGER Grant No. 31 (“Grant Agreement”). The FHWA TIGER Grant No. 31 is included as part of this Agreement by reference and is attached and incorporated hereto as Attachment A.
4. All Parties to this Agreement will ensure that the avoidance, minimization, and mitigation measures identified in the Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) are incorporated into the Project.

ARTICLE II. FUNDING AND REIMBURSEMENT

The respective financial obligations of the parties under this Agreement shall be as follows:

- A. TDOT has been awarded fifty-two million five hundred thousand dollars (\$52,500,000) in funding under the TIGER Discretionary Grant Program. Upon execution of the Grant Agreement, TDOT will initiate and comply with the procedures needed to transfer all fifty-two million five hundred thousand dollars (\$52,500,000) in TIGER funds and nine million four hundred thousand (\$ 9,400,000) in Congestion Mitigation and Air Quality (CMAQ) funds directly to the EFLHD, as authorized by 23 U.S.C. § 132.

- B. For the Project, EFLHD, on behalf of the U.S. DOT, will provide to the Railroad TIGER funding up to fifty-two million five hundred thousand dollars (\$52,500,000). In addition, fourteen million two hundred thousand dollars (\$14,200,000) in Congestion Mitigation and Air Quality (CMAQ) funds apportioned to the State of Tennessee by the federal government will be obligated for the Project. It is anticipated that four million eight hundred thousand dollars (\$4,800,000) in CMAQ funds will be used by TDOT for the SR-57 Improvements in Tennessee and that nine million four hundred thousand dollar (\$ 9,400,000) in CMAQ funds will be used by the Railroad for equipment for the MRIMF. Upon execution of the Grant Agreement, TDOT will initiate a request that the aforesaid nine million four hundred thousand dollars (\$ 9,400,000) in CMAQ funds be transferred to EFLHD. The Railroad shall be responsible for the remaining total cost of the Project (subject to Railroad's rights to re-design, re-bid, and/or terminate as described in Article IV, below) and shall be responsible for the non-federal share required for the CMAQ funds, if any.

- C. The Railroad will provide one million two hundred thousand dollars (\$1,200,000) to TDOT to pay for EFLHD's project oversight costs for the entire Crescent Corridor Intermodal Freight Rail TIGER funds in both Tennessee and Alabama. TDOT will accept from the Railroad the aforesaid one million two hundred thousand dollars (\$1,200,000) and transfer this amount to EFLHD for the sole purpose of funding the expenses of EFLHD to administer the entire Crescent Corridor Intermodal Freight Rail TIGER funds in both Tennessee and Alabama. Within one hundred twenty (120) days of completion of the Project, TDOT will receive from EFLHD an itemized receipt of its oversight costs together with the return of

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any difference between the one million two hundred thousand dollars (\$1,200,000) paid to EFLHD and the actual amount of EFLHD's oversight costs, and TDOT will deliver both the itemized receipt and the refund to the Railroad within forty-five (45) days of receipt from EFLHD.

- D. The Railroad agrees to make its invoices and supporting records available for federal audit.

- E. The Railroad may bill the EFLHD no more frequently than every thirty (30) days for actual and approved costs within the scope of the Project. The Railroad, for the purpose of reimbursement, shall submit to the EFLHD on a monthly basis:
 - 1. Certified invoices, including proof of allowable costs, for work performed by the Railroad forces on the Project. The proof of allowable costs may include but not be limited to, time sheets, material invoices and equipment records of the Railroad. Invoices shall be deemed certified when they are signed and dated by an authorized representative of the Railroad.

 - 2. Certified invoices already paid by the Railroad based on current estimates of the work performed on the Project by the Railroad's contractors and/or consultant. Copies of the estimates will be included with the invoices. Invoices shall be deemed certified when they are signed and dated by an authorized representative of the contractor or consultant.

 - 3. Upon receipt of such invoices, the EFLHD will promptly make payment to the Railroad after review and approval of the invoice.

- F. Nothing in this Agreement shall preclude the Railroad from submitting bills for costs incurred by in-house forces necessary to accomplish the Project. Proof of costs incurred or payments by the Railroad must be submitted along with the request for reimbursement under this Agreement.

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- G. The Railroad, by executing this Agreement, certifies that it has on hand sufficient funds to meet all of its obligations under the terms of this Agreement, and that the Railroad, not EFHLD or TDOT, will be responsible for providing all funds needed to pay any costs incurred in excess of those costs eligible for Federal participation, subject to Railroad's rights to re-design, re-bid, and/or terminate as described in Article IV, below. The Railroad shall be solely responsible for one hundred percent (100%) of any costs incurred in excess of those costs eligible for Federal participation. The Railroad may use any combination of funds from its own budget and/or outside sources, whether public or private to meet its obligations under this Agreement.
- H. The EFLHD shall not reimburse any additional or extra work done or materials furnished that are not specifically provided for in the approved plans and the specifications, unless the EFLHD has first approved such additional or extra work or materials in writing. Any such work done or materials furnished without such written approval first having been given by the EFLHD shall be at the Railroad's own risk, cost and expense. EFLHD will not reimburse any costs incurred by the Railroad prior to the execution of the Grant Agreement.
- I. The Railroad will own all of the MRIMF improvements performed, constructed or completed pursuant to this Agreement, with the exception of public roadways, public bridges, or improvements to existing non-railroad-owned public structures that may be impacted by the Project.

ARTICLE III: KEY OFFICIALS AND CONTACTS

Designated points of contact for the coordination of this project are as follows:

For the TDOT:

Gerald F. Nicely
Commissioner
Tennessee Department of Transportation
Suite 700, James K. Polk Bldg.

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505 Deaderick Street
Nashville, Tennessee 37243
615-741-2848
Gerald.Nicely@tn.gov

Chris Christianson
Transportation Administrator
Tennessee Department of Transportation
Suite 700, James K. Polk Bldg.
505 Deaderick Street
Nashville, Tennessee 37243
615-741-4838
N.E.Christianson@tn.gov

For the Railroad:

Robert E. Huffman
Vice President Intermodal Operations
Norfolk Southern Corporation
Three Commercial Place Box 208
Norfolk, VA 23510
Phone 757-629-2736
Fax: 757-823-5272
robert.huffman@nscorp.com

Mark S. Dewberry
Chief Engineer - Design & Construction
Norfolk Southern Corporation
1200 Peachtree St. Suite 7-142
Atlanta, GA 30309
Phone 404-529-1228
Fax: 404-529-1372
mark.dewberry@nscorp.com

For the EFLHD:

Ms. Melisa Ridenour
Division Engineer

Mr. Robert Morris
Senior Project Manager

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Department of Transportation
Federal Highway Administration
Eastern Federal Lands Highway Division
21400 Ridgetop Circle
Sterling, Virginia 20166
Phone: (703) 404-6201
Fax: (571) 434-1599
email: melisa.ridenour@fhwa.dot.gov

Department of Transportation
Federal Highway Administration
Eastern Federal Lands Highway Division
21400 Ridgetop Circle
Sterling, Virginia 20166
Phone: (703) 404-6302
Fax: (703) 404-6217
email: robert.morris@dot.gov

ARTICLE IV: TERMINATION, MODIFICATION, AND EXPIRATION

- A. Except as provided otherwise in this Article IV, termination, modification, and expiration of this Agreement will be in accordance with the terms of Section 9 of the Grant Agreement.

- B. In case of the failure on the part of any Party to observe any of the conditions of the Agreement, any affected Party shall notify the other Party of the violation and allow a reasonable time to cure the violation. In the event that the violation is not cured within what the affected Party considers a reasonable time, this Agreement may be terminated or modified in accordance with Section 9 of the Grant Agreement.

- C. The Parties may seek to amend or modify this Agreement by written notice (formal letter) to the other Parties. This Agreement will be amended or modified only on mutual written agreement by all Parties.

- D. While it is the intention of the Government, Grantee, and Railroad to complete this Project, it is recognized that not all future events can be anticipated. If upon receipt of construction bids for the majority of the cost to complete the MRIMF but before the awarding of that work it is determined by TDOT and Railroad that the total construction cost of the MRIMF, excluding acquisition of property and lift machines, will exceed Fifty-Five Million Three Hundred Fifty Thousand Dollars (\$55,350,000) by more than 5%, Railroad shall have the option to redesign and re-bid. If after such redesign and re-bid the estimated cost still

AGREEMENT No. DTFH71-11-X-30002

exceeds Fifty-Five Million Three Hundred Fifty Thousand Dollars (\$55,350,000) by more than 5%, or if any of the expected TIGER funding or CMAQ funding is not available on or before March 31, 2011, TDOT shall have the right to terminate this Agreement. If TDOT exercises this termination right, Railroad shall refund to the Government any of the Federal funds received by Railroad less any payments to the Government, and Railroad shall refund to TDOT any expenses TDOT has incurred toward the Project, including without limitation right-of-way acquisition, utility relocation, construction, and/or construction inspection costs related to the SR-57 Improvements, and no party shall have any further responsibility under this Agreement.

ARTICLE V: ASSIGNMENT

No transfer or assignment of this Agreement, or any part thereof or interest therein, directly or indirectly, voluntarily or involuntarily, shall be made unless such transfer or assignment is first approved in writing by all Parties, except that the Railroad may freely transfer or assign this Agreement to any of its parents, subsidiaries or affiliates as long as the Railroad's obligations under this Agreement are fully assumed by the transferee/assignee.

ARTICLE VI: LIABILITY

The Parties accept full responsibility for any property damage, injury, or death caused by the acts or omissions of their respective employees, acting within the scope of their employment. The Parties will require their respective contractors to accept responsibility for any property damage, injury, or death caused by the acts or omissions of their respective employees and subcontractors. All claims shall be processed pursuant to applicable governing law.

Any claim that might be cognizable under the Federal Tort Claims Act (Title 28, United States Code, Section 2671, et seq.) or the tort claim provisions of State law, alleging an injury during the performance of this Agreement which may be traced to a Party, shall be received and processed by the Party having responsibility for the particular injury-causing condition according to the laws of that Party's State or, for the Federal Government, of the United States.

ARTICLE VII: REQUIRED AND STANDARD CLAUSES

- A. Nothing in this Agreement shall be construed as limiting or affecting the legal authorities of the Parties, or as requiring the Parties to perform beyond their respective authorities. Nothing in this Agreement shall be deemed to bind any party to expend funds in excess of available appropriations. This Agreement is subject to all laws governing federal and state procurement and to all regulations and rules promulgated thereunder, whether now in force or hereafter enacted or promulgated, except as specified in this Agreement. Nothing in this Agreement shall be construed as in any way impairing the general powers of the Parties for supervision, regulation, and control of its property under such applicable laws, regulations, and rules.
- B. Non-Discrimination: The Parties shall not discriminate in the selection of employees or participants for any employment or other activities undertaken pursuant to this Agreement on the grounds of disability, age, religion, race, creed, color, sex, or national origin, and shall observe all of the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. Section 2000(d), et seq.). The Parties shall take positive action to ensure that all applicants for employment or participation in any activities pursuant to this Agreement shall be employed or involved without regard to disability, age, religion, race, creed, color, sex, or national origin.
- C. Anti-Deficiency Act: Pursuant to the Anti-Deficiency Act, 31 U.S.C. Section 1341(a)(1) (1994), nothing contained in this Agreement shall be construed as binding the United States or any State to expend any sum in excess of appropriations made by Congress for the purposes of this Agreement, or as involving the United States or any State in any contract or other obligation for the further expenditure of money in excess of such appropriations.
- D. Lobby Prohibition: The Parties will abide by the provisions of 18 U.S.C. Section 1913 (Lobbying with Appropriated Monies).

AGREEMENT No. DTFH71-11-X-30002

- E. 31 U.S.C. Section 1352 prohibit the recipient or any lower tier sub-recipients of a Federal contract, grant, loan or cooperative agreement from expending federal funds to pay any person for influencing or attempting to influence a Federal Agency or Congress in connection with the awarding of any Federal contract, the making of any federal grant or loan or entering into of any cooperative agreement.

- F. The Parties agree that no rights shall be granted to any other person whatsoever by virtue of this Agreement, and there are no third party beneficiaries hereof.

- G. Conflicts of Interest: The Railroad warrants that no part of the total funds provided under this Agreement shall be paid directly or indirectly to an employee or official of the State of Tennessee as wages, compensation, or gifts in exchange for acting as an officer, agent, employee, subcontractor, or consultant to the Railroad in connection with any work contemplated or performed relative to this Agreement. The Railroad acknowledges, understands, and agrees that this Agreement shall be null and void if the Railroad is an entity in which a controlling interest is held by an individual who is, or within the past six months has been, an employee of the State of Tennessee.

- H. This Agreement and the authorizations granted in it shall be effective only after the execution and approval by all Parties to this Agreement.

- I. The Parties will be afforded an opportunity to participate in all meetings and field reviews.

- J. This Agreement is governed by federal law, regulations, and policy.

ARTICLE VIII. EXECUTION IN COUNTERPARTS

This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

ARTICLE IX. ENTIRE AGREEMENT

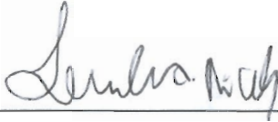
This Agreement and its attachments constitute the entire Agreement and understanding of the Parties with respect to the Project. No oral or other written provisions shall have any force or effect except those contained in a written amendment to this Agreement executed by the parties.

AGREEMENT No. DTFH71-11-X-30002

IN WITNESS THEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized representatives.

AGREEMENT No. DTFH71-11-X-30002

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION:

 12-30-2010

Gerald F. Nicely, Commissioner

Date

AGREEMENT No. DTFH71-11-X-30002

UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
EASTERN FEDERAL LANDS HIGHWAY DIVISION:

Donald W. Melin 12/29/10

for Ms. Melisa Ridenour
Division Engineer

Date

AGREEMENT No. DTFH71-11-X-30002

NORFOLK SOUTHERN RAILWAY COMPANY:

 . 12/29/2010

Date

AGREEMENT No. DTFH71-11-X-30002

Attachment A

FHWA TIGER Grant No. 31 (“Grant Agreement”)

**UNITED STATES OF AMERICA
U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
WASHINGTON, DC 20590**

**GRANT AGREEMENT
UNDER THE
AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009
TRANSPORTATION INVESTMENTS GENERATING ECONOMIC
RECOVERY (TIGER) DISCRETIONARY GRANT PROGRAM**

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

**CRESCENT CORRIDOR PROJECT – MEMPHIS REGIONAL
INTERMODAL FACILITY**

FHWA TIGER Grant No. 31

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**GRANT AGREEMENT BETWEEN THE
U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY
ADMINISTRATION AND THE STATE OF TENNESSEE DEPARTMENT OF
TRANSPORTATION, UNDER THE AMERICAN RECOVERY AND
REINVESTMENT ACT OF 2009,
SUPPLEMENTAL DISCRETIONARY GRANTS FOR A NATIONAL SURFACE
TRANSPORTATION SYSTEM,
HEREINAFTER REFERRED TO AS THE
“TIGER DISCRETIONARY GRANT PROGRAM”**

WHEREAS, the State of Tennessee Department of Transportation, hereinafter referred to as “Grantee,” or “Recipient,” or “Project Sponsor” or “State” has applied for a grant to construct portions of the proposed Memphis Regional Intermodal Facility (hereinafter referred to as the “Project”), under the TIGER Discretionary Grant Program authorized by the American Recovery and Reinvestment Act of 2009, Public Law 111-5 (hereinafter referred to as the “Recovery Act” or “ARRA”);

WHEREAS, the U.S. Department of Transportation (hereinafter referred to as the “Government” or “DOT”), acting for the United States, received and reviewed over 1,400 applications for grants under the TIGER Discretionary Grant Program;

WHEREAS, DOT selected 51 projects to receive TIGER Discretionary Grants because of the benefits that these projects are expected to provide;

WHEREAS, the Project was selected for funding based on the projected improvement of rail intermodal service between the Northeast and the Southeast, including the Memphis region, and strengthening domestic and international freight distribution in the Southeast, Gulf Coast, and Mid-Atlantic markets;

THEREFORE, DOT awards this grant in the amount of Fifty-Two Million Five Hundred Thousand Dollars (\$52,500,000) to be administered by the Federal Highway Administration (“FHWA” or “Government”), to assist in the Grantee’s efforts to construct the Project, in accordance with the terms and conditions of this grant agreement (hereinafter referred to as the “Grant Agreement”).

SECTION 1. LEGISLATIVE AUTHORITY

Title XII of the Recovery Act provides that “...the Secretary of Transportation shall distribute funds provided...as discretionary grants to be awarded to State and local governments or transit agencies on a competitive basis for projects that will have a significant impact on the Nation, a metropolitan area, or a region.” The Recovery Act also provides that “...projects eligible for funding provided under this heading shall include, but not be limited to, highway or bridge projects eligible under title 23, United States Code, including interstate rehabilitation, improvements to the rural collector road system, the reconstruction of overpasses and interchanges, bridge replacements, seismic retrofit projects for bridges, and road realignments; public transportation projects eligible

under chapter 53 of title 49, United States Code, including investments in projects participating in the New Starts or Small Starts programs that will expedite the completion of those projects and their entry into revenue service; passenger and freight rail transportation projects; and port infrastructure investments, including projects that connect ports to other modes of transportation and improve the efficiency of freight movement.”

Further, the Recovery Act provides that the authority to award a grant under the TIGER Discretionary Grant Program and perform oversight may be transferred from the Secretary of Transportation to the Administrators of the Federal Highway Administration, the Federal Transit Administration, the Federal Railroad Administration and the Maritime Administration.

SECTION 2. GENERAL TERMS AND CONDITIONS

- a) The maximum obligation of the Government payable under this award, (hereinafter referred to as the “Grant”), shall be Fifty-Two Million Five Hundred Thousand Dollars (\$52,500,000) , subject to all the terms and conditions in this Grant Agreement and of all other Federal grant awards funding the Project.
- b) Payment of the Grant will be made pursuant to and in accordance with 49 C.F.R. Parts 18 and 19 (to the extent that a non-governmental grantee receives grant funding), and the provisions of such regulations and procedures as the Government may prescribe. Final determination of Grant expenditures may be based upon a final review of the total amount of agreed project costs and settlement will be made for adjustments to the Grant amount in accordance with applicable government-wide cost principles under 2 C.F.R. 225 (State and Local Governments); 2 C.F.R. 215 (Higher Education Institutions); and 2 C.F.R. 230 (Non-Profit Organizations). If there are any differences between the requirements of 49 C.F.R. Parts 18 and 19 and title 23 of the United States Code and Code of Federal Regulations, the title 23 requirements will take precedence.
- c) The Grantee agrees to carry out and complete the Project without undue delays and in accordance with the terms hereof, including the Project Schedule attached as Attachment F, and such regulations and procedures as the Government may prescribe.
- d) The Grantee has submitted a request for Federal assistance, hereinafter referred to as the “Technical Application,” attached as Attachment G, and the Government is relying upon the Grantee’s assurances, certifications, and other representations made in the Technical Application, or any other related documents submitted to the Government; and, in its submissions, the Grantee has demonstrated justification for the Project, and has demonstrated the financial and technical feasibility of the Project, including the ability to start construction quickly upon receipt of the Grant; to expend Grant funds once construction starts; and to receive all necessary environmental, state and local planning, and legislative approvals necessary for the Project to proceed in accordance with the Project Schedule.

- e) The Government has determined that the Project should receive a Grant based on a review of the Project's potential to rapidly create jobs and economic activity; to provide lasting, long-term economic benefits for the transportation system; and to provide other outcomes, as specified in the June 17, 2009, Federal Register Notice, "Notice of Funding Availability for Supplemental Discretionary Grants for Capital Investments in Surface Transportation Infrastructure Under the American Recovery and Reinvestment Act" (Docket No. OST-2009-0115).
- f) The Grantee will be monitored periodically by the Government, both programmatically and financially, to ensure that the Project goals, objectives, performance requirements, timelines, milestone completion, budgets, and other related program criteria are being met. Monitoring will be accomplished through a combination of office-based reviews and onsite monitoring visits. Monitoring will involve the review and analysis of the financial, programmatic, performance and administrative issues relative to each program and will identify areas where technical assistance and other support may be needed. The Grantee is responsible for monitoring award activities, to include sub-awards, to provide reasonable assurance that the Federal award is administered in compliance with applicable requirements. Responsibilities include the accounting of receipts and expenditures, cash management, maintaining adequate financial records, and refunding disallowed expenditures. In furtherance of this requirement the Grantee will request a transfer to the U.S. Department of Transportation, Federal Highway Administration, Eastern Federal Lands Highway Division under the provisions of 23 U.S.C. 132 for appropriate action. (For further information, please see Attachment B).
- g) The Grantee agrees to take all steps, including initiating litigation, if necessary, to recover Federal funds if the Government determines, after consultation with the Grantee, that such funds have been spent fraudulently, wastefully, or in violation of Federal laws, or misused in any manner in undertaking the Project. For the purposes of this Grant Agreement, the term "Federal funds" means funds however used or disbursed by the Grantee that were originally paid pursuant to this Grant Agreement.
- h) The Grantee agrees to retain all documents relevant to the Grant award for a period of three years from completion of the Project and receipt of final reimbursement from the Government. The Grantee agrees to furnish the Government, upon request, all documents and records pertaining to the determination of the Grant amount or to any settlement, litigation, negotiation, or other efforts taken to recover such funds. All settlements or other final positions of the Grantee, in court or otherwise, involving the recovery of such Grant amount shall be approved in advance by the Government.
- i) The Government is subject to the Freedom of Information Act (FOIA). The Grantee should therefore be aware that all applications and related materials submitted by the Grantee related to this Grant Agreement will become agency records and thus are subject to FOIA and to public release through individual FOIA requests. ARRA also mandates broad public dissemination of information related to the expenditure of

funds through reporting requirements and website postings that are addressed in other sections of this Grant Agreement. President Obama's March 20, 2009 Memorandum for the Heads of Executive Departments and Agencies on Ensuring Responsible Spending of Recovery Act Funds mandates the strongest possible efforts to ensure public transparency and accountability of Recovery Act expenditures.

- j) The Government shall not be responsible or liable for any damage to property or any injury to persons that may arise from, or be incident to, performance or compliance with this Grant Agreement.
- k) The Grantee agrees to comply with 49 C.F.R. Part 26 – Participation by Disadvantaged Business Enterprises in Department of Transportation Programs -- as a condition of receiving grant funding.
- l) In accordance with OMB Recovery Act Guidance, (available at http://www.whitehouse.gov/omb/recovery_default/), and in the answers to Frequently Asked Questions (available at http://www.whitehouse.gov/omb/recovery_faqs/), the Grantee may recoup costs in the amount of up to 0.5% of the grant amount for administering the Grant. Information about which administrative costs are reimbursable under this program is available in 2 C.F.R. Part 225 (OMB Circular A-87), "Cost Principles for State and Local Governments" [located at: <http://www.whitehouse.gov/omb/circulars/a087/a087-all.html>], and in Recovery Act specific guidance in OMB Memorandum M-09-18, Payments to State Grantees for Administrative Costs of Recovery Act Activities (May 11, 2009). The costs for reporting performance measures required pursuant to subsection m below are permitted as part of the up to 0.5% in administrative costs.
- m) Subject to the Paperwork Reduction Act, as necessary, the Grantee agrees to (i) collect the data necessary to track and report on each of the performance measures identified in the Performance Measure Table included as Attachment I of this Grant Agreement, and (ii) report the results of such data collection to the Government. Grantee should include the data collected for each measure in each required report. To satisfy the reporting requirements, Grantee agrees to provide "Before Reports" and "After Reports". Before Reports should include current baseline data for each performance measure and should be delivered to the Government before project completion. Before Reports should include a detailed description of data sources, assumptions, variability and the estimated level of precision for each measure. Grantee should provide After Reports for each performance measure following project completion at the intervals, and for the time periods, specified in the Performance Measure Table included as Attachment I. After Reports may include a narrative discussion detailing project successes and/or the influence of external factors on project expectations. The final After Report must include an *ex post* examination of project effectiveness in relation to Before Report baselines.
- n) The Government encourages the Grantee to adopt and enforce workplace safety policies to decrease crashes caused by distracted drivers including policies that bar

text messaging while driving company-owned or rented vehicles, or government-owned, leased, or rented vehicles or privately-owned vehicles when on official government business or when performing any work for or on behalf of the Government. See Executive Order 13513 “Federal Leadership on Reducing Text Messaging While Driving”, Oct. 1, 2009 (available at <http://edocket.access.gpo.gov/2009/E9-24203.htm>) and DOT Order 3902.1 “Text Messaging While Driving”, Dec. 30, 2009 (available at <http://dotnet.gov.gov>), as implemented by Financial Assistance Policy Letter (No. FAP-2010-01, Feb. 2, 2010). This includes, but is not limited to, the Grantee:

- 1) considering new rules and programs or re-evaluating existing programs to prohibit text messaging while driving.
- 2) conducting education, awareness, and other outreach for employees about the safety risks associated with texting while driving.
- 3) encouraging voluntary compliance with the agency’s text messaging policy while off duty.

The Grantee is encouraged to insert the substance of this clause in all assistance awards.

SECTION 3. APPLICABLE FEDERAL LAWS AND REGULATIONS

In addition to any other Federal requirements that apply, including specific and/or additional Buy American and Davis Bacon Act Prevailing Wage requirements or other specific requirements that apply under Title 23 or Title 49 of the United States Code, performance under this Grant Agreement shall be governed by and in compliance with the following requirements as applicable to the type of organization of the Recipient and any applicable sub-recipients:

- a) The “Uniform Administrative Requirements for Grants and Grant Agreements to State and Local Governments” (49 C.F.R. 18), located at: <http://www.dot.gov/ost/m60/grant/49cfr18.htm>, DOT’s procurement standards for grants, will apply to the extent that the Grantee procures property and services in carrying out the approved grant project. If there are any differences between the DOT procurement standards and the FHWA procurement standards, the FHWA standards will take precedence.
- b) Section 902 of the Recovery Act, requiring that each contract awarded using Recovery Act funds must include a provision that provides the U.S. Comptroller General and his representatives with the authority to: 1) examine any records of the contractor or any of its subcontractors, or any State or local agency administering such contract, that directly pertain to, and involve transactions relating to, the contract or subcontract; and 2) to interview any officer or employee of the contractor or any of its subcontractors, or of any State or local government agency administering the contract, regarding such transactions.

- c) Section 1515 of the Recovery Act, authorizing the DOT Office of the Inspector General to: 1) examine any records of the contractor or Grantee, any of its subcontractors or subgrantees, or any State or local agency administering such contract, that pertain to, and involve transactions relating to, the contract, subcontract, grant or subgrant; and 2) interview any officer or employee of the contractor, Grantee, subgrantee, or agency regarding such transactions.
- d) The Buy America provision under 23 U.S. C. § 313 and 23 C.F.R. § 635.410.
- e) Section 1606 of the Recovery Act (Davis-Bacon Act Wage Rate Requirements at 2 C.F.R. Part 176.190) to the extent that the Grantee uses Grant funds for construction, alteration, maintenance, or repair work. See Attachment C, Recovery Act Requirements and Contract Clauses, for requirements and more information on Section 1606 compliance.
- f) Section 1604 of the Recovery Act, which prohibits the Grantee from expending funds under this Grant Agreement on any casino, or other gambling establishment, aquarium, zoo, golf course, or swimming pool.
- g) Sections 1201, 1511, and 1607 of the Recovery Act, requiring certifications (existing certifications will remain valid unless an update is needed). Note that the Section 1511 certification requirement pertains to particular infrastructure investments. All Certifications, once executed, should have been submitted to the Secretary of Transportation, c/o Joel Szabat, Deputy Assistant Secretary for Transportation Policy, at TigerTeam.Leads@dot.gov. Certifications may be submitted via e-mail as electronic, scanned copies, with original signed versions to follow to be submitted via U.S. mail. As required by the Recovery Act, certifications under Section 1511 shall be immediately posted on a website and linked to the website Recovery.gov. No funds may be obligated until such posting is made. Section 1553 of the Recovery Act, which requires the Grantee to provide Whistleblower protections. As a non-Federal employer, the Grantee is required to post a notice of the rights and remedies provided under this section. The whistleblower program requirements and poster are available at the following web site: <http://www.recovery.gov/?q=content/whistleblower-information>.
- h) Section 1554 of the Recovery Act, which requires the Grantee to award contracts as fixed-price contracts to the maximum extent possible through the use of competitive procedures. In the rare circumstances where the Grantee does not award fixed-price contracts and does not use competitive procedures, the Grantee shall publicly and electronically post a summary of such contracts.
- i) The Single Audit Act Amendments of 1996 and the Office of Management and Budget's (OMB) Circular A-133, "Audits of States, Local Governments, and Non-Profit Organizations" (Single Audit Information requirements for Recipients of Recovery Act Funds (regulations at 2 C.F.R. Part 176.210)), which govern the tracking and documentation of all Recovery Act expenditures. This includes

compliance with Federal regulations requiring conduct of a federally-approved audit of any expenditure of funds of \$500,000 or more in a year in Federal awards. See Attachment C, Recovery Act Requirements and Contract Clauses, for requirements and more information on Single Audit Information compliance.

- j) The “New Restrictions On Lobbying,” (49 C.F.R. Part 20) [located at: <http://www.dot.gov/ost/m60/grant/49cfr20.htm>].
- k) The “Cost Principles for State and Local Governments” 2 C.F.R. Part 225 (OMB Circular A-87), or other applicable cost principles, depending upon the grantee [located at: <http://www.whitehouse.gov/omb/circulars/a087/a087-all.html>].
- l) OMB Circular A-102, “Grants and Grant Agreements With State and Local Governments” or other applicable requirements, depending upon the grantee [located at: <http://www.whitehouse.gov/omb/circulars/a102/a102.html>]
- m) Any other applicable Federal regulation or statute including each of the laws, regulations, executive orders, policies, guidelines, and requirements identified in Attachment B, Grant Assurances.

SECTION 4. GRANTEE AND PROJECT CONDITIONS

- a) Grantee: The State of Tennessee Department of Transportation, as the Grantee under the TIGER Discretionary Grant Program, agrees to administer the Grant according to the conditions set forth in this Grant Agreement.

Dun and Bradstreet Data Universal Numbering System (DUNS) No. of the Grantee:
878297712

First-Tier Sub-Grantees or Sub-Recipients (if applicable – to be reported if/when identified): Norfolk Southern Railway Company

DUNS No. of First-Tier Sub-Grantee or Sub-Recipient (if applicable – to be reported if/when identified): 101712388

- b) Notices:

Notices required by this Agreement should be addressed as follows:

As to the Government:

Ed Strocko
TIGER Discretionary Program Modal Coordinator
Federal Highway Administration
1200 New Jersey Ave. SE, E84-440
Washington DC 20590

(202) 366- 2997
Ed.Strocko@dot.gov

and

Robert Mariner
United States Department of Transportation
Office of the Secretary
1200 New Jersey Avenue, SE, W84-244
Washington, DC 20590
(202) 366-8914
Robert.Mariner@dot.gov

and

Robert Morris
Federal Highway Administration
Office of Federal Lands Highway
Eastern Federal Lands Highway Division
21400 Ridgetop Circle
Sterling, VA 20166
(703) 404-6201
Robert.Morris@dot.gov

As to the Grantee:

Gerald F. Nicely
Commissioner
Tennessee Department of Transportation
Suite 700, James K. Polk Bldg.
505 Deaderick Street
Nashville, Tennessee 37243
615-741-2848
Gerald.Nicely@tn.gov

and

Chris Christianson
Transportation Administrator
Tennessee Department of Transportation
Suite 700, James K. Polk Bldg.
505 Deaderick Street
Nashville, Tennessee 37243
615-741-4838
N.E.Christianson@tn.gov

c) Project Description and Milestones:

1) Project Description:

The Projects, the Memphis Regional Intermodal Facility (MRIMF), will be constructed immediately west of Rossville, in Fayette County, TN, approximately 27 miles east of downtown Memphis on the NS mainline running between Memphis and Chattanooga, TN. It will occupy 380 acres of secured right-of-way. General components of the initial phase of the expandable facility capable of handling 200,000 container lifts from or to a railcar will include (subject to the completion of detailed engineering plans):

- Three pad tracks, each 4050 ft. long,
- Four support tracks totaling approximately 17,000 ft
- 999 paved trailer parking spaces
- A double lead track connecting the facility to the Norfolk Southern main line
- A loop track to allow trains to reverse direction after entering the facility
- Ancillary modular buildings and operating equipment.

The initial phase facility will accommodate 200,000 annual lifts. However, Norfolk Southern has acquired sufficient property rights to expand the facility if additional public funding sources are identified or if market conditions warrant a privately financed expansion. Grading for a 327,000 lift facility will be performed during the initial phase construction, and Norfolk Southern is proceeding with environmental documents and permits for a facility with this capacity. Additional capacity expansions to the initial 200,000 lift facility will be less expensive on a per lift basis and will be much easier and faster to accomplish because all property will have been acquired, the grading performed, and many of the necessary permits for the work will already be secured.

Norfolk Southern entered into a site development agreement dated December 30, 2009 (the “Development Agreement”) with William C. Adair Development Company LLC (“Adair”), whereby Adair agreed to clear, grade and fill the site, to construct an access road, and to perform other duties as detailed in the Development Agreement (the “Adair Work”). The Adair Work is outside the scope of the Project for purposes of this Grant Agreement.

See Statement of Work (Attachment A).

2) State and Local Planning:

Planning Program Date: STIP 2011-2014 approved by FHWA on November 5, 2010.

3) Environmental Process:

Environmental Approval Type: Finding of No Significant Impact (FONSI).

Lead Agency: Federal Highway Administration and Federal Railroad Administration

DOT Agency (if not Lead Agency):

Date of Environmental Approval: December 21, 2010

Title of the Environmental Document: Norfolk Southern Railway Company Memphis Regional Intermodal Facility, Fayette County, Tennessee.

4) Project Schedule (See Project Schedule, Attachment F):

Planned or Actual Construction Start Date: April 22, 2011

Planned Project Completion Date: September 30, 2012

d) Project Funding (See Project Budget, Attachment E):

1) TIGER Discretionary Grant Program Funding:

The total not-to-exceed amount of Federal funding that is provided from the TIGER Discretionary Grant Program under this Grant Agreement is Fifty-Two Million Five Hundred Thousand Dollars (\$52,500,000) for the entire period of performance. The Government's liability to make payments to the Grantee under this Grant Agreement is limited to those funds obligated under this Grant Agreement as indicated above and any subsequent amendments.

2) Other Financial Share:

- A. The Grantee hereby commits and certifies that it will provide funds (and ensure the availability of other sources of funding, such as local/private funding or in-kind contributions) in an amount sufficient, together with the Federal contribution (acknowledging the limitations as set forth in this Grant Agreement), to assure timely and full payment of the project costs as necessary to complete the Project.
- B. The Grantee agrees to notify the Government within 14 calendar days of any change in circumstances or commitments that adversely affect the Grantee's plan to fund the Project as set forth in the Grantee's Technical Application. In its notification, the Grantee shall advise the Government of what actions it has taken or plans to take to ensure adequate funding resources and shall reaffirm its commitment to the

Government as set forth in Paragraph (A) of this Section 4(d)(2). The Government is not responsible for any funding shortfalls regarding the non-TIGER Discretionary Grant amount share. The TIGER Discretionary Grant Amount will remain unchanged (See Section 9 of this Grant Agreement regarding termination).

3) Grant Funds and Sources of Project Funds:

TIGER Discretionary Grant Amount:	\$52,500,000
Federal Other Share (if any):	\$14,200,000
State Share (if any):	\$0
Local Share (if any):	\$N/A
Other Share (if any):	\$38,400,000
Total Project Cost:	\$105,100,000

SECTION 5. REIMBURSEMENT OF PROJECT COSTS

- a) Payment will be in accordance with the terms of a Project agreement or E-76 for the Project that incorporates this Grant Agreement by reference.
- b) The Grantee or Grantee's First-Tier Sub-Grantee shall have entered into obligations for services and goods associated with the Project prior to seeking reimbursement from the Government. Reimbursement will only be made for expenses incurred after execution of the aforesaid Memorandum of Agreement.
- c) The Grantee shall ensure that the funds provided by the Government are not misappropriated or misdirected to any other account, need, project, line-item, or the like.
- d) Any Federal funds not expended in conjunction with the Project will remain the property of the Government.
- e) Financial Management System: By signing this Grant Agreement, the Grantee verifies that it has, or will implement, a financial management system adequate for monitoring the accumulation of costs and that it complies with the financial management system requirements of 49 C.F.R. Part 18 and Title 23. The Grantee's failure to comply with these requirements may result in Grant Agreement termination.
- f) Allowability of Costs: Determination of allowable costs will be made in accordance with the applicable Federal cost principles, e.g., OMB Circular A-87. Disallowed costs are those charges determined to not be allowed in accordance with the applicable Federal cost principles or other conditions contained in this Grant Agreement.

SECTION 6. REPORTING

a) Recovery Act Reporting:

Reporting requirements under Section 1201(c)(2) of the Recovery Act, “General Provision – Department of Transportation” apply. Project reports, including information as set forth in subparagraph (2), below, shall therefore be reported to the Government in accordance with the statutory timeframes. Due to the unique timeframe for TIGER Discretionary Grant awards, Grantees should submit the first of such reports on the 20th of the month following the execution date of this Grant Agreement and on each subsequent due date thereafter. Grantee shall submit its data using the Recovery Act Data System (RADS). The RADS guidance, which includes guidance on Section 1201(c) reporting, is located at: <http://www.fhwa.dot.gov/economicrecovery/guidancelist.htm>.

- 1) Project reports for Section 1201(c) should include the amount of Grant Funds appropriated, allocated, obligated, and outlayed under the appropriation; the number of projects put out to bid under the appropriation and the amount of Grant Funds associated with these contracts; the number contracts awarded under the appropriation and the amount of Grant Funds associated with these contracts; the number of projects for which work has begun under these contracts and the associated amount of Grant Funds; the number of projects for which work has been completed and the associated amount of Grant Funds; and the number of direct, on-project jobs created or sustained by the Grant Funds for projects under the appropriation and, to the extent possible, number of direct on-project job hours (the Department calculates the number of indirect and induced jobs).
- 2) In accordance with the Recovery Act and OMB Guidance, dated June 22, 2009 (http://www.whitehouse.gov/omb/assets/memoranda_fy2009/m09-21.pdf), this Grant award requires the Grantee to complete projects or activities which are funded under the Recovery Act and to report on use of Recovery Act funds provided through this award to <http://www.FederalReporting.gov>. Information from these reports will be made available to the public. Such reporting responsibility may be delegated from the Grantee/ Recipient to the Sub-grantee/ Sub-recipient or vendor, in order to ensure that the necessary information is provided to the Grantee/ Recipient, who is ultimately responsible for reporting the required elements.

The reports are due no later than ten calendar days after each calendar quarter in which the recipient receives the assistance award funded in whole or in part by the Recovery Act.

Grantees/ Recipients and their Subgrantees/ first-tier recipients (to the extent that they have been delegated direct reporting responsibility) must maintain

current registrations in the Central Contractor Registration (<http://www.ccr.gov>) at all times during which they have active Federal awards funded with Recovery Act funds. A DUNS Number (<http://www.dnb.com>) is one of the requirements for registration in the Central Contractor Registration.

The Grantees/Recipients shall report the information described in section 1512(c) of the Recovery Act using the reporting instructions and data elements that will be provided online at <http://www.FederalReporting.gov> and ensure that any information that is pre-filled is corrected or updated as needed.

Projects administered by the FHWA shall comply with the reporting instructions and data elements in the RADS guidance and any updates to that guidance. The RADS guidance is available online at: <http://www.fhwa.dot.gov/economicrecovery/guidancelist.htm>.

- 3) In accordance with Section 1609 of the Recovery Act, the Grantee shall submit quarterly reports, as necessary, describing the status of the Project with respect to the National Environmental Policy Act (NEPA) review. A report shall be submitted to RADS by July 5, 2010, and every 90 days thereafter following the execution of this Grant Agreement. Due to the unique timeframe for TIGER Discretionary Grant awards, Grantees should submit the first of such reports on the first due date following the execution date of this Grant Agreement and on each subsequent due date thereafter.
 - 4) In accordance with the purposes of the Recovery Act, the Grantee may be required to submit additional information in response to requests from DOT, OMB, the Congressional Budget Office, the Government Accountability Office, or the Department of Transportation's Inspector General. The Government will inform Grantees if and when such additional reports are required.
- b) Project Reports:
- 1) Consistent with the purposes of the TIGER Discretionary Grant Program, to ensure accountability and transparency in Government spending, the Grantee shall submit quarterly progress reports in RADS or other system designated by the Government, as set forth in Attachment D: Quarterly Project Progress Reports, Format and Content, to the Government on a quarterly basis, beginning on the 20th of the first full month following the execution of the Grant Agreement, and thereafter on the 20th of the month for the reporting period thereafter until completion of the Project. The initial report shall include a detailed description, and, where appropriate, drawings, of the items funded. Addresses for submittal of reports and documents: The Grantee shall submit all required reports and documents to the Government

electronically, referencing the Grant Agreement number, at the following addresses: Ed.Strocko@dot.gov.

- 2) **Annual Budget Review and Program Plan:** The Grantee shall submit an Annual Budget Review and Program Plan to the Government via e-mail 60 days prior to the end of each Grant Agreement year. The Annual Budget Review and Program Plan shall provide a detailed schedule of activities, estimate of specific performance objectives, include forecasted expenditures, and schedule of milestones for the upcoming Grant Agreement year. If there are no proposed deviations from the Approved Project Budget, attached hereto as Attachment E, the Annual Budget Review shall contain a statement stating such. The Recipient will meet with DOT to discuss the Annual Budget Review and Program Plan. If there is an actual or projected project cost increase, the annual submittal should include a written plan for providing additional sources of funding to cover the project budget shortfall or supporting documentation of committed funds to cover the cost increase.

To the extent the annual budget update deviates from the approved project budget by more than 10 percent, then work proposed under the Annual Budget Review and Program Plan shall not commence until written approval from the Government is received.

- c) **Milestones/Deliverables Schedule:** Attachment H is incorporated herein.

Closeout Process: Closeout occurs when all required project work and all administrative procedures described in 49 C.F.R. part 18 (or part 19 or Title 23 as applicable) are completed, and the Government notifies the Grantee and forwards the final Federal assistance payment, or when the Government acknowledges Grantee's remittance of the proper refund. Within 90 days of the Project completion date or termination by the Government, the Grantee must submit a final Financial Status Report (XF-269), a certification or summary of project expenses, and third party audit reports.

SECTION 7. SPECIAL GRANT REQUIREMENTS

- a) **High-Speed Rail:**

The Project Sponsor agrees that (1) it will work cooperatively with the Federal Railroad Administration (FRA) in the development of high speed rail projects within the State, and; (2) the Federal Highway Administration (FHWA), FRA and Project Sponsor will work to ensure that both high-speed rail and TIGER projects in the State are coordinated to optimize rail capacity for freight and passenger use, subject to considerations for the safety of rail passengers, employees and the general public.

The Grantee agrees to comply with applicable terms and conditions set forth in Title 23, United States Code, Highways, the regulations issued pursuant thereto, and the policies and procedures promulgated by the FHWA relative to the project.

b) 23 U.S.C. 132 Transfer:

Notwithstanding any provision of this Grant Agreement to the contrary:

The Grantee agrees to make arrangements to carry out and complete the Project without undue delays and in accordance with the terms hereof, including the Project Schedule attached as Attachment F, and such regulations and procedures as the Government may prescribe. To further the aforesaid arrangements, upon execution of the Grant Agreement the Grantee will request a transfer to the Federal Highway Administration's Eastern Federal Lands Highway Division under the provisions of 23 U.S.C. 132 for appropriate action. The Grantee, Norfolk Southern Railway Company as First-Tier Sub-Grantee, and the Federal Highway Administration's Eastern Federal Lands Highway Division intend to execute a Memorandum of Agreement that will ensure that the requirements imposed by applicable Federal statutes and regulations will be met.

The Grantee will be monitored periodically by the Government, both programmatically and financially, to ensure that the Project goals, objectives, performance requirements, timelines, milestone completion, budgets, and other related program criteria are being met. Monitoring will be accomplished through a combination of office-based reviews and onsite monitoring visits. Monitoring will involve the review and analysis of the financial, programmatic, performance and administrative issues relative to each program and will identify areas where technical assistance and other support may be needed. The Grantee is responsible for monitoring award activities, to include sub-awards, to provide reasonable assurance that the Federal award is administered in compliance with applicable requirements. Responsibilities include the accounting of receipts and expenditures, cash management, maintaining adequate financial records, and refunding disallowed expenditures. In furtherance of this requirement the Grantee will request a transfer to the U.S. Department of Transportation, Federal Highway Administration, Eastern Federal Lands Highway Division under the provisions of 23 U.S.C. 132 for appropriate action. The Grantee, Norfolk Southern Railway Company as First-Tier Sub-Grantee, and the Federal Highway Administration's Eastern Federal Lands Highway Division intend to execute a Memorandum of Agreement that will ensure that the requirements imposed by applicable Federal statutes and regulations will be met.

c) Other Financial Share:

Notwithstanding any provision of this Grant Agreement to the contrary:

The Grantee will utilize Four Million Eight Hundred Thousand Dollars (\$4,800,000) of the funds listed in Section 4. d) 3) above as “Federal Other Share” as necessary to complete the portions of the Project detailed as the State Route 57 Improvements. The Grantee will be reimbursed in accordance with the standard Title 23 procedures for expenses of this type.

Norfolk Southern Railway Company as First-Tier Sub-Grantee will provide funds listed in Section 4. d) 3) above as “Other Share” as necessary to complete the Project. Upon execution of the Grant Agreement, the Grantee will request a transfer to the Federal Highway Administration’s Eastern Federal Lands Highway Division under the provisions of 23 U.S.C. 132 for appropriate action. The Grantee, Norfolk Southern Railway Company as First-Tier Sub-Grantee, and the Federal Highway Administration’s Eastern Federal Lands Highway Division intend to execute a Memorandum of Agreement that will ensure that the requirements imposed by applicable Federal statutes and regulations will be met.

The Grantee agrees to notify the Government within 14 calendar days of any discovered change in circumstances that adversely affect the Norfolk Southern Railway Company’s plan to fund the share listed in Section 4. d) 3) above as “Other Share” necessary to complete the Project or the Grantee’s plan to utilize the Four Million Eight Hundred Thousand Dollars (\$4,800,000) of the funds listed in Section 4. d) 3) above as “Federal Other Share” as necessary to complete the Project. In its notification, the Grantee shall advise the Government of what actions it has taken or plans to take to address this change in circumstances. This Grant Agreement shall not require the Grantee to obligate or expend any funds. The Grantee is not responsible for any funding shortfalls regarding any share listed in Section 4. d) 3) above. The Government is not responsible for any funding shortfalls regarding the non-TIGER Discretionary Grant amount share. The TIGER Discretionary Grant Amount will remain unchanged (See Section 9 of this Grant Agreement regarding termination).

d) Termination:

Notwithstanding any provision of this Grant Agreement to the contrary:

While it is the intention of the Government, Grantee, and Norfolk Southern Railway Company as First-Tier Sub-Grantee to complete this Project, it is recognized that not all future events can be anticipated. If upon receipt of construction bids for the majority of the cost to complete the MRIMF but before the awarding of that work it is determined by Grantee and Norfolk Southern Railway Company that the total construction cost of the MRIMF, excluding acquisition of property and lift machines, will exceed Fifty-Five Million Three Hundred Fifty Thousand Dollars (\$55,350,000) by more than 5%, Norfolk Southern Railway Company shall have the option to redesign and re-bid. If after such redesign and re-bid the estimated cost still exceeds Fifty-Five Million Three Hundred Fifty Thousand Dollars (\$55,350,000) by more than 5%, or if any of the

expected TIGER funding or CMAQ funding is not available on or before March 31, 2011, Grantee shall have the right to terminate this Grant Agreement. If Grantee exercises this termination right, Norfolk Southern Railway Company shall refund to the Government any of the Federal funds received by Norfolk Southern Railway Company less any payments to the Government, and Norfolk Southern Railway Company shall refund to the Grantee any expenses Grantee has incurred toward the Project, including without limitation right-of-way acquisition, utility relocation, construction, and/or construction inspection costs related to the SR-57 Improvements, and no party shall have any further responsibility under this Grant Agreement.

SECTION 8. ASSURANCES

The Grantee shall execute the attached assurances and certifications (See Attachment B) in conjunction with execution of this Grant Agreement and shall comply with those assurances and certifications.

SECTION 9. TERMINATION, MODIFICATION AND EXPIRATION

- a) Subject to terms set forth in this Grant Agreement, the Government reserves the right to terminate this Grant Agreement and all of its obligations associated with this Grant Agreement, unless otherwise agreed between the Grantee and the Government, if any of the following occurs:
 - 1) The Grantee fails to obtain or provide any non-TIGER Discretionary Grant contribution or alternatives approved by the Government as provided in this Grant Agreement and in accordance with the Project Schedule;
 - 2) The Grantee fails to begin construction by May 31, 2011;
 - 3) The Grantee fails to begin expenditure of Grant funds by June 30, 2011;
 - 4) The Grantee does not meet the conditions and obligations specified under this Grant Agreement including a material failure to comply with the Project Schedule which is beyond the reasonable control of the Grantee; or
 - 5) The Government determines that termination is in the public interest.
- b) Funds available under this Grant Agreement must be obligated on or before September 30, 2011, but once obligated, are available for liquidation and adjustment through September 30, 2016, the "Grant Termination Date." Unless otherwise specified, this Grant Agreement shall terminate on the Grant Termination Date.
- c) Either party (Government or the Grantee) may seek to amend or modify this Grant Agreement prior to the Grant Termination Date by written notice (formal letter) to the other party and in accordance with 49 C.F.R. parts 18.43 and 18.44. The Grant

Agreement will be amended or modified only on mutual written agreement by both parties.

SECTION 10. AWARD AND EXECUTION OF GRANT AGREEMENT

There are four (4) identical counterparts of this Grant Agreement in typewritten hard copy; each counterpart is to be fully signed in writing by the parties and each counterpart is deemed to be an original having identical legal effect. When signed and dated by the authorized official of the Government, this instrument will constitute an Award. Upon full Execution of this Grant Agreement by the Grantee, the effective date will be the date the Government awarded funding under this Grant Agreement as set forth below.

EXECUTION BY Government

The Government executes this Grant Agreement in accordance with Public Law 111-5, and in accordance with the above conditions and assurances.

Executed this _____ day of _____, 2010.

Signature of Government's Authorized Representative

Title

EXECUTION BY Grantee

The Grantee agrees to accomplish each element of the project in compliance with the terms and conditions contained herein.

Executed this _____ day of _____, 2010.

State of Tennessee Department of
Transportation:

Gerald F. Nicely, Commissioner

ATTACHMENT A: STATEMENT OF WORK

The Crescent Corridor Intermodal Freight Program is a public-private partnership that envisions the continued development of a faster, more efficient rail intermodal route from the Gulf Coast to the mid-Atlantic. A fully-developed program will provide improved domestic rail intermodal service between the Northeast and South for terminal host cities within the corridor, including Memphis. Connecting this 2500-mile network of existing rail lines with regional intermodal freight distribution centers will strengthen domestic and international distribution in the Southeast, Gulf Coast, and Mid-Atlantic markets.

The full development of the Crescent Corridor will produce substantial public benefits, including job creation, improved economic competitiveness and energy efficiency, safer roads, and an enhanced quality of life. In addition, public highways will experience less congestion.

Rail route enhancements and intermodal terminal development are required to provide the service necessary to create these public benefits. The initial projects in the Crescent Corridor Intermodal Freight Program include the construction or improvement of intermodal terminals, including the construction of one in the Memphis region.

The Memphis Regional Intermodal Facility (MRIMF) will be built immediately west of Rossville, in Fayette County, TN, approximately 27 miles east of downtown Memphis on the NS mainline running between Memphis and Chattanooga, TN. It will occupy 380 acres of secured right-of-way. General components of the initial phase of the expandable facility capable of handling 200,000 container lifts from or to a railcar will include (subject to the completion of detailed engineering plans):

- Three pad tracks, each 4050 ft. long
- Four support tracks totaling approximately 17,000 ft
- 999 paved trailer parking spaces
- A double lead track connecting the facility to the Norfolk Southern main line
- A loop track to allow trains to reverse direction after entering the facility
- Ancillary modular buildings and operating equipment.

The initial phase facility will accommodate 200,000 annual lifts. However, Norfolk Southern has acquired sufficient property rights to expand the facility if additional public funding sources are identified or if market conditions warrant a privately financed expansion. Grading for a 327,000 lift facility will be performed during the initial phase construction, and Norfolk Southern is proceeding with environmental documents and permits for a facility with this capacity. Additional capacity expansions to the initial 200,000 lift facility will be less expensive on a per lift basis and will be much easier and faster to accomplish because all property will have been acquired, the grading performed, and many of the necessary permits for the work will already be secured.

Norfolk Southern entered into a site development agreement dated December 30, 2009 (the "Development Agreement") with William C. Adair Development Company LLC ("Adair"), whereby Adair agreed to clear, grade and fill the site, to construct an access road, and to perform other duties as detailed in the Development Agreement (the "Adair Work"). The Adair Work is outside the scope of the Project for purposes of this Grant Agreement.

ATTACHMENT B: GRANT ASSURANCES

**OFFICE OF THE SECRETARY
DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION**

**TITLE VI ASSURANCE
(Implementing Title VI of the Civil Rights Act of 1964, as amended)**

**ASSURANCE CONCERNING NONDISCRIMINATION IN FEDERALLY-
ASSISTED PROGRAMS
AND ACTIVITIES RECEIVING OR BENEFITING FROM
FEDERAL FINANCIAL ASSISTANCE**

(Implementing the Rehabilitation Act of 1973, as amended, and the Americans With Disabilities Act, as amended)

49 C.F.R. Parts 21, 25, 27, 37 and 38

State of Tennessee Department of Transportation (the Grantee) HEREBY AGREES THAT,

- I. As a condition to receiving any Federal financial assistance from the Department of Transportation, it will comply: with Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. 2000d--42 U.S.C. 2000d-4; all requirements imposed by or pursuant to: Title 49, Code of Federal Regulations, Part 21, Nondiscrimination in Federally-Assisted Programs of the Department of Transportation--Effectuation of Title VI of the Civil Rights Act of 1964; and other pertinent directives so that no person in the United States shall, on the grounds of race, color, national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which the Grantee receives Federal financial assistance from the Department of Transportation. This assurance is required by Title 49, Code of Federal Regulations, Section 21.7(a).

- II. As a condition to receiving any Federal financial assistance from the Department of Transportation, it will comply with: Title IX of the Education Amendments of 1972, as amended, 20 U.S.C. 1681 through 1683, and 1685 through 1687, and U.S. DOT regulations, "Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance," 49 C.F.R. part 25, which prohibit discrimination on the basis of sex.

III. As a condition to receiving any Federal financial assistance from the Department of Transportation, it will comply with: the Age Discrimination Act of 1975, as amended (42 U.S.C. 6101 et seq.), the Drug Abuse Office and Treatment Act of 1972, as amended (21 U.S.C. 1101 et seq.), the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, as amended (42 U.S.C. 4541 et seq.); and any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance was made; and the requirements of any other nondiscrimination statute(s) which may apply to the Grantee.

IV. As a condition to receiving any Federal financial assistance from the Department of Transportation, it will comply with: section 504 of the Rehabilitation Act of 1973, as amended, (29 U.S.C. 794); and all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Part 27, Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance; and Part 37, Transportation Services for Individuals With Disabilities; and Part 38, Americans With Disabilities Act – Accessibility Specifications for Transportation Vehicles; and other pertinent directives so that no otherwise qualified person with a disability, be excluded from participation in, be denied the benefits of, be discriminated against by reason of such handicap, or otherwise be subjected to discrimination under any program for which the Grantee receives Federal financial assistance from the Department of Transportation. This assurance is required by Title 49, Code of Federal Regulations, Section 27.9.

- The Grantee will promptly take any measures necessary to effectuate this Grant Agreement. The Grantee further agrees that it shall take reasonable actions to guarantee that it, its contractors and subcontractors subject to the Department of Transportation regulations cited above, transferees, and successors in interest will comply with all requirements imposed or pursuant to the statutes and Department of Transportation regulations cited above, other pertinent directives, and the above assurances.
- These assurances obligate the Grantee for the period during which Federal financial assistance is extended. The Grantee agrees that the United States has a right to seek judicial enforcement with regard to any matter arising under the statutes and Department of Transportation regulations cited above, other pertinent directives, and the above assurances.
- These assurances are given for the purpose of obtaining Federal grant assistance under the TIGER Discretionary Grant Program and are binding on the Grantee, contractors, subcontractors, transferees, successors in interest, and all other

participants receiving Federal grant assistance in the TIGER Discretionary Grant Program. The person or persons whose signatures appear below are authorized to sign this Grant Agreement on behalf of the Grantee.

- In addition to these assurances, the Grantee agrees to file: a summary of all complaints filed against it within the past year that allege violation(s) by the Recipient of Title VI of the Civil Rights Act of 1964, as amended, section 504 of the Rehabilitation Act of 1973, as amended; or a statement that there have been no complaints filed against it. The summary should include the date the complaint was filed, the nature of the complaint, the status or outcome of the complaint (*i.e.*, whether it is still pending or how it was resolved).

State of Tennessee Department of
Transportation:

Gerald F. Nicely, Commissioner Date

**UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
OFFICE OF THE SECRETARY**

DISCLOSURE OF LOBBYING ACTIVITIES

Certification for Contracts, Grants, Loans,
and Grant Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any grant agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or grant agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or grant agreement, the undersigned shall complete and submit Standard Form-LLL (Rev. 7-97), "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans and grant agreements) and that all subgrantees shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

State of Tennessee Department of
Transportation:

Gerald F. Nicely, Commissioner Date

**UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
OFFICE OF THE SECRETARY**

**CERTIFICATION REGARDING DRUG-FREE WORKPLACE
REQUIREMENTS
IN THE PERFORMANCE OF THE TIGER DISCRETIONARY GRANT
PROGRAM**

A. The Grantee certifies that it will, or will continue, to provide a drug-free workplace by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the Grantee's workplace, and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing an ongoing drug-free awareness program to inform employees about--
 - (1) The dangers of drug abuse in the workplace;
 - (2) The Grantee's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of work supported by the grant award be given a copy of the statement required by paragraph (a);
- (d) Notifying the employee in the statement required by paragraph (a) that, as a condition of employment supported by the grant award, the employee will--
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer in writing of his or her conviction for a violation of a criminal drug statute occurring in the workplace no later than five calendar days after such conviction;
- (e) Notifying the agency in writing, within ten calendar days after receiving notice under paragraph (d)(2) from an employee or otherwise receiving actual notice of conviction. Employers of convicted employees must provide notice, including position title, to the Department. Notice shall include the order number of the grant award;
- (f) Taking one of the following actions, within 30 days of receiving notice under paragraph (d)(2), with respect to any employee who is so convicted--
 - (1) Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation Act of 1973, as amended, or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State or local health, law enforcement, or other appropriate agency;

(g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e) and (f).

B. The Grantee *may*, but is not required to, insert in the space provided below the site for the performance of work done in connection with the specific grant.

Places of Performance (street address, city, county, state, zip code). For the provision of services pursuant to the grant award, workplaces include outstations, maintenance sites, headquarters office locations, training sites and any other worksites where work is performed that are supported by the grant award.

Check [] if there are workplaces on file that are not identified here.

State of Tennessee Department of
Transportation:

Gerald F. Nicely, Commissioner Date

TIGER DISCRETIONARY GRANT PROGRAM

GRANT ASSURANCES

Certification. The Grantee hereby assures and certifies, with respect to this grant, that it will comply with all applicable Federal laws, regulations, executive orders, policies, guidelines, and requirements as they relate to the application, acceptance, and use of Federal funds for this project including but not limited to the following:

General Federal Legislation

- a. Davis-Bacon Act - 40 U.S.C. 3141, et seq.
- b. Federal Fair Labor Standards Act - 29 U.S.C. 201, et seq.
- c. Hatch Act - 5 U.S.C. 1501, et seq.
- d. Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 Title - 42 U.S.C. 4601, et seq.
- e. National Historic Preservation Act of 1966 - Section 106 - 16 U.S.C. 470f
- f. Archeological and Historic Preservation Act of 1974 - 16 U.S.C. 469a through 469c.
- g. Native American Graves Protection and Repatriation Act - 25 U.S.C. 3001, et seq.
- h. Clean Air Act, P.L. 90-148, as amended
- i. Section 404 of the Clean Water Act, as amended 33 U.S.C. 1251, et seq.
- j. Section 7 of the Endangered Species Act, P.L. 93-205, as amended.
- k. Coastal Zone Management Act, P.L. 92-583, as amended.
- l. Flood Disaster Protection Act of 1973 - Section 102(a) - 42 U.S.C. 4012a
- m. Age Discrimination Act of 1975 - 42 U.S.C. 6101, et seq.
- n. American Indian Religious Freedom Act, P.L. 95-341, as amended
- o. Drug Abuse Office and Treatment Act of 1972, as amended, 21 U.S.C. 1101, et seq.
- p. The Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970, P.L. 91-616, as amended - 42 U.S.C. 4541, et seq.
- q. Sections 523 and 527 of the Public Health Service Act of 1912, as amended, 42U.S.C. 290dd through 290dd-2
- r. Architectural Barriers Act of 1968 - 42 U.S.C. 4151, et seq.
- s. Power Plant and Industrial Fuel Use Act of 1978, P.L. 100-42 - Section 403 - 42 U.S.C.8373
- t. Contract Work Hours and Safety Standards Act - 40 U.S.C. 3701, et seq.
- u. Copeland Anti-kickback Act, as amended - 18 U.S.C. 874 and 40 U.S.C. 3145
- v. National Environmental Policy Act of 1969 - 42 U.S.C. 4321, et seq.
- w. Wild and Scenic Rivers Act, P.L. 90-542, as amended – 16 U.S.C. 1271, et seq.
- x. Federal Water Pollution Control Act, as amended - 33 U.S.C. 1251-1376
- y. Single Audit Act of 1984 - 31 U.S.C. 7501, et seq.
- z. Americans with Disabilities Act of 1990 - 42 U.S.C. 12101, et seq.
- aa. Title IX of the Education Amendments of 1972, as amended - 20 U.S.C. 1681 through 1683, and 1685 through 1687
- bb. Section 504 of the Rehabilitation Act of 1973, as amended - 29 U.S.C. 794

- cc. American Recovery and Reinvestment Act of 2009 – P.L. 111-5
- dd. Title VI of the Civil Rights Act of 1964 - 42 U.S.C. 2000d *et seq.*
- ee. Title IX of the Federal Property and Administrative Services Act of 1949 - 40 U.S.C. 541, *et seq.*
- ff. Limitation on Use of Appropriated Funds to Influence Certain Federal Contracting and Financial Transactions – 31 U.S.C. 1352
- gg. Freedom of Information Act - 5 U.S.C. 552, as amended
- hh. Magnuson-Stevens Fishery Conservation and Management Act – 16 U.S.C. 1855
- ii. Farmlands Protection Policy Act of 1981 – 7 U.S.C. 4201
- jj. Noise Control Act of 1972 – 42 U.S.C. 4901, *et seq.*
- kk. Fish and Wildlife Coordination Act of 1956 – 16 U.S.C. 661
- ll. Section 9 of the Rivers and Harbors Act and General Bridge Act of 1946 - 33 U.S.C. 401
- mm. Section 4(f) of the Department of Transportation Act of 1966, 49 U.S.C. 303 and 23 U.S.C. 138
- nn. Resource Conservation and Recovery Act of 1976 (RCRA), as amended -- 42 U.S.C. 6901, *et seq.*
- oo. Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), as amended --42 U.S.C. 9601-9657
- pp. Safe Drinking Water Act -- 42 U.S.C. 300F-300J-6
- qq. Wilderness Act -- 16 U.S.C. 1131-1136
- rr. Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 -- 42 U.S.C. 6901, *et seq.*
- ss. Migratory Bird Treaty Act 16 U.S.C. 760c-760g

Executive Orders

- a. Executive Order 11246 - Equal Employment Opportunity
- b. Executive Order 11990 - Protection of Wetlands
- c. Executive Order 11988 – Floodplain Management
- d. Executive Order 12372 - Intergovernmental Review of Federal Programs
- e. Executive Order 12549 – Debarment and Suspension
- f. Executive Order 12898 – Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations
- g. Executive Order 13166 – Improving Access to Services for Persons With Limited English Proficiency

General Federal Regulations

- a. Interim Final Guidance on Buy American – 74 FR 18449 (April 23, 2009), 2 C.F.R. Part 176
- b. Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and other Non-Profit Organizations – 2 C.F.R. Part 215
- c. Cost Principles for State and Local Governments – 2 C.F.R. Part 225
- d. Non-procurement Suspension and Debarment – 2 C.F.R. Part 1200

- e. Investigative and Enforcement Procedures - 14 C.F.R. Part 13
- f. Procedures for predetermination of wage rates - 29 C.F.R. Part 1
- g. Contractors and subcontractors on public building or public work financed in whole or part by loans or grants from the United States - 29 C.F.R. Part 3
- h. Labor standards provisions applicable to contracts governing federally financed and assisted construction (also labor standards provisions applicable to non-construction contracts subject to the Contract Work Hours and Safety Standards Act) - 29 C.F.R. Part 5
- i. Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor (Federal and federally assisted contracting requirements) - 41 C.F.R. Parts 60, et seq.
- j. Contractor Qualifications - 48 C.F.R. Part 9
- k. Uniform administrative requirements for grants and cooperative agreements to state and local governments - 49 C.F.R. Part 18
- l. New Restrictions on Lobbying – 49 C.F.R. Part 20
- m. Nondiscrimination in Federally Assisted Programs of the Department of Transportation –Effectuation of Title VI of the Civil Rights Act of 1964 – 49 C.F.R. Part 21
- n. Uniform relocation assistance and real property acquisition for Federal and Federally assisted programs - 49 C.F.R. Part 24
- o. Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance - 49 C.F.R. Part 25
- p. Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs – 49 C.F.R. Part 26
- q. Nondiscrimination on the Basis of Handicap in Programs and Activities Receiving or Benefiting from Federal Financial Assistance - 49 C.F.R. Part 27
- r. Enforcement of Nondiscrimination on the Basis of Handicap in Programs or Activities Conducted by the Department of Transportation – 49 C.F.R. Part 28
- s. Denial of public works contracts to suppliers of goods and services of countries that deny procurement market access to U.S. contractors - 49 C.F.R. Part 30
- t. Governmentwide Requirements for Drug-Free Workplace (Financial Assistance) – 49 C.F.R. Part 32
- u. DOT's implementing ADA regulations, including the ADA Accessibility Guidelines in Part 37, Appendix A - 49 C.F.R. Parts 37 and 38
- v. Procedures for Transportation Workplace Drug and Alcohol Testing Programs – 49 C.F.R. Part 40
- w. Permitting Requirements under the National Pollutant Discharge Elimination System – 40 C.F.R. Part 122

Office of Management and Budget Circulars

- a. A-87 – Cost Principles Applicable to Grants and Contracts with State and Local Governments
- b. A-102 – Grants and Grant Agreements with State and Local Governments
- c. A-133 - Audits of States, Local Governments, and Non-Profit Organizations

- d. Any other applicable OMB Circular based upon the specific TIGER Grant Recipient

Highway Federal Legislation

- a. Brooks Act (for FHWA projects, this replaces Title IX of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 541, et seq.) - 40 U.S.C. 1101-1104)
- b. Highway Design and Construction Standards, 23 U.S.C. 109
- c. Planning, 23 U.S.C. 134 and 135 (except for projects that are not regionally significant that do not receive funding under Title 23 or Chapter 53 of Title 49)
- d. Tolls, 23 U.S.C. 301 (to the extent the recipient wishes to toll an existing free facility that has received Title 23 funds in the past)
- e. Size, Weight, and Length Limitations - 23 U.S.C. 127, 49 U.S.C. 31101 et seq.

Highway Federal Regulations

- a. Planning 23 – C.F.R. Part 450 (except for projects that are not regionally significant that do not receive funding under Title 23 or Chapter 53 of Title 49)
- b. National Highway System Design Standards – 23 C.F.R. Part 625
- c. Manual on Uniform Traffic Control Devices – 23 C.F.R. Part 655
- d. Environmental Impact and Related Procedures – 23 C.F.R. Part 771
- e. Procedures Implementing Section 4(f) of the Department of Transportation Act – 23 C.F.R. Part 774

Specific assurances required to be included in grant agreements by any of the above laws, regulations, or circulars are hereby incorporated by reference into the Grant Agreement.

Responsibility and Authority of the Grantee.

1. The Grantee has the legal authority to apply for the grant, and to finance and carry out the proposed project; that a resolution, motion or similar action has been duly adopted or passed as an official act of the applicant's governing body authorizing the filing of the application, including all understandings and assurances contained therein, and directing and authorizing the person identified as the official representative of the applicant to act in connection with the application and to provide such additional information as may be required.

2. Funds Availability. It has sufficient funds available for that portion of the project costs that are not to be paid by the United States. It has sufficient funds available to assure operation and maintenance of items funded under the Grant Agreement that it will own or control.

3. Preserving Rights and Powers.

It will not take or permit any action that would operate to deprive it of any of the rights and powers necessary to perform any or all of the terms, conditions, and assurances in the Grant Agreement without the written approval of the DOT, and will act promptly to acquire, extinguish, or modify any outstanding rights or claims of right of others that would interfere

with such performance by the Grantee. The Grantee agrees that this will be done in a manner acceptable to the DOT.

4. Accounting System, Audit, and Record Keeping Requirements.

a. The Grantee agrees to keep all project accounts and records that fully disclose the amount and disposition by the Grantee of the proceeds of the grant, the total cost of the project in connection with which the grant is given or used, and the amount or nature of that portion of the cost of the project supplied by other sources, and such other financial records pertinent to the project. The accounts and records shall be kept in accordance with an accounting system that will facilitate an effective audit in accordance with the Single Audit Act of 1984, as amended (31 U.S.C. 7501-7507).

b. The Grantee agrees to make available to the DOT and the Comptroller General of the United States, or any of their duly authorized representatives, for the purpose of audit and examination, any books, documents, papers, and records of the Grantee that are pertinent to the grant. The DOT may require that a Grantee conduct an appropriate audit. In any case in which an independent audit is made of the accounts of a Grantee relating to the disposition of the proceeds of a grant or relating to the project in connection with which the grant was given or used, it shall file a certified copy of such audit with the Comptroller General of the United States not later than six (6) months following the close of the fiscal year for which the audit was made.

5. Minimum Wage Rates. It shall include, in all contracts in excess of \$2,000 for work on any projects funded under this Grant Agreement that involve labor, provisions establishing minimum rates of wages, to be predetermined by the Secretary of Labor, in accordance with the Davis-Bacon Act, as amended (40 U.S.C. 3141, et seq.), which contractors shall pay to skilled and unskilled labor, and such minimum rates shall be stated in the invitation for bids and shall be included in proposals or bids for the work.

In addition, in order to incorporate the provisions of Section 1606 of the Recovery Act, which applies Davis-Bacon Act prevailing wage requirements to projects funded directly by or assisted in whole or in part by and through the Federal Government using laborers and mechanics, the Grantee agrees to insert the clauses found in 29 C.F.R. 5.5(a) provided in Attachment B of this Grant Agreement in all Grantee contracts and grants using funds obligated to carry out this Grant Agreement.

6. Engineering and Design Services. It will award each contract or sub-contract for program management, construction management, planning studies, feasibility studies, architectural services, preliminary engineering, design, engineering, surveying, mapping, or related services with respect to the project in the same manner as a contract for architectural and engineering services is negotiated under the Brooks Act (40 U.S.C. 1101-1104) or an equivalent qualifications-based requirement prescribed for or by the Grantee as approved by the Secretary.

7. Foreign Market Restrictions. It will not allow funds provided under this grant to be used to fund any project that uses any product or service of a foreign country during the period in which such foreign country is listed by the United States Trade Representative as denying fair and equitable market opportunities for products and suppliers of the United States in

procurement and construction.

8. Relocation and Real Property Acquisition. (1) It will be guided in acquiring real property, to the greatest extent practicable under State law, by the land acquisition policies in Subpart B of 49 C.F.R. Part 24 and will pay or reimburse property owners for necessary expenses as specified in Subpart B. (2) It will provide a relocation assistance program offering the services described in Subpart C and fair and reasonable relocation payments and assistance to displaced persons as required in Subpart D and E of 49 C.F.R. Part 24. (3) It will make available within a reasonable period of time prior to displacement, comparable replacement dwellings to displaced persons in accordance with Subpart E of 49 C.F.R. Part 24.

State of Tennessee Department of
Transportation:

Gerald F. Nicely, Commissioner Date

OFFICE OF THE SECRETARY OF TRANSPORTATION

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS -- PRIMARY COVERED TRANSACTIONS

2 C.F.R. Part 1200, 49 C.F.R. Part 32

Instructions for Certification

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.
4. The prospective primary participant shall provide immediate written notice to the department or agency to which this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. See Nonprocurement Suspension and Debarment (2 C.F.R. Part 1200) and Government wide Requirements for Drug-Free Workplace Grants (49 C.F.R. Part 32).6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 C.F.R. part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
6. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 C.F.R. part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may

decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Non-procurement Programs.

8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

9. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 C.F.R. part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, and Other Responsibility Matters -- Primary Covered Transactions

(1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency;

(b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and

(d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

(2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

State of Tennessee Department of
Transportation:

Gerald F. Nicely, Commissioner Date

OFFICE OF THE SECRETARY OF TRANSPORTATION
CERTIFICATION REGARDING DEBARMENT, SUSPENSION,
INELIGIBILITY AND VOLUNTARY EXCLUSION -- LOWER TIER COVERED
TRANSACTIONS

Instructions for Certification

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to whom this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or had become erroneous by reason of changed circumstances.
4. The terms covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded, as used in this clause, have the meaning set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is proposed for debarment under 48 C.F.R. part 9, subpart 9.4, debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion -- Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not proposed for debarment under 48 C.F.R. part 9, subpart 9.4, debarred, suspended, ineligible, or voluntarily excluded from covered transactions, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the List of Parties Excluded from Federal Procurement and Non-procurement Programs.

8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is proposed for debarment under 48 C.F.R. part 9, subpart 9.4, suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

Certification Regarding Debarment, Suspension, Ineligibility an Voluntary Exclusion -- Lower Tier Covered Transactions

(1) The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

(2) Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

State of Tennessee Department of
Transportation:

Gerald F. Nicely, Commissioner Date

ATTACHMENT C

RECOVERY ACT REQUIREMENTS AND CONTRACT CLAUSES

DAVIS-BACON WAGE RATE REQUIREMENTS AND CONTRACT CLAUSES

- a) Section 1606 of the Recovery Act requires that all laborers and mechanics employed by contractors and subcontractors on projects funded directly by or assisted in whole or in part by and through the Federal Government pursuant to the Recovery Act shall be paid wages at rates not less than those prevailing on projects of a character similar in the locality as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code.
- b) Pursuant to Reorganization Plan No. 14 and the Copeland Act, 40 U.S.C. 3145, the Department of Labor has issued regulations at 29 C.F.R. parts 1, 3, and 5 to implement the Davis-Bacon and related Acts. Regulations in 29 C.F.R. 5.5 instruct agencies concerning application of the standard Davis-Bacon contract clauses set forth in that section. Federal agencies providing grants, cooperative agreements, and loans under the Recovery Act shall ensure that the standard Davis-Bacon contract clauses found in 29 C.F.R. 5.5(a) are incorporated in any resultant covered contracts that are in excess of \$2,000 for construction, alteration or repair (including painting and decorating).
- c) Federal agencies providing grants, grant agreements, and loans under the Recovery Act shall ensure that the standard Davis-Bacon contract clauses found in 29 C.F.R. 5.5(a) are incorporated in any resultant covered contracts that are in excess of \$2,000 for construction, alteration or repair (including painting and decorating).
- d) For additional guidance on the wage rate requirements of section 1606, contact your awarding agency. Recipients of grants, grant agreements and loans should direct their initial inquiries concerning the application of Davis-Bacon requirements to a particular federally assisted project to the Federal agency funding the project. The Secretary of Labor retains final coverage authority under Reorganization Plan Number 14.

SINGLE AUDIT INFORMATION FOR RECIPIENTS OF RECOVERY ACT FUNDS REQUIREMENTS

- (a) To maximize the transparency and accountability of funds authorized under the American Recovery and Reinvestment Act of 2009 (Pub. L. 111–5) (Recovery Act) as required by Congress and in accordance with 2 C.F.R. 215.21 “Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and other Non-Profit Organizations” and OMB Circular A–102 “Grants and Cooperative Agreements with State and Local Governments.” Common Rules provisions, recipients agree to maintain records that identify adequately the source and application of Recovery Act funds. OMB Circular A–102 is available at <http://www.whitehouse.gov/omb/circulars/a102/a102.html>.
- (b) For recipients covered by the Single Audit Act Amendments of 1996 and OMB Circular A–133, “Audits of States, Local Governments, and Non-Profit Organizations,” recipients

agree to separately identify the expenditures for Federal awards under the Recovery Act on the Schedule of Expenditures of Federal Awards (SEFA) and the Data Collection Form (SF-SAC) required by OMB Circular A-133. OMB Circular A-133 is available at <http://www.whitehouse.gov/omb/circulars/a133/a133.html>. This shall be accomplished by identifying expenditures for Federal awards made under the Recovery Act separately on the SEFA, and as separate rows under Item 9 of Part III on the SF-SAC by CFDA number, and inclusion of the prefix "ARRA-" in identifying the name of the Federal program on the SEFA and as the first characters in Item 9d of Part III on the SF-SAC.

(c) Recipients agree to separately identify to each subrecipient, and document at the time of subaward and at the time of disbursement of funds, the Federal award number, CFDA number, and amount of Recovery Act funds. When a recipient awards Recovery Act funds for an existing program, the information furnished to subrecipients shall distinguish the subawards of incremental Recovery Act funds from regular subawards under the existing program.

(d) Recipients agree to require their subrecipients to include on their SEFA information to specifically identify Recovery Act funding similar to the requirements for the recipient SEFA described above. This information is needed to allow the recipient to properly monitor subrecipient expenditure of ARRA funds as well as oversight by the Federal awarding agencies, Offices of Inspector General and the Government Accountability Office.

ATTACHMENT D
QUARTERLY PROJECT PROGRESS REPORTS
FORMAT AND CONTENT

The Paperwork Reduction Act approval is still pending. At this time, Attachment D is included for informational purposes. Grantees are requested to retain data for potential future reporting to ensure that DOT records are complete (assuming clearance is granted).

The purpose of the quarterly progress reports is to ensure that the project budget and schedule will be maintained to the maximum extent possible, that the project will be completed with the highest degree of quality, and that compliance with Federal regulations will be met.

The Grantee should develop a project reporting and tracking system to collect, assess and maintain project status information and data that is timely, independent, and accurate. This system should provide current information on project prosecution, progress, changes, and issues. This information should be used to identify trends and forecast project performance and to identify and proactively address challenges to eliminate major project surprises.

The need to continuously and accurately report cost increases; schedule changes; deficient quality items; and the causes, impacts, and proposed measures to mitigate these issues is paramount to effectively managing, administering, and protecting the public investment in the project. Any apparent reporting deficiencies or questionable data should be completely resolved. Ultimately, the Grantee and the Government must be fully aware of the complete status of the project, and therefore be in a position to take appropriate action if necessary.

A quarterly cost, schedule, and status report will be produced by the Grantee, and a quarterly status meeting will be held with the Grantee, the Government and other applicable agencies in attendance. The quarterly status meetings should discuss the project costs, schedules, quality issues, compliance with Federal requirements, and other status items in sufficient enough detail to allow all involved parties to be fully aware of the significant status issues and actions planned to mitigate any adverse impacts. In addition, significant issues occurring between status meetings must be communicated immediately without waiting for the next regularly scheduled meeting, with any highly significant or sensitive issues elevated immediately to the executive leadership.

The following is the required format for the quarterly status reports. At the discretion of the Government, modifications or additions can be made in order to produce a quarterly reporting format that will most effectively serve both the Grantee and the Government. It is recognized that some projects will have a more extensive quarterly status than others. In the case of smaller projects, the content of the quarterly reports will be streamlined and project status meetings will be held on a less-frequent basis.

Please note that the initial quarterly progress report should include a detailed description, and where appropriate, drawings, of the items funded.

1. Executive Summary. The executive summary should be a clear and concise summary of the current status of the project, including any major issues that have an impact on the project's scope, budget, schedule, quality, or safety. It may be done in a bulleted format. The following summary information is an example of items that should be covered in the executive summary section:

- Current total project cost (forecast) vs. latest budget vs. baseline budget. Include an explanation of the reasons for any deviations from the approved budget.
- Current overall project completion percentage vs. latest plan percentage.
- Any delays or exposures to milestone and final completion dates. Include an explanation of the reasons for the delays and exposures.
- A summary of the projected and actual dates for notices to proceed for significant contracts, start of construction, start of expenditure of TIGER Discretionary Grant funds, and project completion date. Include an explanation of the reasons for any discrepancies from the corresponding project milestone dates included in the Grant Agreement.
- Any Federal obligations and/or TIFIA disbursements occurring during the month versus planned obligations or disbursements.
- Any significant contracts advertised, awarded, or completed.
- Any significant scope of work changes.
- Any significant items identified as having deficient quality.
- Any significant safety issues.
- Any significant Federal issues such as environmental compliance, Buy America/Buy American (whichever is applicable), Davis Bacon Act Prevailing Wage requirements, etc.

2. Project Activities and Deliverables. The purpose of this section is to: (1) highlight the project activities and deliverables occurring during the previous quarter (reporting period), and (2) define the activities and deliverables planned for the next two reporting periods. Activities and deliverables to be reported on should include meetings, audits and other reviews, design packages submitted, advertisements, awards, construction submittals, construction completion milestones, submittals related to Recovery Act requirements, media or Congressional inquiries, value engineering/constructability

reviews, and other items of significance. The two-period “look ahead schedule” will enable the Government to accommodate any activities requiring input or assistance.

3. Action Items/Outstanding Issues. This section should draw attention to, and track the progress of, highly significant or sensitive issues requiring action and direction in order to resolve. In general, issues and administrative requirements that could have a significant or adverse impact to the project’s scope, budget, schedule, quality, safety, and/or compliance with Federal requirements should be included. Status, responsible person(s), and due dates should be included for each action item/outstanding issue. Action items requiring action or direction should be included in the quarterly status meeting agenda. The action items/outstanding issues may be dropped from this section upon full implementation of the remedial action, and upon no further monitoring anticipated.

4. Project Schedule. An updated master program schedule reflecting the current status of the program activities should be included in this section. A Gantt (bar) type chart is probably the most appropriate for quarterly reporting purposes, with the ultimate format to be agreed upon between the Grantee and the Government. It is imperative that the master program schedule be integrated, i.e., the individual contract milestones tied to each other, such that any delays occurring in one activity will be reflected throughout the entire program schedule, with a realistic completion date being reported.

Narratives, tables, and/or graphs should accompany the updated master program schedule, basically detailing the current schedule status, delays and potential exposures, and recovery efforts. The following information should also be included:

- Current overall project completion percentage vs. latest plan percentage.
- Completion percentages vs. latest plan percentages for major activities such as right-of-way, major or critical design contracts, major or critical construction contracts, and significant force accounts or task orders. A schedule status description should also be included for each of these major or critical elements.
- Any delays or potential exposures to milestone and final completion dates. The delays and exposures should be quantified, and overall schedule impacts assessed. The reasons for the delays and exposures should be explained, and initiatives being analyzed or implemented in order to recover the schedule should be detailed.

5. Project Cost. An updated cost spreadsheet reflecting the current forecasted cost vs. the latest approved budget vs. the baseline budget should be included in this section. One way to track project cost is to show: (1) Baseline Budget, (2) Latest Approved Budget, (3) Current Forecasted Cost Estimate, (4) Expenditures or Commitments To Date, and (5) Variance between Current Forecasted Cost and Latest Approved Budget. Line items should include all significant cost centers, such as prior costs, right-of-way, preliminary engineering, environmental mitigation, general engineering consultant, section design

contracts, construction administration, utilities, construction packages, force accounts/task orders, wrap-up insurance, construction contingencies, management contingencies, and other contingencies. The line items can be broken-up in enough detail such that specific areas of cost change can be sufficiently tracked and future improvements made to the overall cost estimating methodology. A Program Total line should be included at the bottom of the spreadsheet.

Narratives, tables, and/or graphs should accompany the updated cost spreadsheet, basically detailing the current cost status, reasons for cost deviations, impacts of cost overruns, and efforts to mitigate cost overruns. The following information should be provided:

- Reasons for each line item deviation from the approved budget, impacts resulting from the deviations, and initiatives being analyzed or implemented in order to recover any cost overruns.
- Transfer of costs to and from contingency line items, and reasons supporting the transfers.
- Speculative cost changes that potentially may develop in the future, a quantified dollar range for each potential cost change, and the current status of the speculative change. Also, a comparison analysis to the available contingency amounts should be included, showing that reasonable and sufficient amounts of contingency remain to keep the project within the latest approved budget.
- Detailed cost breakdown of the general engineering consultant (GEC) services (if applicable), including such line items as contract amounts, task orders issued (amounts), balance remaining for tasks, and accrued (billable) costs.
- Federal obligations and/or TIFIA disbursements for the project, compared to planned obligations and disbursements.

6. Project Funding Status. The purpose of this section is to provide a status report on the non-TIGER Discretionary Grant funds necessary to complete the project. This report section should include a status update of any legislative approvals or other actions necessary to provide the non-TIGER Discretionary Grant funds to the project. Such approvals might include legislative authority to charge user fees or set toll rates, or the commitment of local funding revenues to the project. In the event that there is an anticipated or actual project cost increase, the project funding status section should include a report on the anticipated or actual source of funds to cover the cost increase and any significant issues identified with obtaining additional funding.

7. Project Quality. The purpose of this section is to: (1) summarize the Quality Assurance/Quality Control activities during the previous quarter (reporting period), and (2) highlight any significant items identified as being deficient in quality. Deficient items noted should be accompanied by reasons and specifics concerning the deficiencies, and

corrective actions taken or planned. In addition, the agency or firm responsible for the corrective action should be documented. Planned corrective actions should then be included as Action Items/Outstanding Issues.

8. Other Status Reports. The Grantee and the Government may agree that other reports may be beneficial in ensuring that project status issues are fully and openly communicated. Such reports may include the public relations plan, value engineering and constructability review plan, environmental compliance report, and/or compliance with the Buy America/Buy American (whichever is applicable) requirements.

**ATTACHMENT E
PROJECT BUDGET**

TIGER funded work

<i>Description</i>	<i>Estimated cost (millions)</i>
Track installation	\$10.05
Sub-Ballast for Track Bed	\$2.09
Drainage (Facility)	\$2.75
Bridge for Entrance Road	\$1.42
Track Bridges	\$3.32
Utilities (Water & Sewer)	\$0.38
Fencing & Security	\$1.90
Fuel Tanks & Equipment Maintenance Pad	\$0.52
Oil Water Separator	\$0.28
Retaining Wall	\$0.38
Pavement	\$16.41
NS Mechanical Dept Cost	\$0.71
Air System	\$0.24
Train signaling	\$4.17
Modular buildings	\$0.38
Electrical Distribution & Lights	\$3.60
Performance & Payment Bond	\$0.38
Construction Management and Supervision	\$2.37
Communication Facilities	\$0.85
Landscaping	\$0.28
<i>TOTAL</i>	<i>\$52.50</i>

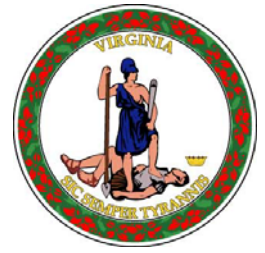
CMAQ funded work

<i>Description</i>	<i>Estimated Cost (millions)</i>
AGS building	\$1.20
Automatic Gate System	\$2.30
SR 57 overpass	\$4.80
Lift Machines	\$5.90
<i>CMAQ TOTAL</i>	<i>\$14.20</i>

**ATTACHMENT F
PROJECT SCHEDULE**

ACTIVITY	Estimated Start	Estimated Complete
• NEPA	3/1/09	12/10/10
• Environmental Permits	1/4/10	12/31/10
• Design	4/1/09	12/23/10
• Construction bid process	01/10/11	3/25/11
• Contract award	3/28/11	4/22/11
• Mobilization	4/25/11	4/29/11
• Initial erosion control BMP's	1/04/11	4/30/11
• Clearing	1/18/11	5/31/11
• Grading	1/31/11	12/31/11
• Drainage installation	4/1/11	11/30/11
• Utilities	6/1/11	7/31/12
• Buildings	8/1/11	8/31/12
• Track work	7/1/11	6/30/12
• Lighting	4/1/12	8/31/12
• Paving	2/1/12	8/31/12
• Landscaping	10/1/11	12/31/11
• Fencing	7/1/12	9/30/12
• Signal work	3/1/12	9/30/12

ATTACHMENT G
TECHNICAL APPLICATION



The Crescent Corridor Intermodal Freight Application

Submitted by
The Governor of Pennsylvania, and Supported by the Governors of Tennessee,
Alabama, Mississippi, and Virginia

The Crescent Corridor



Figure N-1 Crescent Corridor Map

**AMERICAN RECOVERY AND REINVESTMENT ACT OF 2009
TRANSPORTATION INVESTMENT GENERATING ECONOMIC RECOVERY
(TIGER) GRANT PROGRAM APPLICATION**

Project Type: Intermodal Rail

Project Description: Four Intermodal Rail Transfer Facilities Rail Route Speed, Signal, Capacity, and Double Stack Improvements.
(See detailed project description data on pages 4 and 5.)

Urban or Rural: Urban/Rural/Industrial

Grant Amount: \$300,000,000

DUNS Numbers: 083320791 – Commonwealth of Pennsylvania
101712388 - Norfolk Southern Corporation

Primary Point of Contact: Deputy Secretary Eric Madden
Pennsylvania Department of Transportation
400 North Street-8th Floor
Harrisburg, PA 17105
emadden@state.pa.us
Phone 717-783-2026

Executive Summary

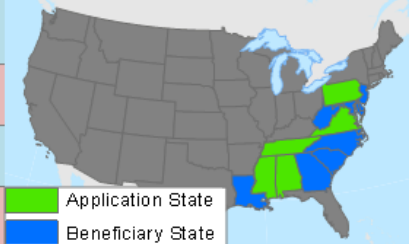
The Crescent Corridor Intermodal Freight Program is one of the single largest additions of new freight transportation capacity in America since the Interstate Highway System.

The Crescent Corridor Intermodal Freight Program centers on the continued development of a faster more efficient rail intermodal route from the Gulf Coast to the Mid-Atlantic. A fully-developed program will provide improved domestic rail intermodal service between the Northeast and Southeast for the terminal host cities of Memphis, Birmingham, Atlanta, Charlotte, Knoxville, Roanoke, Greencastle, Harrisburg, Bethlehem, Philadelphia, and Northern New Jersey. Connecting this 2,500-mile network of existing rail lines with regional intermodal freight distribution centers will strengthen domestic and international distribution in the Southeast, Gulf Coast, and Mid-Atlantic markets.

<i>Trucks Diverted</i>	<i>1.3 Million</i>
<i>Jobs Created</i>	<i>14,700</i>
<i>Value of Crash Avoidance</i>	<i>\$146 Million</i>
<i>CO2 Reduction</i>	<i>1.9 Million Tons</i>
<i>Tax Benefits Created</i>	<i>\$324 Million</i>
<i>Congestion Savings</i>	<i>\$575 Million</i>
<i>Fuel Saved</i>	<i>169 Million Gallons</i>
1 Program – The Crescent Corridor	

Figure N-2 Crescent Corridor Benefits Summary

The 13 states along the Crescent Corridor route include 26 percent of the Crescent Corridor leverages past and ongoing private transportation investments to create a more efficient rail transportation network that benefits nearly a third of the nation’s manufacturing output.

		Crescent Application States	Beneficiary States	GRAND TOTAL	Crescent Application and Beneficiary States
Total Population (000)	2008	34,033	44,803	78,835	
	% of U.S.	11%	15%	26%	
Manufacturing Output (m\$)	2008	625,892	1,029,624	1,655,516	
	% of U.S.	11%	19%	30%	
Miles of Interstate Highways	2007	5,585	5,608	11,193	
	% of U.S.	12%	12%	24%	
Class 1 Route Miles	2008	16,786	17,360	34,146	
	% of U.S.	12%	13%	25%	

Data sources: Population - Woods & Poole; Manufacturing - Global Insight; Highways - FHWA; Railroads - AAR

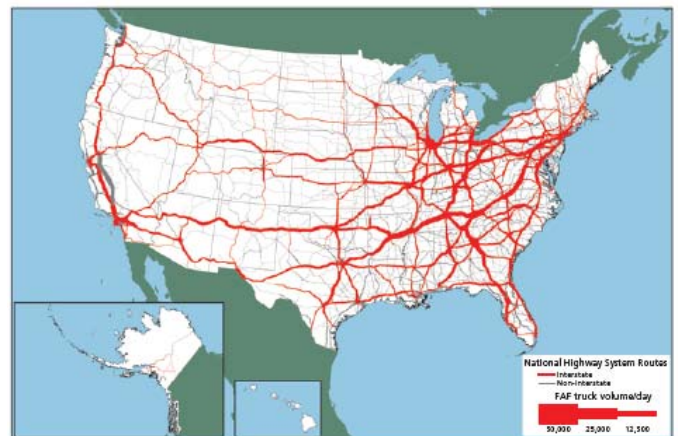
Figure N-3 Crescent Beneficiary States

With The American Recovery and Reinvestment Act, Congress has enacted an ambitious public works program to strengthen America’s infrastructure and economy. Under this plan, Pennsylvania, Virginia, Tennessee, Alabama, and Mississippi have formed a partnership to develop a new vision for freight transportation through implementation of the Crescent Corridor Program.

As proposed by the five partner states, this application for Transportation Investment Generating Economic Recovery (TIGER) grant funding is submitted as a program of independent projects to absorb freight from highway to rail, improve energy efficiency, enhance safety, and provide public benefits such as greater mobility, less congestion, improved air quality, prudent land use, and reduced costs for shippers.

Domestic Freight Growth and the Development of the Crescent Corridor Concept

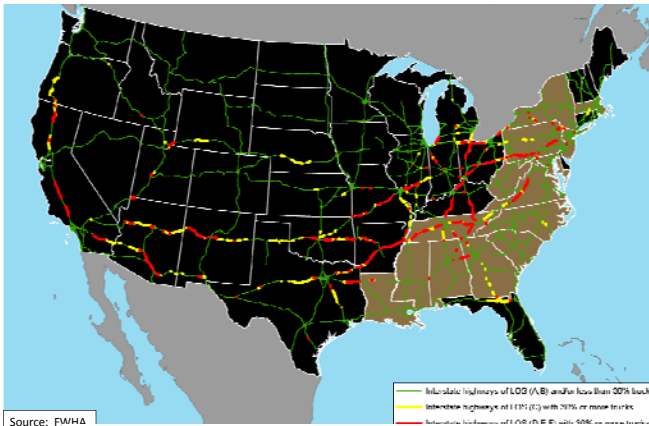
Since 1990, commercial truck miles have grown faster than any other mode on the nation’s highways. Recent surveys by the Federal Highway Administration (FHWA) show that on certain segments of the Interstate system served by the parallel Crescent Corridor routes (including I-20, I-40, I-59, I75, I78, I-81, I-85, I95) trucks now represent 30 percent of vehicular congestion. This traffic is twice the volume for which the system was designed, and it has not been matched by commensurate growth in lane miles. During this same time, commercial vehicle miles driven have increased 105 percent, while lane miles have grown



SOURCE: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, Freight Analysis Framework, version 2.2, 2007.

Figure N-4 National Highway System Routes

By 2020, Traffic on Many Congested Interstate Highways Will Consist of Over 30% Trucks



Source: FHWA

Figure N-5 Truck Density of Congested Interstates

only six percent. This pattern of congestion will grow worse without an innovative solution that meets the needs of shippers and domestic manufacturers. Truck driver shortages, high energy prices, deferred interstate maintenance, safety concerns, and diminishing air quality will continue to plague transportation productivity and reduce the livability of communities.

There are three primary reasons why the development of a robust, modern intermodal network has failed to develop in these markets; undefined market potential, rail system length of haul limitations due to ownership, and capital limitations for rail expansion.



Figure N-6 Market Assessment of Freight 2006

Market Research. Development of the Crescent Corridor Program began in 2003. Initial studies conducted by Virginia and later by Tennessee and Pennsylvania determined that freight diversion along I-81, I-40, and I-95 is possible if well-integrated intermodal investments are made across several states. These studies demonstrated that strategic investments along the Corridor will provide substantial public benefits throughout 13 states. An assessment of freight volumes conducted in 2006 by Norfolk Southern, using private truckload data and publicly available data, found more than 4.1 million single driver truck loads

moving between the Southeast and Northeast, with a length of haul greater than 500 miles. (See Market Potential and Truck Diversion Appendix.) The U.S. Department of Transportation map in Figure N-7 illustrates intermodal freight tonnage by lane. This graph is consistent with state studies that show an absence of significant intermodal rail volumes from the Southeast to the Northeast.

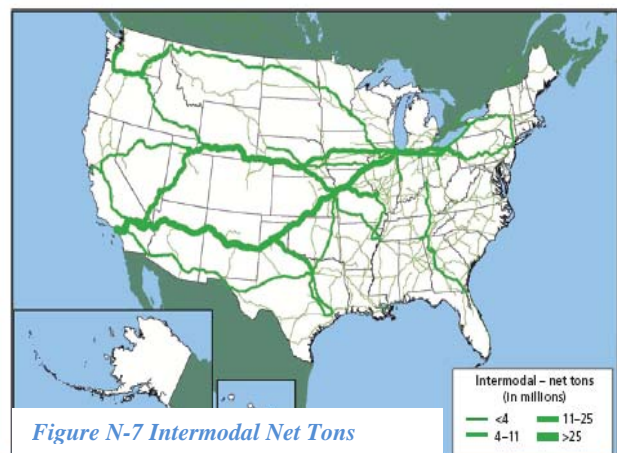
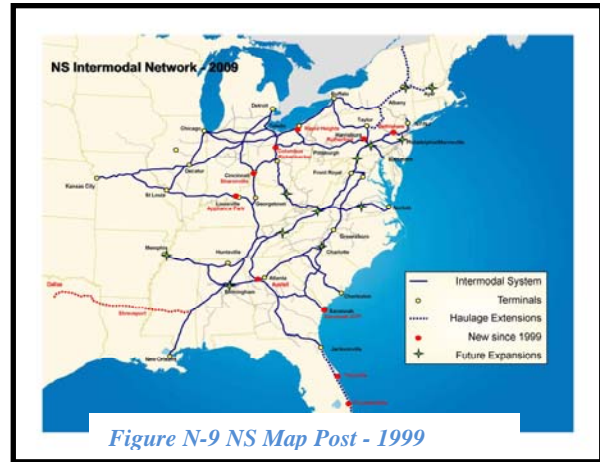
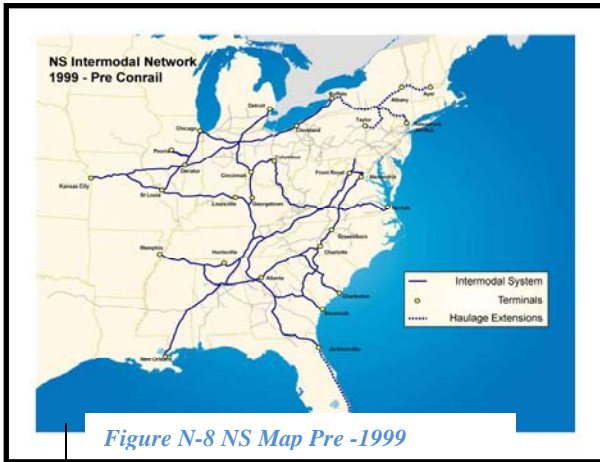


Figure N-7 Intermodal Net Tons

SOURCE: Refocus. Reform. Renew. A New Transportation Approach for America (DOT. Freight Transportation Web page. 2008).

Rail Ownership Changes Strengthen Length of Haul. In 1999, completion of the largest rail transaction ever in the Eastern U.S. resulted in a seamless rail network connecting the Northeast and Southeast for the first time. This rail system integration – a



combination of Norfolk Southern and a large part of Conrail -- motivated states to partner with railroads to strengthen rail market share for long-haul shipments. Now, only a decade later, concerns about congestion, truck driver shortages, environmental impacts, and energy conservation accelerate the need to build an intermodal network capable of meeting the demands of domestic manufacturers and shippers.

Partnerships, Capital Limitations and Corridor Costs. In 2005, Norfolk Southern entered into a strategic partnership with Virginia, West Virginia, Ohio, and the Federal Highway Administration to develop the first public-private partnership of its kind across multiple states. The Heartland Corridor, now nearly complete, required more than \$300 million in investments beginning in Portsmouth, VA, continuing across West Virginia, and ending in Columbus, Ohio. This project is an innovative example of how public-private partnerships leverage private capital and long-term maintenance commitments from private entities to provide innovative solutions to solve long-haul freight challenges. More on this project can be found here: <http://www.epl.fhwa.dot.gov/projects-heartland-corridor.aspx>

In 2007, Virginia invested \$43 million in a public and private partnership to improve parts of the Crescent rail corridor. Since then, the Commonwealth of Virginia has pledged an additional \$24 million for track capacity by 2012, as well as another \$36 million in funding to develop access roads and a new terminal near Roanoke, which will serve both Virginia port traffic and potential Crescent traffic. In 2009, Pennsylvania began work on a state budget that calls for an additional \$45 million investment in a public-private partnership over three years

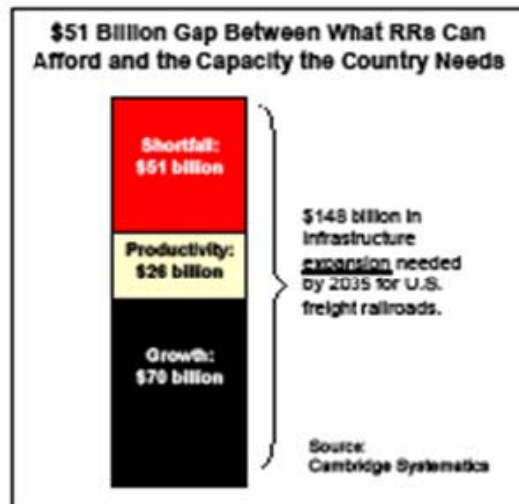


Figure N-10 Rail Investment Forecast

for terminals in Greencastle and Philadelphia. Norfolk Southern has outlined a potential commitment of more than \$264 million in private funding by 2013 to match an anticipated \$300 million TIGER grant and the previously committed \$148 million in state funding. Without these partnerships, the railroad alone cannot accelerate enough capital spending in a three-year time frame to create a corridor of this magnitude – The Crescent Corridor is estimated to cost \$2.5 billion (2008 dollars) for full development by 2020. Shared investment is necessary to provide an intermodal terminal and route network capable of diverting hundreds of thousands of freight loads and creating thousands of desirable jobs. The initial projects will construct five intermodal terminals, build 10 passing tracks, improve 393 miles of track with upgraded rail, and construct 557 individual speed improvements.

TIGER Grant Corridor Project Description.

Details of the following Crescent Corridor components can be found in each state’s appendix.

Intermodal Facility Components of the Crescent Corridor					
<i>Intermodal Facility</i>	<i>Location</i>	<i>Cong. District</i>	<i>Estimated Cost (in millions)</i>	<i>Approx. size (acres)</i>	<i>Description</i>
<i>Memphis Regional Intermodal Facility</i>	<i>Rossville, Fayette County</i>	<i>TN -7, MS - 1</i>	<i>\$112 m</i>	<i>570</i>	<i>Construct a new intermodal facility consisting of pad and support tracks, trailer and container parking areas, lead tracks, and related ancillary buildings and features to perform a projected 327,000 annual lifts.</i>
<i>Birmingham Regional Intermodal Facility</i>	<i>McCalla, Jefferson County</i>	<i>AL - 6, 7</i>	<i>\$112 m</i>	<i>165</i>	<i>Construct a new intermodal facility consisting of pad and support tracks, trailer and container parking areas, lead tracks, and related ancillary buildings and features to perform a projected 165,000 annual lifts.</i>
<i>Franklin County Regional Intermodal Facility</i>	<i>Greencastle, Franklin County</i>	<i>PA - 9</i>	<i>\$95 m</i>	<i>200</i>	<i>Construct a new intermodal facility consisting of pad and support tracks, trailer and container parking areas, lead tracks, and related ancillary buildings and features to perform a projected 85,000 annual lifts.</i>
<i>Harrisburg Intermodal Expansion</i>	<i>Harrisburg, Dauphin County</i>	<i>PA - 17</i>	<i>\$52 m</i>	<i>50</i>	<i>Expand an existing intermodal facility with additional pad and support tracks, trailer and container parking areas, and related ancillary buildings and features to perform a projected 65,000 annual lifts. Also rearrange a portion of an existing rail yard to accommodate the expansion.</i>
<i>Philadelphia Intermodal Expansion</i>	<i>Philadelphia Navy Yard, Philadelphia County</i>	<i>PA - 1</i>	<i>\$11 m</i>	<i>70</i>	<i>Expand an existing intermodal facility with additional pad and support tracks, and trailer and container parking areas to perform a projected 72,000 annual lifts. NOTE: This project to be funded by Pennsylvania and Norfolk Southern.</i>

Route Enhancement Components of the Crescent Corridor			
Route Enhancements	Cong. District	Estimated Cost (in millions)	Description
Mississippi Track Improvements	MS-3	\$44	<ol style="list-style-type: none"> 1. <u>Meridian, MS connection track</u> between Kansas City Southern and Norfolk Southern. Project will improve rail service between the Southeast and the Southwest. Particularly I-20. 2. <u>Toomsuba, MS passing track</u> to create six miles of double track east of Meridian to accommodate expected growth. 3. <u>Statewide Track Upgrades</u> that consist of replacing rail and crossties.
Alabama Track Improvements	AL-3 AL-5	\$15	<ol style="list-style-type: none"> 1. <u>Statewide Speed Improvements</u> are attained by raising curve elevation, stabilizing slopes, and improvement grade crossings, turnouts and bridges. 2. <u>Statewide Track Upgrades</u> that consist of replacing rail and crossties.
Virginia Track Improvements	VA-9 VA-6 VA-10 VA-5	\$88	<ol style="list-style-type: none"> 1. <u>Statewide Speed Improvements</u> are attained by raising curve elevation, stabilizing slopes, and improvement grade crossings, turnouts and bridges. 2. <u>Montgomery Tunnel Clearance</u> to accommodate double stack intermodal trains. 3. <u>Four Passing Tracks</u> to be constructed in to create a location to meet and pass trains. See details in the Virginia Appendix. 4. <u>Statewide Track Upgrades</u> that consist of replacing rail and crossties.
Tennessee Track Improvements	TN-4 TN-3 TN-2	\$62	<ol style="list-style-type: none"> 1. <u>Three Passing Tracks</u> to be constructed in Greene, Bradley, & Fayette county that will be, at least, two miles in length. 2. <u>Upgrade Signal System</u> in Greene, Knox, & Bradley county with up-to-date traffic control technology. 3. <u>Statewide Track Upgrades</u> that consist of replacing rail and crossties.
Pennsylvania Track Improvements	PA-8 PA-15	\$27	<ol style="list-style-type: none"> 1. <u>Statewide Speed Improvements</u> are attained by raising curve elevation, stabilizing slopes, and improvement grade crossings, turnouts and bridges. 2. <u>Statewide Track Upgrades</u> that consist of replacing rail and crossties.

Project Readiness. The Crescent Corridor Program is a series of separate, independent projects in the applicant states. These projects are designed to meet the timelines required under the TIGER program. These specific projects can be built in a fraction of the time it would take to build new highway lane capacity. Each project will be constructed on existing, operating rail lines, or already finalized rights of way acquisition. On all project elements, final engineering design is projected for June 2010. Environmental clearance and environmental permitting are active on each major terminal project, with completion expected in early 2010. Track and speed improvements will be constructed on operating rights of way, making each route improvement eligible for a Categorical Exclusion under 23 CFR 771.177. Construction deadlines are expected to be final in Q2 2012, with additional private and state funds expended on certain track improvements through 2013. Details of these schedules can be found in each state's appendix.

Terminal Development Schedule Summary					
<i>Intermodal Facility</i>	<i>NEPA Completion</i>	<i>NEPA Document</i>	<i>Permits</i>	<i>Design</i>	<i>Completion</i>
<i>Memphis Regional Intermodal Facility</i>	<i>April 2010</i>	<i>EA - Fonsi</i>	<i>May 2010</i>	<i>April 2010</i>	<i>Jan 2012</i>
<i>Birmingham Regional Intermodal Facility</i>	<i>March 2010</i>	<i>EA - Fonsi</i>	<i>May 2010</i>	<i>April 2010</i>	<i>Jan 2012</i>
<i>Franklin County Regional Intermodal Facility</i>	<i>March 2010</i>	<i>EA - Fonsi</i>	<i>May 2010</i>	<i>April 2010</i>	<i>Jan 2012</i>
<i>Harrisburg Regional Intermodal Facility</i>	<i>March 2010</i>	<i>CAT-EX</i>	<i>May 2010</i>	<i>April 2010</i>	<i>Dec 2011</i>

Route Enhancement Development Schedule Summary				
<i>Route Enhancements</i>	<i>NEPA</i>	<i>Permits</i>	<i>Design</i>	<i>Completion</i>
<i>Mississippi</i>	<i>April 2010</i>	<i>May 2010</i>	<i>April 2010</i>	<i>Jan 2012</i>
<i>Alabama</i>	<i>N/A</i>	<i>N/A</i>	<i>April 2010</i>	<i>Jan 2012</i>
<i>Virginia</i>	<i>April 2010</i>	<i>May 2010</i>	<i>May 2010</i>	<i>Jan 2012</i>
<i>Tennessee</i>	<i>N/A</i>	<i>May 2010</i>	<i>April 2010</i>	<i>Jan 2012</i>
<i>Pennsylvania</i>	<i>N/A</i>	<i>N/A</i>	<i>April 2010</i>	<i>Jan 2012</i>

Project Selection Criteria

In accordance with the TIGER Grant requirements, Cambridge Systematics provided a rigorous cost-benefit analysis on the full build Crescent Corridor Intermodal Freight Program, and established the supporting data for most of the TIGER decision criteria. Insight Research Corporation conducted a study for the initial phase of the project, reporting on economic, employment, and tax revenue impact for direct and indirect employment for the facility improvements. Both studies used third-party information provided by USDOT modal agencies, along with publicly available data from other

studies. (See both Executive Reports in the “Additional Supporting Documentation” Appendix.)

State of Good Repair. The Crescent Corridor Program supports partner states and the USDOT in their challenge with the long-term highway maintenance funding shortfall. In 2008, the FHWA strategic plan addressed future funding needs for highways, stating,

“The cost to maintain and improve the nation’s surface transportation systems will exceed current funding at all levels of government.

“Current federal tax receipts will not be sufficient to sustain funding levels authorized in SAFETEA-LU. The total annual investment needed to maintain the condition of highways and bridges over a 20-year period is estimated to be approximately \$79 billion (2004 dollars)”.

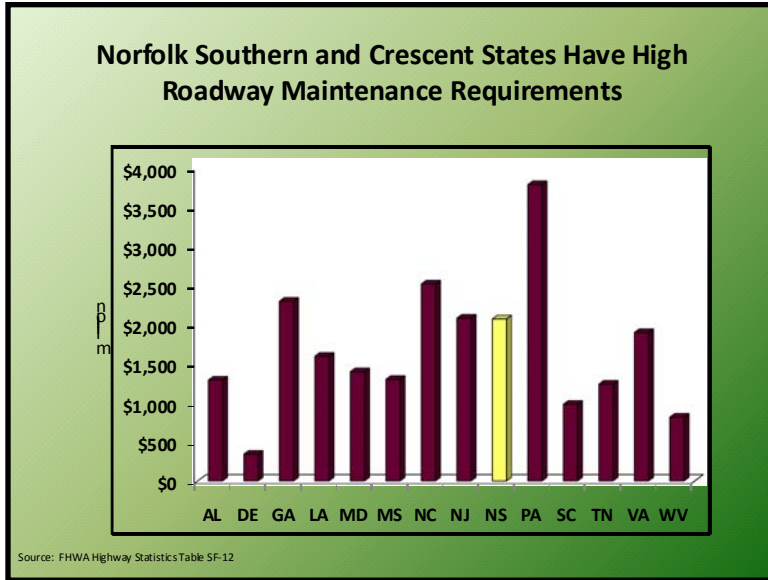


Diagram N-11: 13 State & NS Roadway Maintenance Requirements

The growing deficit between the funding needed to maintain our current system and available resources gives added incentive for our states to support this application. As part of the financial plan, Norfolk Southern has pledged to maintain the individual intermodal facilities, signal systems, rail lines, locomotives, cars, cranes and other equipment needed to continue the operation of the Crescent Corridor network in a state of good repair. This commitment allows applicant states and the federal government to avoid long-term highway maintenance costs. With 150 years of service on these rail routes, Norfolk Southern holds the track record for high standards in rail maintenance and safety. The cost of replicating these existing routes today would easily exceed \$10 billion, but upgrading them to absorb trucks from parallel highways would cost a small fraction – approximately \$620 million, or 24% of the five state total roadway maintenance spending for 2007. (2007 FHWA Highway Statistics, Table SF-12.)

Using the conservative Cambridge Systematics numbers, the public benefits for avoided costs to highway maintenance across the Crescent Corridor amount to \$92 million annually. Norfolk Southern will bear future maintenance of the Crescent Corridor rail system, estimated at \$2.1 billion, as shown in the chart below. This estimate is based on cost per gross ton mile for the fully developed Crescent Corridor through 2029.

	Estimated Maintenance Spending By Year (millions)																		
	Totals	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
GRAND TOTALS	\$2,123	\$24	\$32	\$50	\$72	\$87	\$106	\$120	\$136	\$146	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150	\$150

Economic Competitiveness. The Crescent program will have a positive economic impact on localities by building new facilities and improving intermodal service for underserved major markets. Providing a new option for shippers of intermodal freight in the Northeast and Southeast can lead to decreased costs for producers and receivers and help insulate domestic production from recent trends to source from international markets. In 2002, logistics costs hit a low of 8.7 percent of GDP after a 20-year pattern of steady declines. Since then, these costs have hit a high of 10.1 percent in 2007 and only moderated slightly in 2008 at 9.4 percent of GDP. Domestic manufacturers and shippers with long lengths of haul can be disadvantaged when competing in the global marketplace. New intermodal options can help them retain operations in the domestic market. Length of haul is a competitive disadvantage for the U.S. economy and will be even more harmful if energy prices remain volatile and dependence on highway transport continues apace. It is important to note that 54 percent of the \$618 million in funding in this application will occur in economically distressed areas, as referenced by Table F-8 in the Financial Plan.

Rail intermodal combines multiple modes, (water, rail, and highway) to gain the capacities, efficiencies and environmental benefits of each. The Crescent Corridor will primarily focus on the rail and highway modes. At some facilities (Memphis and Birmingham), the Crescent Corridor will also present the opportunity to handle international export or import traffic through U.S. ports.

Cambridge Systematics made a corridor-wide assessment for long-term outcomes over the 20-year analysis period. For 2011 to 2030, Cambridge estimates \$8.7 billion in long-term economic benefits, including \$560 million in annual logistics savings for shippers and \$480 million in additional annual capital -- found through transportation efficiencies -- that could be made available for industries to expand facilities production or employment.

The Insight Research identified the jobs and regional economic impacts of the initial phase of individual Crescent Corridor intermodal facilities. This analysis examined the direct and indirect benefits associated with intermodal facility development and the attendant economic development associated with integrated logistics facilities and light manufacturing. The initial Crescent Corridor facility

KEY FINDINGS – NSRC CRESCENT CORRIDOR INTERMODAL ACTIVITY	
ECONOMIC IMPACT AT 2020: \$2.128 Billion	
Economic impact is the computed benefit of intermodal service additions to the general economy of the entire Crescent Corridor area, shown as a multiplier and generally referred to as the "economic ripple effect" of new money in the economy. All results are cited in 2009 constant dollars, as follows:	
Annual Economic Impact at 2020	
NSRC Intermodals Only	\$0.234 Billion
At Risk Industrial Expansions	\$0.533 Billion
Potentially Benefited Industrial Expansions	<u>\$1.361 Billion</u>
Total	\$2.128 Billion
Cumulative Economic Impact, 2009 through 2020	
Intermodal Facilities Only	\$3.121 Billion
At Risk Industrial Expansions	\$3.849 Billion
Potentially Benefited Industrial Expansions	<u>\$9.747 Billion</u>
Total	\$16.717 Billion

Figure N-12 Insight Research Economic Impact

improvements are expected to handle 815,000 lifts and employ 1,484 people. Insight Research concluded that new and expanded industrial development potential through 2020 for just the initial facility improvements will be some 50 million square feet of new industrial and warehousing space. A summary for this study is found in the Insight Executive Summary. (See the *Crescent Job Creation and Economic Stimulus – Insight Research Corp Appendix*)

Insight Research also found that the initial facility improvements will create or benefit 47,020 direct and indirect jobs by 2020. This includes direct and indirect employment for both construction and operating phases of the initial six intermodal facility improvements, plus related industrial expansions defined as “At Risk” or “Somewhat Benefited.” Direct employment includes people on-site at one of the intermodal facilities or benefited industries (drivers, on-site contractors, and others whose labor is committed to facility/industry operations), while indirect employment is generated by goods and services purchases by these businesses and their employees. Annual direct payroll by 2020 for all beneficiaries is estimated to exceed \$1.36 billion by 2020.

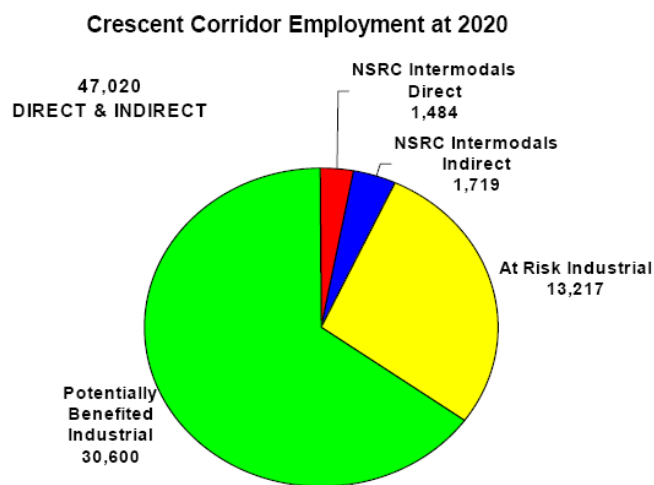


Figure N-13 Insight Employment at 2020

Quality of Crescent Corridor Job Creation. According to the U.S. Department of Labor, Bureau of Labor Statistics (May 2008 National, State, Metropolitan, and Nonmetropolitan Area Occupational Employment and Wage Estimates), the mean hourly wage for all occupations in the U.S. is \$20.32, with a mean annual income of \$42,270. Rail Transportation Workers (Occupation Code 53-4099) have a mean hourly wage of \$22.15 and a mean annual wage of \$46,080. A small percentage (managers, crane operators, locomotive engineers, conductors, and brakemen) have mean wages of more than \$53,000 per year. Drivers in general freight trucking, and terminal hostler drivers, have annual mean wages between \$37,000 and \$42,000 per year. Rail-Track Laying and Maintenance Equipment Operators (Occupation Code 47-4061) have a mean hourly wage of \$21.96 and a mean annual wage of \$45,670.

Livability. In 2002, the American Association of State Highway & Transportation Officials (AASHTO) concluded in its “Freight Bottom Line Report” of 2002 that, “A public policy-driven expansion of the freight rail system supported by public sector investment is needed [to] help relieve pressure on the highway system. Without coordinated public and private action, congestion and capacity constraints will weaken the freight industry, the economy, local communities, and the environment.” Nationwide, accidents and traffic delays cost Americans more than \$365 billion a year. That’s \$1

billion a day or \$1,200 for every citizen. The substantial livability improvements that will flow from Crescent Corridor diversions include an estimated \$8.5 billion in congestion reduction benefits from 2011-2030 across all 13 states. At a cost of \$24.62/hr, and with 23.37 million hours of reduced congestion for trucks and passenger vehicles on the network, the nation will benefit from more than \$500 million in congestion savings each year, according to Cambridge Systematics.

The Table below shows additional Crescent Corridor livability benefits.

	Full Corridor (13 States)	Selected States				
		AL	MS	PA	TN	VA
Non-Monetized Benefits						
Units Handled (many are handled in multiple states)	1,320,827	578,523	508,597	690,070	573,034	878,106
VMT Eliminated	1,311,984,717	129,194,161	65,998,906	76,837,733	208,521,588	269,381,833
Hours of Travel Saved	23,370,366	1,919,230	1,122,741	1,789,771	3,179,404	4,013,125
Gallons of Fuel Saved	168,918,655	16,633,810	8,497,391	9,892,895	26,847,253	34,683,039
Tons of CO2 Eliminated	1,874,997	184,635	94,321	109,811	298,005	384,982
Accidents Avoided	1,304	128	66	76	207	268

Ten Metropolitan or Regional Planning Organizations have registered support for this program of projects. Many represent areas where major Crescent Corridor improvements will be made. These organizations ensure that community transportation and land use plans promote a more livable future. They recognize the public benefits that will be shared when the Crescent Corridor’s potential is realized. Letters of support have been received from Hagerstown/Eastern, Panhandle MPO, York County Planning Commission, West Alabama Regional Commission, Lakeway Area MTPO, Harrisburg Area Transportation Study (HATS), Knoxville Regional TPO, Kingsport MPO, Johnson City MTPO, Bristol MPO, Roanoke Valley MPO.

Sustainability. At full development, the Crescent Corridor Program each year will divert more than 1.3 billion vehicle miles traveled from the nation’s highways. This will bring significant public benefits to states and communities. Nearly all are “stranded” public benefits that will materialize only as freight is moved to rail lines from overburdened roads. These public benefits are “stranded” because private entities cannot capture a productivity savings or capitalize a rate of return on their formation. Public-private partnerships such as the Crescent Corridor can provide significant public benefits in each facility location, as well as in every market served by the Corridor. In this scenario, the private partner pays for the private benefits, and the public partners invest in the public benefits. This structure lowers future funding needs for public infrastructure, ensures a proper balance in returns for both public and private partners, and creates a sustainable long-term partnership that shares risks and rewards fairly. It will bear fruit long after the original projects are completed.

As shown in the table below, Cambridge Systematics calculated substantial environmental benefits from fuel usage reduction and avoidance of carbon dioxide

emissions, nitrous oxide emissions, and particulate matter emissions. The total benefit at full build should exceed \$147 million annually.

Sustainability Factors*	Tons Saved (million)	Value (million)
Carbon Dioxide	1,874,997	\$56.1
Nitrogen Oxides	3,353	\$13.4
Particulate Matter	80	\$13.5
Monopsony Value	N/A	\$44.9
Reduced exposure to economic loss risks	N/A	\$19.6
TOTAL		\$ 147.5
* Refer to Appendix F-1: Cambridge Systematics executive report for more details		

Safety. In 2007, traffic-related vehicular crashes killed 41,000 people. According to NHTSA, the U.S. will continue to spend \$230 billion per year on crash-related costs. By diverting trucks from highways, the Crescent Corridor should help reduce these accidents and fatalities. The recent RAND Report, “Key Issues in Modernizing the U.S. Freight-Transportation System for Future Economic Growth” (Hillestad, Roo and Yoho 2008), described the social cost of transporting a ton-mile of freight by truck vs. by intermodal train. RAND said that the social costs of accidents are nearly 3.5 times higher for truck transport compared with intermodal rail transport. Cambridge Systematics found that the Crescent Corridor Project at full build will help prevent 14 fatalities and 1,304 accidents annually. That represents \$146.5 million annually in safety-related benefits.

For Norfolk Southern, safety is the first priority. In fact, NS has earned the E.H. Harriman Memorial gold medal award for employee safety an unprecedented 20 years in a row. Norfolk Southern’s leadership in this area contributes to industry-wide safety records. In 2008, for example, American railroads as a group reported the lowest train accident rate in history and the lowest employee injury rate in history.

Job Creation and Economic Stimulus. The Crescent Corridor program will produce meaningful job creation and economic stimulus. Norfolk Southern welcomes people with all types of skills and varying social, religious, cultural, ethnic, and educational backgrounds. NS has an ongoing commitment to equal opportunity and affirmative action. Since January 2009, the Crescent Corridor Program has employed 16 consulting engineers for design and permitting. When the \$618 million in improvements begins in 2010, employment will grow throughout each of the five partnering states -- with 54 percent of all public and private funds occurring within HEPGIS-designated economically-distressed areas. This employment growth is highlighted in the Application Criteria in each state’s appendix. The Insight Research Study shows that the Crescent Corridor projects will collectively produce 3,663 direct construction-related full time equivalent jobs and 23,373 construction-related FTE jobs from at-risk and potentially benefited industrial expansions, in the initial phase. The following table shows direct construction employment by quarter for each state and the resulting indirect employment for the whole corridor.

**CRESCENT CORRIDOR ON SITE CONSTRUCTION JOBS (DIRECT)
BY QUARTER AND STATE**
(Complete listing by projects in *Financial Plan Appendix*)

	2009				2010				2011				2012				2013			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
TENNESSEE	20	20	20	20	0	417	834	834	813	813	813	813	152	152	152	152	50	50	50	50
ALABAMA	20	20	20	20	0	264	529	529	662	662	662	662	50	38	38	38	38	38	38	38
PENNSYLVANIA	20	20	20	20	0	247	494	494	1,021	1,021	1,021	1,021	162	138	138	138	68	68	68	68
VIRGINIA	0	0	0	0	0	168	336	336	309	309	359	359	246	150	150	150	150	150	150	150
MISSISSIPPI	0	0	60	60	0	104	284	284	296	216	216	216	16	0	0	0	0	0	0	0
TOTAL DIRECT	60	60	120	120	0	1,200	2,476	2,476	3,100	3,020	3,070	3,070	625	477	477	477	305	305	305	305
INDIRECT CRESCENT CORRIDOR JOBS RELATED TO DIRECT CONSTRUCTION JOBS																				
TOTAL*	108	108	171	171	0	2,037	4,154	4,154	5,330	5,246	5,332	5,332	1,085	836	836	836	536	536	536	536

* Based on 1 Annual Full Time Equivalent per \$100k of Construction Expenditure; Totals may vary due to rounding

Innovation. Planning and development of a large rail intermodal network such as the Crescent Corridor represents a significant departure from past location-specific intermodal rail development practices. Although the Crescent Corridor projects are designed to stand alone, when linked as part of an integrated multistate network they will become even more effective in absorbing trucks from congested highways and putting them on rail. Further, the inclusion of a public-private partnership is a necessary and innovative approach to getting the work done in an efficient and economical manner.

In addition to the network design approach, individual projects will include innovative features. Franklin County Regional, Birmingham Regional, and Memphis Regional facilities will include:

- An advanced proprietary Automatic Gate System (AGS) to process truck shipments in and out. The AGS will reduce truck queuing, fuel usage, and associated emissions caused by idling trucks. AGS will provide a competitive advantage for shippers, as local drayage driver operations become more productive, cost effective, and timely. Responsive drayage service is critical for high-value just-in-time logistics.
- A radio frequency transmission system for work order communication to cranes and hostler trucks equipped with mobile computers. This system will improve the efficiency of expensive facility



Figure N-14 Automated Gate System

- equipment, make the network more competitive with highway transport, and reduce on-site fuel consumption and emissions.
- Proximity to an industrial park containing intermodal shippers. Short drayage distances will reduce drayage cost, fuel use, and emissions and improve the intermodal service product for shippers in the park.
 - The Birmingham Regional Intermodal Facility will be adjacent to 740 acres of the Jefferson Metropolitan Industrial Park, serving intermodal shippers such as Home Depot and Office Max.
 - The Franklin County Regional Intermodal Facility has been located within an existing industrial park, Antrim Township Business Park, which is planned for expansion to 500-600 acres. This park is adjacent to I-81 and an I-81 interchange.
 - The Memphis Regional Intermodal Facility is within four miles of the 2,600-acre Chickasaw Trail Industrial Park in Mississippi. Some 635 acres of recently zoned commercial and industrial land in Tennessee is adjacent to the facility and could be developed for uses compatible with intermodal transport.

Partnership. Intermodal freight networks serve the nation’s interest by providing a hedge against the cost of fuel, reducing environmental impact, lowering the cost of transportation for consumers, reducing the cost of maintaining the country’s infrastructure, and, most important, providing the safest, most efficient movement of essential commerce **The Crescent Corridor Program is one of the single biggest additions of new freight capacity since the creation of the Interstate Highway System. Building the last long haul intermodal freight distribution supply chain is one of the best transportation investments of our time.**

This application represents significant effort by Alabama, Mississippi, Pennsylvania, Tennessee, and Virginia. The coordination and planning that characterize this partnership will ensure successful implementation of the state-by-state projects. The projects covered in this application will leverage \$412 million in non-federal resources and provide a 57/43 share of nonfederal to federal investment. We hope the department and the president will recognize the national implications of this program and join us, our communities and customers, numerous MPOs, nine U.S. Senators and 30 U.S. Representatives, and a range of other organizations in building this missing link in the nation’s logistics network. This development partnership is also supported by many others, including, several US Senators and US Representatives, as well as a number of other government organizations and private industry supporters. These letters of support and a press release can be found in the “Additional Supporting Documentation” appendix.

Conclusion. The TIGER Discretionary Grant program can shape the long-term effectiveness of the nation’s surface transportation system by supporting the efficiency requirements of a 21st century economy, reducing dependence on foreign oil, alleviating traffic congestion, and improving motorist safety for years to come. Intermodal transportation -- an integral but underused component of the transportation network -- leverages the inherent strengths and efficiencies of both long-haul rail and short-haul truck movements in order to improve the transportation system overall. The Crescent

Corridor Project will produce long-term, sustainable public benefits by connecting and expanding the multimodal capacity in the Southeast, Gulf Coast and Mid-Atlantic transportation markets.

Our states, along with our partner Norfolk Southern, already have invested in the Crescent Corridor. That's because, when fully developed, the Crescent Corridor will generate nearly \$16 in annual benefits for every \$1 of investment. It will divert more than 1.3 million commercial long-haul trucks off congested interstates annually. It will save 169 million gallons of fuel and \$90 million in highway maintenance costs annually. It will reduce carbon dioxide emissions by 1.9 million tons annually and it will save \$500 million in travel time while avoiding \$146 million in accidents costs annually.

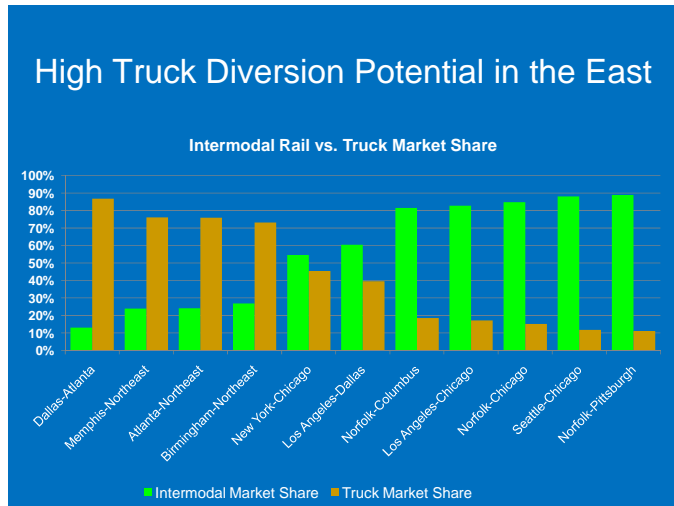


Figure N-15 Rail vs. Truck Market Share

For our immediate economic recovery, the Crescent Corridor's intermodal facilities will serve as economic development engines, particularly for integrated warehousing and distribution centers that will create or benefit 40,000 jobs during the initial construction and operating phases. State and federal tax revenue from these jobs alone will yield \$326 million annually -- that's more than this initial TIGER request of \$300 million.

Integrated multimodal surface transportation systems will drive tomorrow's economy. The Crescent Corridor will bring significant economic, environmental, and safety improvements to the nation's surface transportation system. It is the right approach for meeting our nation's future transportation needs. We respectfully request that you award the Crescent Corridor Project's full funding request through the attached TIGER application.

ATTACHMENT H
MILESTONE/DELIVERABLE SCHEDULE

Memphis Regional Intermodal Facility
(Projected Dates)

- FONSI obtained – Dec 10, 2010
- Approval to Advertise for Construction Bids - Jan 3, 2011
- Notice to Proceed – Jan 7, 2011
- TIGER Construction Contract Bid Award – March 31, 2011
- TIGER Groundbreaking – April 22, 2011
- 50% Complete – Dec 1, 2011
- Project Completion – Sept 30, 2012

**ATTACHMENT I
PERFORMANCE MEASURE TABLE**

Measure	Description of Measure	Frequency	Measurement Period
Daily Gross Ton-Miles (GTM)	Gross ton-miles of freight moved by railcar at the Memphis Regional Intermodal Facility (MRIMF)	Quarterly	3 years after the project opens for operation under normal conditions
Average Container Lifts per Day (TEUs)	Trailers and containers (units) either loaded onto a railcar or unloaded from a railcar at the Memphis Regional Intermodal Facility (MRIMF)	Quarterly	3 years after the project opens for operation under normal conditions
Truck vehicle miles of travel	Estimate of truck vehicles miles of travel for units lifted at the MRIMF based on highway miles between Norfolk Southern rail origin and Norfolk Southern rail destination	Quarterly	3 years after the project opens for operation under normal conditions
Diesel fuel consumption (gallons)	Estimate of diesel fuel savings based on reduced truck vehicle miles of travel	Quarterly	3 years after the project opens for operation under normal conditions
Highway accidents	Estimate of highway accidents based on reduced truck vehicle miles of travel	Quarterly	3 years after the project opens for operation under normal conditions