

**UNITED STATES OF AMERICA  
DEPARTMENT OF TRANSPORTATION  
FEDERAL TRANSIT ADMINISTRATION  
WASHINGTON, D.C. 20590**

**FULL FUNDING GRANT AGREEMENT**

**TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT OF OREGON**

**SOUTH CORRIDOR I-205/PORTLAND MALL LIGHT RAIL PROJECT**

**OR-03-0124**

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**UNITED STATES OF AMERICA  
DEPARTMENT OF TRANSPORTATION  
FEDERAL TRANSIT ADMINISTRATION**

**FULL FUNDING GRANT AGREEMENT  
(FTA FFGA-12, October 1, 2005)**

On the date the authorized U.S. Department of Transportation, Federal Transit Administration (FTA) official signs this Full Funding Grant Agreement, the Government (FTA) has awarded Federal assistance in support of the Project described below. Upon Execution of this Full Funding Grant Agreement by the Grantee named below, the Grantee affirms this Award by the Government (FTA Award), and enters into this Full Funding Grant Agreement with FTA. The following documents are incorporated by reference and made part of this Full Funding Grant Agreement:

- (1) "Federal Transit Administration Master Agreement," FTA MA(12), October 1, 2005, [[http://www.fta.dot.gov/16874\\_16882\\_ENG\\_HTML.html](http://www.fta.dot.gov/16874_16882_ENG_HTML.html)]; and
- (2) Any Award notification containing special conditions or requirements, if issued.

**FTA AWARD**

The Government (FTA) hereby awards a Full Funding Grant as follows:

Project Number(s): OR-03-0124

Grantee: Tri-County Metropolitan Transportation District of Oregon (TriMet)

Citation of Statutes Authorizing the Project: 49 U.S.C. §§ 5309(b), 5309(d)

Estimated Net Project Cost: \$575,700,000

Maximum FTA Amount Awarded: \$436,353,000

Amount of This FTA Award: \$0

Maximum Federal New Starts Financial Contribution: \$345,413,000

Maximum Percentage of FTA Participation: 75.8 percent

Maximum Percentage of New Starts Participation: 60.0 percent

Dates of U.S. Department of Labor Certifications of Transit Employee Protective Arrangements:

<u>Original Project or Amendment Numbers</u>	<u>Certification Dates</u>
OR-03-0124	April 17, 2007

Revenue Operations Date: September 30, 2009

Project Description: This project includes design and construction of approximately 8.3 miles of new electric light rail alignment in two segments along with 15 new stations. One segment will be a 6.5-mile segment of double-track with eight new stations and approximately 2,300 park-and-ride spaces along I-205 from the tie-in with the existing light rail Blue/Red lines at the Gateway Transit Center south to the Clackamas Regional Center. The second segment will be a 1.8-mile segment of double track with seven new stations along the Portland Mall in downtown Portland from Union Station south to Portland State University. The project will acquire approximately 24 light rail vehicles. Improvements to the Elmonica and Ruby Junction maintenance and operations facilities will also be constructed.

**UNITED STATES OF AMERICA  
DEPARTMENT OF TRANSPORTATION  
FEDERAL TRANSIT ADMINISTRATION**

**FULL FUNDING GRANT AGREEMENT TERMS AND CONDITIONS**

**THIS FEDERAL TRANSIT ADMINISTRATION FULL FUNDING GRANT AGREEMENT** (Agreement) is entered into by the Tri-County Metropolitan Transportation District of Oregon (Grantee) and the United States of America, acting through the United States Department of Transportation, Federal Transit Administration (FTA or Government).

**WHEREAS**, the Grantee has determined through the local planning process that construction of an 8.3-mile light rail line along Interstate – 205 from the Gateway Transit Center south to the Clackamas Regional Center and along the Portland Mall in downtown Portland from Union Station south to Portland State University would effectively and efficiently serve the transportation needs of the greater Portland metropolitan area.

**WHEREAS**, the Grantee has developed a Financial Plan, as herein defined, using a combination of local, state, and Federal funds to finance the costs of the Project and, in accordance with its plan, has requested a Grant, as herein defined, of Federal financial assistance in the Project.

**WHEREAS**, the Government has previously provided to the Grantee \$21,146,801 in funds authorized under the Federal Transit Laws for development of the Project.

**WHEREAS**, the Government has determined to enter into this Agreement and to support final design and construction of the Project up to a Maximum Federal New Starts Financial Contribution of \$345,413,000 in capital new starts funds, subject to all the terms and conditions set forth in this Agreement.

**WHEREAS**, the Grantee has submitted its request for Federal assistance (the Application) and the Government has received and is relying upon the Grantee's assurances, certifications, and all other documents required as conditions precedent to a Grant of assistance by the Government for the Project; and, in its submissions, the Grantee has demonstrated justification for the Project, has demonstrated its financial, organizational, and technical capacity as is necessary to complete the Project within the maximum amount of Federal assistance set forth in this Agreement, and has demonstrated the capability to secure non-Federal funds as may be necessary for such completion.

**WHEREAS**, the Government has determined that the Project is based on the results of an alternatives analysis and preliminary engineering; is justified based on a comprehensive review of its mobility improvements, environmental benefits, cost effectiveness, and operating efficiencies; and is supported by an acceptable degree of local financial commitment, including evidence of stable and dependable financing sources to construct, maintain, and operate the Project.

**WHEREAS**, the Government and the Grantee have agreed that their respective duties and responsibilities as related to the completion of the Project shall be determined by and under the terms and conditions of this Agreement and have agreed that this Agreement shall be recognized as the sole understanding between the Government and the Grantee in consideration of the mutual promises as set forth in this Agreement.

**THEREFORE**, in consideration of the above and the parties' mutual promises as set forth in this Federal Transit Administration Full Funding Grant Agreement, the Grantee and the Government agree to the specific terms, conditions and provisions set forth in this entire Agreement including, in particular, the specific terms of the following Sections and Attachments:

## **SECTION 1. DEFINITIONS**

**"Agreement"** means this Federal Transit Administration Full Funding Grant Agreement (FFGA) and consists of all parts and documents listed in Section 20 of this Agreement, "Contents of Agreement," and will include all future addenda, substitutions, modifications and amendments as and when legally executed and effective. (This definition supersedes the definition of "Grant Agreement" set forth in Section 1.j of the Federal Transit Administration Master Agreement (Master Agreement), incorporated by reference and made part of this Agreement.)

**"Application"** means those documents and written submissions filed by or on behalf of the Grantee pursuant to its request for Federal financial assistance for support of the Project and relied upon by the Government as satisfaction of the legal and policy requirements of Grant award. The Application includes all explanatory, supporting, or supplementary documents related to the Project that the Government relied upon in its determination to obligate and award Federal funds for the Project. (This definition is intended to supplement the definition "Application" set forth in Section 1.a of the Master Agreement, incorporated by reference and made part of this Agreement.)

**"Baseline Cost Estimate"** means the Application document described in Section 13 of this Agreement and set forth in the Tables that comprise Attachment 3. The requirements of the Baseline Cost Estimate are set forth in FTA Circular 5200.1A, "Full Funding Grant Agreement Guidance," as may be revised from time to time. The Baseline Cost Estimate reflects the total anticipated cost of the Project as of the Date of this Agreement.

**"Complete the Project"** means to accomplish all of the scope and activities of the Project as described in Attachment 1, "Scope of the Project," and Attachment 2, "Project Description."

**"Date of this Agreement"** means the date the Government awards this Full Funding Grant Agreement.

**"Estimated Net Project Cost"** means the amount that is calculated by subtracting the cost that can reasonably be financed from the Grantee's revenue from the total anticipated cost of the

Project as reflected in the "Baseline Cost Estimate," Attachment 3. The Estimated Net Project Cost is set forth in Section 7 of this Agreement.

**"Financial Plan"** means the plan accepted by the Government as part of the Application process describing the Grantee's financial condition and capability to Complete the Project and to maintain and operate the Project together with its existing transit system. It includes all explanatory, supporting and supplementary documents, commitments, and agreements accepted or approved by the Government.

**"Government"** means the United States of America, acting through the Federal Transit Administration of the United States Department of Transportation.

**"Grantee"** means the Tri-County Metropolitan Transportation District.

**"Grant(s)"** means, in singular and plural forms, the obligation and award of Federal financial assistance by the Government pursuant to the laws codified at 49 U.S.C. Chapter 53.

**"Local Share"** means that portion of the Grantee's local financial commitment that is the Grantee's legally required share of the Net Project Cost.

**"Master Agreement"** means the standard terms and conditions applicable to recipients of Federal financial assistance from the Government. It is updated and published annually. It is incorporated by reference and made part of this Agreement and identified in Federal Fiscal Year 2006 by FTA Form MA(12) (October 1, 2005).

**"Maximum Federal New Starts Financial Contribution"** means the limit of Federal capital new starts financial participation in the Project. (The amount of the "Maximum Federal New Starts Financial Contribution" is set forth in Section 8 of this Agreement, "Limitations of the Federal Funding Commitment," and is only a portion of the total Federal financial contribution for the Project.)

**"Maximum FTA Amount Awarded"** means the total amount of Federal funds from all sources administered by FTA and awarded for the Project, regardless of source, and available to the Grantee. (This amount is set forth in the first page of this Agreement.)

**"Net Project Cost"** means the cost of the Project that cannot reasonably be financed from the Grantee's revenues.

**"Project"** means the transit/transportation improvements the Grantee has promised to implement as a condition of its Full Funding Grant. A description of the Project is set forth in Attachment 1, "Scope of the Project." Activities to carry out the project scope are set forth in Attachment 2, "Project Description."

**"Project Costs"** means all costs eligible for Federal financial participation under the terms of this Agreement and consistent with the cost principles set forth in Section 9 of the Master



Agreement, "Payments."

**"Recovery Plan"** means a plan developed by the Grantee, and accepted by the Government, whereby the Grantee will take every reasonable measure to minimize any delay in achieving the baseline schedule set forth in Attachment 4 to this Agreement (the Baseline Schedule) and eliminate or otherwise mitigate [recover] any increase in the total project costs as currently estimated, as compared to the total project cost identified in Attachment 3 to this Agreement (the Baseline Cost Estimate).

**"Revenue Operations Date"** means the date certain upon which the Grantee shall commence revenue operations of the Project as defined in Section 5 of this Agreement.

## **SECTION 2. PURPOSES OF AGREEMENT**

Pursuant to 49 U.S.C. § 5309, the purposes of this Agreement are to:

- (a) provide Federal financial assistance to the Grantee in the form of this Full Funding Grant and possible future awards of financial assistance as contemplated under this Agreement, not to exceed the Maximum Federal New Starts Financial Contribution for the Project, as is and may be awarded under this Agreement and the laws codified at 49 U.S.C. Chapter 53 for purposes that are consistent with those statutes, implementing regulations, and other applicable laws and regulations;
- (b) describe the Project and set forth the mutual understandings, terms, conditions, rights and obligations of the parties related to implementing the Project, the future management and operation of the Project, and the manner in which Project real property and equipment will be used;
- (c) establish the Maximum Federal New Starts Financial Contribution for the Project, and the manner in which all future Federal funds for the Project, if any, will be awarded and released to the Grantee;
- (d) establish the Grantee's financial commitment to the Project including its obligation to fund the Local Share, its obligation to Complete the Project with a specified amount of Federal assistance, its obligation to achieve revenue operation of the Project by a specified date, its obligation to pay all costs necessary to Complete the Project that are in excess of the Estimated Net Project Cost and its obligation to finance the future maintenance and operational costs of the Project; and
- (e) facilitate timely and efficient management of the Project.

## **SECTION 3. PREVIOUS FEDERAL DOCUMENTS AND GRANTS**

- (a) The Government's laws, policies and procedures require the completion of a project development process and environmental review prior to the Award and Execution of this

Agreement. Prior Grants of Federal assistance awarded by the Government for this project development process are described in Attachment 5 to this Agreement. These Grants (and any other documents that are described in Attachment 5, including Letters of No Prejudice) are incorporated by reference and made part of this Agreement, except for the terms and conditions thereof specifically superseded by this Agreement. Further, in executing this Agreement, the Grantee assures that the certifications and assurances (made by the Grantee or on behalf of the Grantee or by a third party) upon which the Government relied in these prior actions were made to the Government in good faith and to the best of the Grantee's knowledge and belief, and that the Grantee has no present knowledge of facts or circumstances substantially affecting the continued validity of these certifications and assurances that the Grantee has not formally conveyed to the Government prior to the Government's Award of funding set forth in this Agreement.

(b) This Agreement does not discharge or rescind any of the terms, conditions, or obligations established under the documents set forth in Attachment 5 unless specifically stated otherwise herein. Further, the terms, conditions and obligations of this Agreement take precedence over the provisions of all prior agreements related to the Project between the Grantee and the Government and will be controlling for all actions related to the Project taken after the Date of this Agreement, unless specifically stated otherwise herein.

(c) No amendments will be sought or approved to increase the amount of funds in the prior Grants listed in Attachment 5 beyond the amounts described in this Agreement as available to the Project.

#### **SECTION 4. OBLIGATION TO COMPLETE THE PROJECT**

(a) The Government has no obligation to provide any financial assistance for the Project beyond the Maximum Federal New Starts Financial Contribution. If the total Federal funding provided under Section 8 of this Agreement, "Limitations of the Federal Funding Commitment," is insufficient to undertake revenue operations of the Project and the subsequent activities necessary to Complete the Project, the Grantee agrees to Complete the Project and accepts sole responsibility for the payment of any additional costs (overruns).

(b) If at any time during its efforts to Complete the Project the Grantee determines that the total project cost will exceed the Baseline Cost Estimate, the Grantee must immediately notify the Government of the amount of the difference and the reasons for the difference. Further, the Grantee must provide the Government with a Recovery Plan that demonstrates the Grantee is taking and will take every reasonable measure to eliminate [recover] the difference between the total project cost and the Baseline Cost Estimate. Insofar as any difference between the total project cost and the Baseline Cost Estimate that cannot be eliminated [recovered], the Grantee must secure and provide such additional resources as are necessary to meet the additional costs and expeditiously Complete the Project without further financial assistance from the Federal capital new starts program. Further, in its Recovery Plan, the Grantee must identify the sources of funds it will draw upon to meet the additional costs and cover the difference between the total project cost and the Baseline Cost Estimate.

## **SECTION 5. REVENUE OPERATIONS DATE**

(a) The Grantee agrees and promises to achieve revenue operations of the Project on or before September 30, 2009, the Revenue Operations Date, in accordance with the terms and conditions of this Agreement.

(b) The Revenue Operations Date is a significant term of this Agreement. The Grantee's failure to achieve the operational functions of the Project on or before the Revenue Operations Date will constitute a breach of this Agreement. Upon the Grantee's request, the Government may determine at its sole discretion to waive a breach or an anticipatory breach of this Agreement and to extend the Revenue Operations Date if there is an unavoidable delay in achieving the operational goals of the Project resulting from an event or circumstance beyond the control of the Grantee, or if the Government determines that allowing the delay is in the best interest of the Government and the success of the Project. Requests by the Grantee for waiver of a breach or anticipatory breach of this Agreement and extension of the Revenue Operations Date for the reasons set forth herein shall be submitted promptly (with appropriate documentation) to the Government. In the exercise of its discretion to waive the breach and extend the Revenue Operations Date, the Government will take into consideration the actions and measures taken by the Grantee to ensure adherence to its promise to achieve the operational goals of the Project on or before the scheduled Revenue Operations Date.

(c) Delays in appropriations of funds from Congress shall not constitute a basis for extension of the Revenue Operations Date.

(d) The Government's consent to extend the Revenue Operations Date pursuant to Paragraph (b) of this Section 5 does not constitute a basis for additional Federal financial assistance beyond the Maximum Federal New Starts Financial Contribution.

## **SECTION 6. NET PROJECT COST**

(a) This Grant is to assist in the payment of actual eligible costs within the scope of the Project under this Agreement, minus any amount that can reasonably be financed from revenues of the Grantee. If the funds awarded under this grant exceed the amount necessary to finance the Federal share, those excess funds are not available to the Grantee for payment of costs beyond the scope of this Project supported by this Grant.

(b) In accordance with 49 U.S.C. § 5309(h), a refund or reduction of the Grantee's Local Share of the Net Project Cost requires a refund to the Government of a proportional amount of the Federal financial assistance provided under this Agreement.

(c) The portion of the Net Project Cost that may be financed by the Government with capital new starts funds may not exceed the amount of the Maximum Federal New Starts Financial Contribution for this Project as stated in Section 8 of this Agreement, "Limitations of the Federal Funding Commitment."

(d) The Grantee acknowledges that Federal funds may be used only to reimburse eligible expenses for the Project. Should FTA determine that Federal funds have been used to reimburse any expenses that were ineligible for Federal reimbursement, FTA will direct the Grantee either to reimburse FTA with local funds not already committed to the Project or to reduce the total project costs by the amounts found to have been ineligible.

## **SECTION 7. ESTIMATED NET PROJECT COST**

(a) The Government's determination to provide financial assistance for the Project is based, in significant part, upon the Grantee's estimated costs as set forth in the "Baseline Cost Estimate," Attachment 3 to this Agreement. The Estimated Net Project Cost reported in Attachment 3 is \$575,700,000.

(b) The Estimated Net Project Cost financed with the Execution of this Agreement is limited by the amount of the Maximum FTA Amount Awarded. The amount of the Estimated Net Project Cost and the amount of the Maximum FTA Amount Awarded are stated in the first page of this Agreement. The amount reimbursable by the Government is limited to the lesser of either the amount of the Maximum FTA Amount Awarded or the maximum percentage of FTA participation permitted by Federal law and regulations. Additional funds will not be provided until a Grant amendment awarding additional funds and amending this Full Funding Grant Agreement is executed.

## **SECTION 8. LIMITATIONS OF THE FEDERAL FUNDING COMMITMENT**

(a) The sources of this Federal financial assistance are set forth in Attachment 3, "Funding Sources by Category." These funds are in addition to all previous Federal financial commitments to the development of the Project as set forth in the schedule of "Prior Grants and Related Documents," Attachment 5 of this Agreement.

(b)(1) With its Award set forth in this Agreement, the Government also acknowledges its intent to provide Federal capital new starts financial assistance for the Project in an amount that will not exceed \$345,413,000. The anticipated sources of Federal financial assistance in this amount are listed in Attachment 6 to this Agreement, "Schedule of Federal Funds for the Project." All Federal capital new starts funds obligated pursuant to this Paragraph will be subject to all the terms, conditions and obligations established by this Agreement. Accordingly, it is expected that the award of additional funds will be processed through amendments to this Agreement.

(b)(2) The award by the Government of additional Federal capital new starts financial assistance to the Project under Paragraph (b)(1) of this Section 8 is subject to the following limitations:

(A) the availability of appropriated funds, and

(B) the Grantee's continued performance under the terms and conditions of this Agreement.

(c) The Maximum Federal New Starts Financial Contribution for this Project under the capital new starts category of funds is limited to \$345,413,000, which is the sum of the amounts set forth in Paragraphs (a) and (b)(1) of this Section.

## **SECTION 9. FEDERAL FUNDING -- OTHER SOURCES**

The Maximum Federal New Starts Financial Contribution specified in Section 8(c) of this Agreement does not include funds other than from the capital new starts program under 49 U.S.C. Chapter 53. Should such other Federal funds be provided for the Project in addition to the Federal capital new starts funds set forth in Attachment 6 of this Agreement, the limitation on the Federal funding commitment set forth in Section 8 of this Agreement shall not apply to those funds. Accordingly, such additional funds shall be excluded from the calculation of Maximum Federal New Starts Financial Contribution. Funds awarded pursuant to this Section will be subject to all other terms, conditions and obligations set forth in the Agreement.

## **SECTION 10. LOCAL FINANCIAL COMMITMENT – CAPITAL COSTS**

(a) As a condition of the Government's Award of this Full Funding Grant, the Grantee has developed and adopted a Financial Plan for financing all Project Costs necessary to complete the Project. In addition to the amount of Federal funds requested, the Financial Plan includes a statement identifying the State, local and private sources of funding and the amount of funds available for and committed to the Project from each such source. This Financial Plan, as accepted by the Government, with the supporting documentation (including formal funding agreements and commitments) is hereby incorporated by reference and made part of this Agreement.

(b) The Grantee hereby commits and certifies that it will provide funds in an amount sufficient, together with the Federal contribution (acknowledging the limitations as set forth in this Agreement), to assure timely and full payment of the Project Costs as necessary to complete the Project.

(c) The Grantee hereby commits and certifies that the Local Share portion of its financial commitment will be provided from funding sources other than: Federal funds (except as may otherwise be authorized by Federal statute); receipts from the use of Project facilities or equipment (except as may otherwise be authorized by Federal statute); or revenues of the public transit system in which such facilities or equipment are used.

(d) Given the Estimated Net Project Cost, as set forth in Section 7 of this Agreement, the Grantee's financial commitment to the Net Project Cost is estimated to total \$139,347,000. This amount constitutes the Local Share needed to match the Maximum Federal New Starts Financial Contribution for the Project and Other Federal Sources. In the event that the actual Federal financial contribution for the Project is reduced or is increased, the funding percentage as set

forth in this Agreement is changed, the portion of the Grantee's financial contribution for the Project that is identified as Local Share shall be adjusted accordingly.

(e) The Grantee agrees to notify the Government of any change in circumstances or commitments that adversely affect the Grantee's plan to fund the Project Costs necessary to Complete the Project as set forth in the Financial Plan. 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 (b) of this Section 10.

#### **SECTION 11. AUTHORIZATION TO ADVANCE PROJECT WITHOUT PREJUDICE**

The Grantee may incur costs or expend local funds for all phases of the Project as is reasonably necessary to advance the Project prior to an award of Federal funding assistance without prejudice to possible future Federal participation in or reimbursement of the Project Costs to the extent that such costs are incurred in accordance with all applicable Federal requirements and this Agreement. It is understood that the authority conferred on the Grantee to advance the Project without prejudice does not constitute a legal commitment by the Government to obligate and award Federal funds.

#### **SECTION 12. LOCAL FINANCIAL COMMITMENT – OPERATING AND MAINTENANCE COSTS**

(a) As a condition of the Government's Award of funding set forth in this Agreement, the Grantee has developed and adopted a Financial Plan to finance the future operation and maintenance of the Project that also takes into consideration the Grantee's continuing financial responsibilities to operate, maintain and reinvest in its existing transit system. This Financial Plan, as accepted by the Government, and the supporting documentation (including specific funding commitments) evidencing stable and dependable funding sources is an essential part of the Grantee's Application and is made part of this Agreement by incorporation of the Application.

(b) With the Execution of this Agreement, the Grantee assures that it has stable and dependable funding sources, sufficient in amount and in degree of commitment, to operate and maintain its entire mass transportation system at an adequate and efficient level of service, including the future operation and maintenance of the Project without additional Federal assistance beyond the amounts set forth in the Financial Plan. The foregoing assurance does not preclude the Grantee from altering service through contracts with private providers of mass transportation services.

(c) The Grantee will notify the Government of any change in circumstances or commitments that adversely affects the Grantee's plan to fund the maintenance and operating costs of the Project as set forth in the Financial Plan. In its notification, the Grantee will advise the Government of actions it has taken or plans to take to ensure adequate funding resources and will reaffirm to the Government its assurance as set forth in Paragraph (b) of this Section.

### **SECTION 13. BASELINE COST ESTIMATE**

(a) In its Application, the Grantee submitted to the Government a Baseline Cost Estimate for the activities constituting the Project. The Baseline Cost Estimate is accepted by the Government and is set forth in the four Tables that comprise Attachment 3 of this Agreement. The Baseline Cost Estimate is derived from cost estimates of the individual third party contracts and force account work that, in sum, constitute the Project; it reflects appropriate escalation and Project schedule dates.

(b) The Government intends to use the Baseline Cost Estimate to monitor the Grantee's compliance with certain terms and conditions of this Agreement. The Baseline Cost Estimate established in Attachment 3 serves as the measure of cost estimates as of the Date of this Agreement, and should not be amended or modified during the implementation of the Project.

(c) The Grantee will submit cost reports on the implementation of the Project as required by this Agreement and in a format consistent with the units set forth in the Baseline Cost Estimate so that the Government can, with reasonable diligence, reconcile the Grantee's reports with the Baseline Cost Estimate.

### **SECTION 14. BASELINE SCHEDULE**

(a) In its Application, as approved, the Grantee submitted a Baseline Schedule for the Project that demonstrates how the Grantee intends to implement the Project and meet the Revenue Operation Date. This Baseline Schedule has been accepted by the Government and is Attachment 4 of this Agreement.

(b) The schedule for the Project may be modified from time to time at the discretion of the Grantee. However, the Baseline Schedule is not to be modified because it is to be used as a basis for comparing planned to actual project implementation. The Grantee will notify the Government when a Project schedule modification has the potential to change the Revenue Operations Date and describe the actions planned to recover the schedule. The Government's acquiescence in such notice will not be deemed approval by the Government of an extension of a Revenue Operations Date unless the Government expressly grants an extension in writing.

### **SECTION 15. PROJECT MANAGEMENT OVERSIGHT**

The Project is a "Major Capital Project" as defined in FTA's Project Management Oversight regulations at 49 C.F.R. § 633.5. Accordingly, the Grantee agrees that all requirements and conditions set forth in the rule at 49 C.F.R. Part 633 apply to the Project activities. Noncompliance with any regulatory requirements shall constitute a breach of this Agreement, unless the Government formally waives the regulatory requirement.

### **SECTION 16. ENVIRONMENTAL PROTECTION**

(a) As a condition precedent to this Agreement, the environmental impacts of the Project have

been assessed as required by law. The results of that assessment and the adopted mitigation measures are described in the environmental documents identified in Attachment 7 of this Agreement. These documents together with related agreements and supporting documentation are incorporated by reference and made part of this Agreement. To assist the Government in monitoring the implementation of the adopted mitigation measures, these measures are specifically referenced in Attachment 7 of this Agreement. It is understood and agreed that the description in Attachment 7 shall not supersede or in any way result in a circumvention of the requirements set forth in the Government's environmental record for the Project.

(b) Certain terms and conditions of this Agreement as related to the Grantee's responsibility to ensure protection of the environment are set forth in Section 25 of the Master Agreement, "Environmental Requirements." Under Subsection 25.1, "Mitigation of Adverse Environmental Effects," the Grantee is required, among other actions, to undertake all environmental mitigation measures that are identified in environmental documents prepared for the Project. Accordingly, the Grantee understands that it shall not withdraw or substantially change any of the adopted mitigation measures as described in the Government's environmental record for the Project without the express written approval of the Government.

(c) This Section is intended only to supplement the provisions set forth in Section 25 of the Master Agreement, "Environmental Requirements."

## **SECTION 17. LABOR PROTECTION**

The Grantee will carry out the Project in conformance with the terms and conditions determined by the Secretary of Labor to be fair and equitable to protect the interests of employees affected by the Project and meet the requirements of 49 U.S.C. § 5333(b) and U.S. Department of Labor (USDOL) Guidelines at 29 C.F.R. Part 215. These terms and conditions are identified in the letters of certification from USDOL on the dates set forth on the first page of this Agreement. The Grantee will carry out the Project in compliance with the conditions stated in the USDOL certification letters. Those letters and any documents cited therein are incorporated by reference and made part of this Agreement.

## **SECTION 18. GOVERNMENT ACTIONS**

(a) In all cases where the Government's review, approval or concurrence is required under the terms and conditions of this Agreement, the Government will provide its response within sixty (60) calendar days of receipt from the Grantee of all materials reasonably necessary for the formulation of the Government's response.

(b) If the Government determines that its position cannot be finalized within that sixty (60) day period, the Government will notify the Grantee, in writing, within thirty (30) days following receipt of the Grantee's submission that the Government's response will be delayed and advise the Grantee of the Government's anticipated time period for response.



(c) Whenever the Government's approval or concurrence is needed on any matter pertaining to or concerning this Agreement, the Government's approval or concurrence will not be unreasonably withheld.

## **SECTION 19. REMEDIES**

(a) Substantial failure of the Grantee to Complete the Project in accordance with the Application and this Agreement will be a default of this Agreement. In the event of default, the Government will have all remedies at law and equity, including the right to specific performance without further Federal financial assistance, and the rights to termination or suspension as provided by Section 11 of the Master Agreement, "Right of the Federal Government to Terminate." The Grantee recognizes that in the event of default, the Government may demand all Federal funds provided to the Grantee for the Project be returned to the Government. Furthermore, a default of this Agreement will be a factor considered before a decision is made with respect to the approval of future Grants requested by the Grantee.

(b) Under the provisions of Section 15 of this Agreement, "Project Management Oversight," and under the terms and conditions of the Master Agreement, the Government will review performance by the Grantee to determine whether satisfactory progress is being made to Complete the Project. In the event that the Government determines that the Grantee is in breach of this Agreement, the Government may withhold its approvals of further funding and suspend drawdown of funds, under the provisions of Section 11 of the Master Agreement, "Right of the Federal Government to Terminate," until any necessary corrective action, which may be required by the Government, is accomplished. Any breach of this Agreement that is not corrected within a reasonable period of time will be a default of this Agreement. The Government in its discretion may permit the cost of such corrective action to be deemed a Project Cost, provided that such cost is an allowable cost under the requirements of Section 9.c of the Master Agreement, "Costs Reimbursed," and so long as it remains within the limits of the Maximum Federal New Starts Financial Contribution set forth in Section 8 of this Agreement, "Limitations of the Federal Funding Commitment."

(c) In the event of a breach of this Agreement by the Grantee and before the Government takes action contemplated by this Section, the Government will provide the Grantee with ninety (90) days written notice that the Government considers that such a breach has occurred and will provide the Grantee a reasonable period of time to respond and to take necessary corrective action.

## **SECTION 20. CONTENTS OF AGREEMENT**

This Full Funding Grant Agreement consists of the text of this Agreement, which includes the first pages setting forth significant characteristics of the Agreement (such as the maximum Federal funds obligated and awarded for expenditure on the Project and the funding ratio of Federal and local funds to be expended for the Project, and such other data), followed by the Terms and Conditions and the Attachments to the Agreement. The Agreement also includes the

following documents incorporated by reference and made part of this Agreement: the "Federal Transit Administration Master Agreement," FTA Form MA (12) (October 1, 2005) as may be revised from time to time, the Application, the Government's environmental record for the Project, related agreements, and prior Grant Agreements for the Project referenced in Attachment 5 of this Agreement. Should the Federal assistance award letter include special conditions for the Project, that letter is incorporated by reference and made part of this Agreement. Any inconsistency between the Application and the terms and conditions of this Full Funding Grant Agreement will be resolved according to the clear meaning of the provisions of this Agreement and Attachments hereto.

#### **SECTION 21. SIMULTANEOUS CREATION OF AGREEMENT IN ELECTRONIC FORMAT**

Simultaneous to the Award and Execution of this Agreement set forth in typewritten hard copy, the Agreement is being awarded and executed by electronic means through FTA's electronic award and management system. To the extent any discrepancy may arise between the typewritten version and the electronic version of this Agreement, the typewritten version will prevail. Should any special conditions or requirements for the Project be added separately in the electronic version, those conditions or requirements are incorporated by reference and made part of this Agreement.

#### **SECTION 22. AMENDMENTS TO AGREEMENT**

Amendments to any of the documents referenced in Section 20, "Contents of Agreement," will be made in accordance with the requirements and procedures set forth in FTA Circular 5010.1C, "FTA Grant Management Guidelines" (October 1, 1998), as may be amended from time to time, and FTA Circular 5200.1A, "Full Funding Grant Agreement Guidance," as may be amended from time to time.

#### **SECTION 23. ATTACHMENTS -- INCORPORATION**

Each and every Attachment to this Agreement is incorporated by reference and made part of this Agreement.

#### **SECTION 24. NOTICES**

Notices required by this Agreement will be addressed as follows:

As to the Government:

Mr. Richard Krochalis  
Regional Administrator  
Federal Transit Administration  
915 Second Ave., Room 3142  
Seattle, Washington 98174

As to the Grantee:

Mr. Fred Hansen  
General Manager  
Tri-County Metropolitan Transportation District of Oregon  
710 N.E. Holladay Street  
Portland, Oregon 97232

#### **SECTION 25. APPLICABLE LAW**

If neither Federal statute nor Federal common law governs the interpretation of the provisions of this Agreement, the state law of the State of Oregon will apply. This provision is intended only to supplement Section 2.c of the Master Agreement, "Application of Federal, State, and Local Laws and Regulations."

#### **SECTION 26. AWARD AND EXECUTION OF AGREEMENT**

There are several identical counterparts of this 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 that should be executed by the Grantee within ninety (90) days of the date of the Government's Award (FTA Award). The Government may withdraw its Award of financial assistance and obligation of funds if this Agreement is not executed within the ninety (90) day period. Upon full Execution of this Agreement by the Grantee, the effective date will be the date the Government awarded funding under this Agreement as set forth below.

THE GOVERNMENT HEREBY AWARDS THIS FULL FUNDING GRANT THIS  
\_\_\_\_\_ DAY OF ~~JUN 19 2007~~, 2007.

Signature: James S. Simpson  
James S. Simpson  
Administrator

FEDERAL TRANSIT ADMINISTRATION

**EXECUTION BY GRANTEE**

The Grantee, by executing this Agreement, affirms this FTA Award; adopts and ratifies all statements, representations, warranties, covenants, and materials it has submitted to FTA; consents to this Award; and agrees to all terms and conditions set forth in this Agreement.

THE GRANTEE HEREBY EXECUTES THIS FULL FUNDING GRANT THIS 25 DAY OF June, 2007.

Signature: Fred Hansen  
Fred Hansen  
General Manager  
Tri-County Metropolitan Transportation District of Oregon

ATTESTED BY:

Signature: M Brian Playfair  
By: M. Brian Playfair  
Its: General Counsel  
Tri-County Metropolitan Transportation District of Oregon

**AFFIRMATION OF GRANTEE'S ATTORNEY**

As the undersigned Attorney for the Grantee, I affirm to the Grantee that I have examined this Agreement and the proceedings taken by the Grantee relating to it. As a result of this examination I hereby affirm to the Grantee the Execution of the Agreement by the Grantee is duly authorized under state and local law. In addition, I find that in all respects the Execution of this Agreement is due and proper and in accordance with applicable State and local law. Further, in my opinion, this Agreement constitutes a legal and binding obligation of the Grantee in accordance with the terms of the Agreement. Finally, I affirm to the Grantee that, to the best of my knowledge, there is no legislation or litigation pending or imminent that might adversely affect the full implementation of the Project in accordance with the terms thereof.

DATED 25 DAY OF June, 2007.

AFFIRMED BY:

Signature: M Brian Playfair  
Brian Playfair  
General Counsel  
Tri-County Metropolitan Transportation District of Oregon

## Attachment 1

### Tri-County Metropolitan Transportation District (TriMet) Portland, Oregon South Corridor I-205/Portland Mall Light Rail Project

#### Scope of the Project

The South Corridor I-205/Portland Mall Light Rail Project (Project) consists of design and construction of approximately 8.3 miles of new alignment in two segments, with 15 new stations.

This new "Green Line" light rail route will provide service between downtown Portland and the Clackamas Regional Center via two new segments of track linked by existing track and stations. Along I-205, from the tie-in with the existing Blue/Red lines south of the Gateway Transit Center to Clackamas Regional Center, the Project will construct a 6.5-mile segment of double track with eight (8) new stations and approximately 2,300 park-and-ride spaces. Along the Portland Mall in downtown Portland, the Project will construct a 1.8-mile segment of new track on SW 5<sup>th</sup> and 6<sup>th</sup> Avenues, serving seven (7) new stations from Union Station at the north end of downtown to Portland State University at the south end.

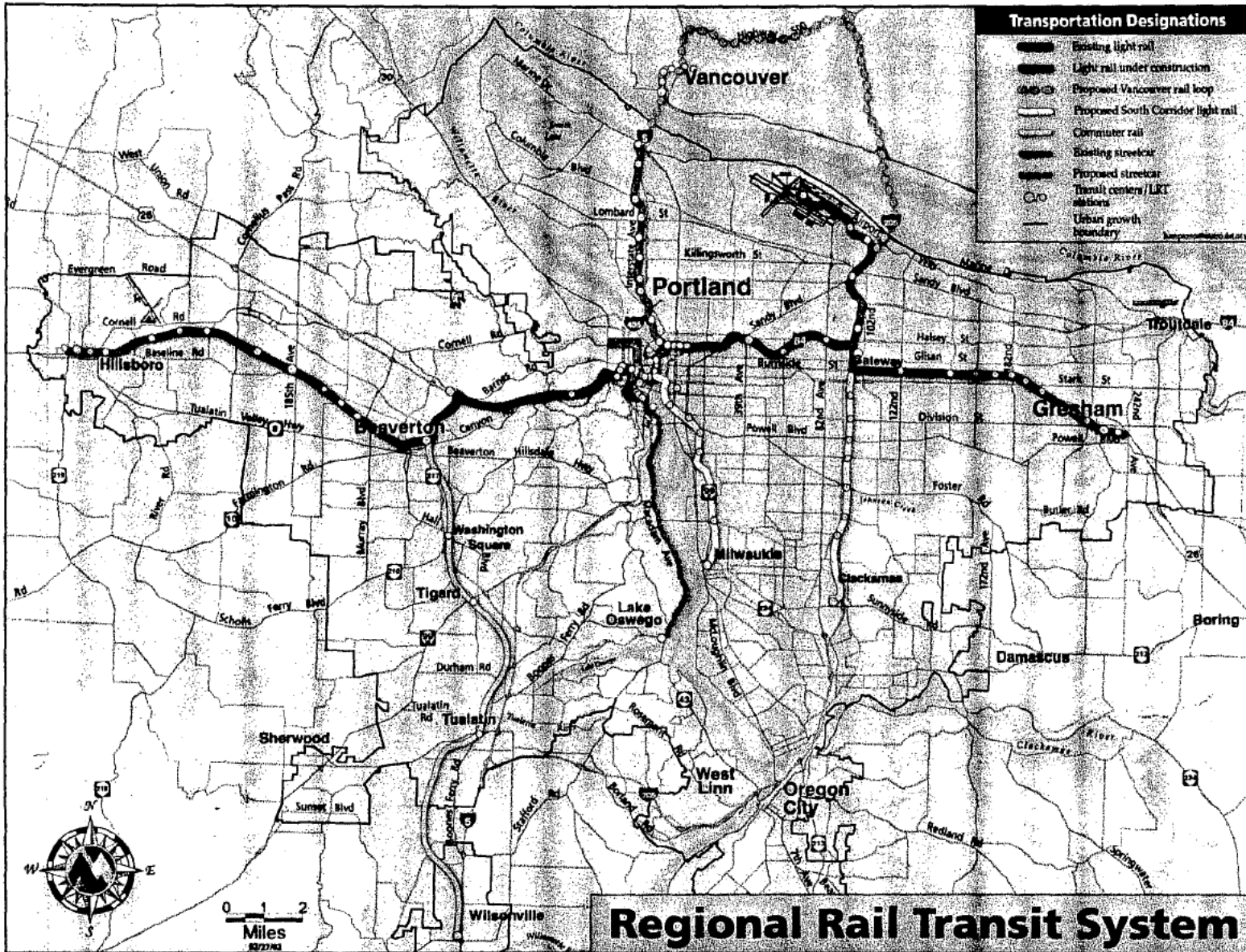
The project will acquire approximately 24 light rail vehicles. Improvements to the Elmonica and Ruby Junction facilities will also be constructed. Traction electrification and an overhead catenary system, communications, central control, fare collection and signal systems will be installed. Provision of facilities for additional service capacity (including traction electrification, communications, central control, signals) along the existing segment of the new route is also included.

Project scope also includes: eligible preliminary and final design; management; insurance; right of way; equipment acquisition and installation; materials acquisition; community relations; construction; environmental mitigation; public art program; startup, training and testing of the Project for revenue service; joint- and transit-oriented development, before-and-after study; Project financing and other elements necessary to achieve Project implementation.

The Revenue Operations Date for the Project is September 30, 2009.

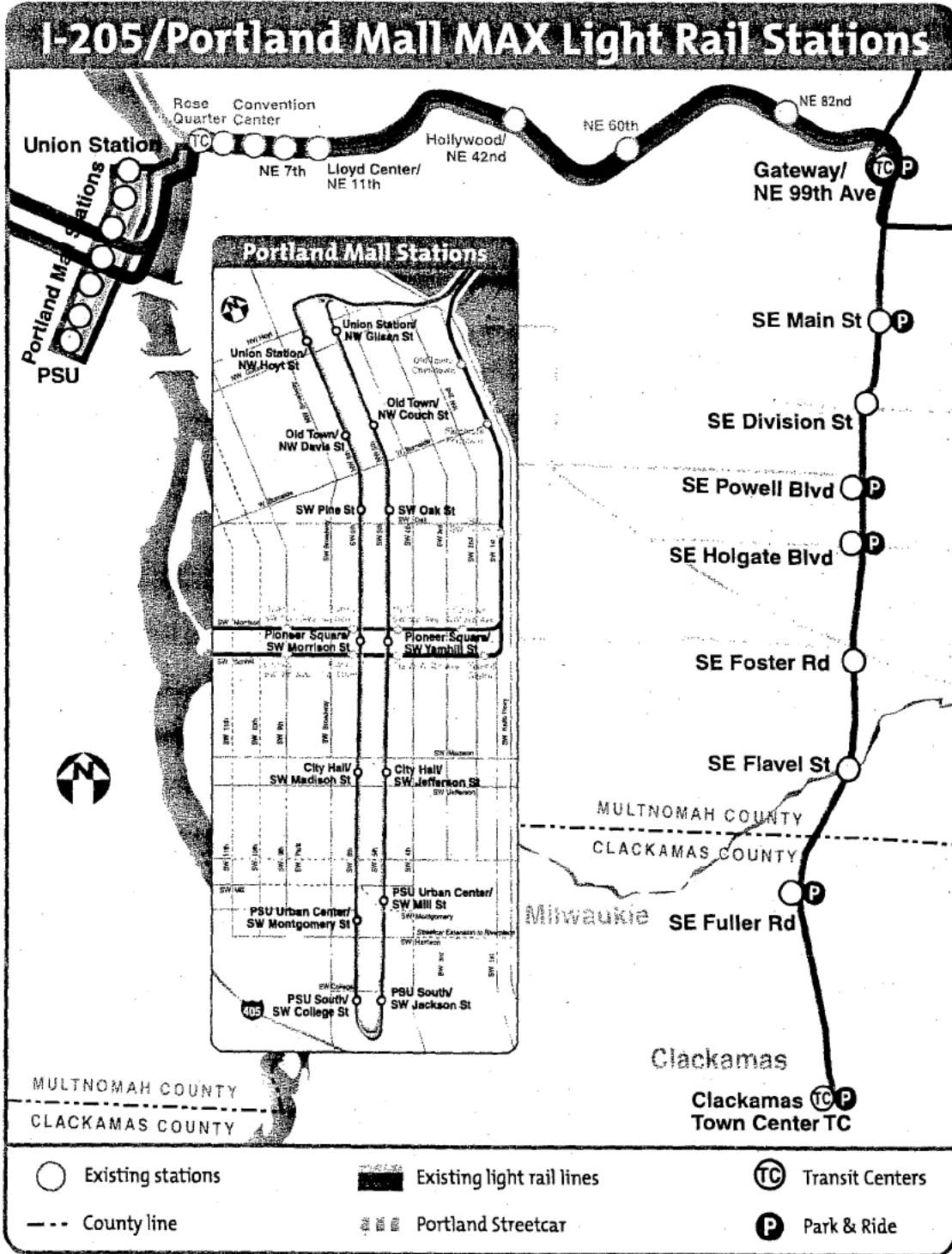
Attachment 1A

Tri-County Metropolitan Transportation District (TriMet)  
 Portland, Oregon  
 South Corridor Light Rail Project  
 Vicinity Map



Attachment 1B

Tri-County Metropolitan Transportation District (TriMet)  
 Portland, Oregon  
 South Corridor Light Rail Project  
 Project Map



## Attachment 2

### Tri-County Metropolitan Transportation District (TriMet) Portland, Oregon South Corridor I-205/Portland Mall Light Rail Project

#### Project Description

##### Narrative Description:

The South Corridor I-205/Portland Mall Light Rail Project (Project) consists of design and construction of approximately 8.3 miles of new alignment in two segments, with 15 new stations. The I-205 segment extends approximately 6.5 miles from Gateway Transit Center to Clackamas Town Center. The Portland Mall segment extends approximately 1.8 miles from the Steel Bridge through the Central Business District to Portland State University.

##### Project Description by Standard Cost Category

The following provides a description of the South Corridor I-205/Portland Mall Light Rail Project by Standard Cost Category (SCC). These SCCs are the basis for the Baseline Cost Estimate (BCE) and the Baseline Schedule which are contained in Attachment 3 and Attachment 4, respectively.

##### SCC 10 Guideway and Track Elements

This SCC encompasses all civil work along the alignment. It includes all elements of trackwork including: procurement; installation; vibration mitigation; stray current protection; cut-and-cover boxes; and bridges. Trackwork includes-- but is not limited to-- the furnishing of rails, cross ties, ballast, girder rail, other track materials, road and pedestrian crossing pads, turnouts, spare track materials for maintenance requirements, and all construction materials, labor, tools and supplies.

SCC 10 includes the following applicable subcategories:

- **Guideway: At-grade exclusive right of way.** The I-205 segment includes approximately 5.74 miles of double track in dedicated right of way adjacent to I-205. The Portland Mall segment includes approximately .05 miles of single track at the west end of the Steel Bridge before the alignment enters public right-of-way. This subcategory includes excavation.
- **Guideway: At-grade semi-exclusive right of way (allows cross-traffic).** The I-205 segment crosses Flavel Street at grade, approximately .03 miles of double track in semi-exclusive right of way. Intersections in the Mall segment account for approximately .43 miles of semi-exclusive right of way.
- **Guideway: At-grade in mixed traffic.** The Portland Mall alignment runs along SW Fifth and Sixth Avenues from NW Irving Street to SW Jackson Street, approximately 1.12 miles.



- Guideway: Aerial structure. The I-205 segment includes approximately .59 miles of aerial structures, specifically, bridges over SE Powell Boulevard, SE Harold Street, the Foster/Woodstock couplet, Springwater corridor, Johnson Creek, 92<sup>nd</sup>/Crystal Springs Boulevard and SE Johnson Creek Boulevard. The Portland Mall includes approximately .15 miles of aerial structure at the west end of the Steel Bridge.
- Guideway: Underground cut and cover. The I-205 segment will use the existing undercrossing between Market and Division Streets to cross from the east to west sides of I-205 and will construct two additional cut-and-cover box structures under Stark and Washington Streets, totaling approximately .13 miles.
- Track: Direct fixation. This includes all work associated with all the rails and connectors necessary for the project. All bridges in the I-205 segment will be fitted with direct fixation track.
- Track: Embedded. This includes the concrete embedded track slab with rail boot around girder rail in the Mall segment.
- Track: Ballasted. This includes rails, ties and ballast in the I-205 segment and at the northern and southern termini in the Mall segment.
- Track: Special. This includes curves, switches, turnouts, crossovers, bumping posts and spares. Special trackwork includes the tie into the existing Blue Line, pocket track at Main Street, and crossovers and tail track at the Clackamas Town Center. This also includes the tail track at the Mall's northern terminus and storage tracks at the Mall's southern terminus.
- Track: Vibration and noise. This includes the vibration mitigation slab.

#### SCC 20 Stations, Stops, Terminals, Intermodal

This SCC provides for the purchase and construction of all elements for all stations. The I-205 segment includes eight stations located at: SE Main Street, SE Division Street, SE Powell Boulevard, SE Holgate Boulevard, SE Foster Road, SE Flavel Street, SE Fuller Road and at the southern terminus at Clackamas Town Center.

The Portland Mall segment includes stations located at: Union Station (NW Glisan and NW Hoyt platforms); Old Town Station (NW Couch and NW Davis platforms); SW Pine and SW Oak Street Station; Pioneer Square Station (SW Yamhill and SW Morrison platforms); City Hall Station (SW Madison and SW Jefferson platforms); Portland State Urban Center Station (SW Montgomery and SW Mill platforms) and the southern terminus of the Mall segment, Portland State University South Station (SW College and SW Jackson platforms.)

As associated with stations, this SCC includes platforms, conduit installations, platform finishes, station canopies, required ramps and railings, fencing, signage and pavement

markings, approximately five bus passenger facilities associated with bus/rail operations integration and other elements for the construction of rail transit stations as necessary.

This SCC also includes systemwide signage.

#### SCC 30 Support Facilities; Yard, Shops, Administration Buildings

This SCC encompasses modifications to existing Ruby Junction and Elmonica operations facilities. Modifications at Ruby Junction include necessary changes to central control facilities, expansion of overview display and construction of a new maintenance bay in the main building. Elmonica modifications include additional yard track, and construction of a spare parts storage building. This SCC includes all site preparation, utility connections, building construction, and equipment.

Bus operator facilities will be provided at the Foster Road and Clackamas Town Center stations. In the Mall segment, bus operator facilities will be provided at SW Columbia St /SW 18<sup>th</sup> and at the northern and southern termini.

#### SCC 40: Sitework and Special Conditions

SCC 40 includes all construction materials and labor for:

- Demolition, clearing, earthwork including but not limited to concrete pavement and sidewalk removal, asphalt pavement removal, grubbing and stripping, ditch drainage improvement, embankment, foundation stabilization material, aggregate base course, modifications to existing sanitary sewer and placement of geotextile material.
- Site utilities and utility relocation activities including but not limited to storm water drainage, sanitary sewer, culver placement and extensions, placement of water system service, and street lighting.
- Hazardous material, contaminated soil removal/mitigation, ground water treatments including contaminated substance health and safety plan and other hazardous materials and treatments not listed.
- Site structures including retaining walls as required along the alignment.
- Pedestrian/bike access and accommodation, landscaping including irrigation at stations, vegetation, public art works, windscreens, and protective and decorative fencing.
- Automobile, bus, van access ways including roads, traffic signals, and parking lots, striping, and pavement markings. In the I-205 segment, surface park-and-ride facilities will be located at the Main, Powell, Holgate and Fuller Stations. Park-and-ride construction includes grading, paving, drainage, walkways, lighting, landscaping and associated costs. The Clackamas Town Center transit facility includes a four-level parking structure with bus layover facility and small retail space on the ground floor. Light rail station access is on the second floor. In the

Mall segment, the Project will construct a continuous through-auto lane and two transit lanes for bus and light rail service.

- Temporary facilities and other indirect costs during construction including permits, field engineering, mobilization, quality control and material testing, street cleaning and site maintenance, security, traffic control, temporary power and facilities, barriers for storm water pollution prevention, temporary access to mitigate construction impacts, construction supervision, general conditions, Owner Controlled Insurance Program (OCIP), overhead and profit. The costs to temporarily relocate existing bus service during construction and to provide "bus bridges" during closure of the Steel Bridge are also included.

#### SCC 50 - Systems

This SCC includes traction electrification and power distribution, signals, communications and central control, and fare collection. Modifications to the existing alignment to ensure compatible system-wide operation are also included.

Traction electrification includes the purchase, installation and testing of the direct current traction power distribution system, including substations, alternating current power connections, poles, mounting brackets, overhead wire, isolation switches, feeder cables, energy management system, spare parts, and supply of power to communications houses and to the signaling system.

Signals includes the purchase, installation and testing of the automatic block signal system, including relay equipment, power transformers, wiring and cabling, cases, gated crossing equipment, signal rooms, spare parts and signal enforcement equipment. Signal work also includes the development, procurement and installation of a train-to-wayside communications system, including loop detectors, control hardware and traffic signal interface.

Communications and central control includes the purchase, installation and testing of the communications and central control system. This system includes fiber optic backbone, supervisory control and data acquisition equipment, terminals, displays, computer control hardware and software, central control furnishings, variable message signs, spare parts, communications houses, and provisions for a closed circuit television system. It also includes required software, training and manuals for operation.

Fare collection provides for the purchase and installation of self-service fare collection equipment, including ticket machines, validators, spare parts, training and technical support. Fare collection includes linkage to the existing networking system to manage and process fare vending machine status and to supply management information.

#### SCC 60 - ROW, Land, Existing Improvements

This SCC includes the real property costs for the Project, specifically the temporary or permanent acquisition of or access to all required real property. Real property includes donated, leased or purchased land, permanent surface and subsurface leases if required; associated professional appraisal, acquisition and legal services; demolition; relocation; and any costs related to the exercise of eminent domain.

### SCC 70 - Light Rail Vehicles

This SCC provides for the procurement, design, manufacture, inspection, delivery, testing and commissioning of approximately 24 low floor light rail vehicles. The vehicle procurement includes, but is not limited to, the vehicles, spare parts, special tools, manuals, training and associated equipment, as well as training for start up and warranty provisions. This unit also includes required modifications to the existing fleet to ensure compatibility.

### SCC 80 - Professional Services

This SCC encompasses the costs of all professional, technical and management services, intergovernmental agreements and related costs during the preliminary engineering, construction and start-up phases of the Project.

- Preliminary engineering includes the professional services and project administration to complete the ridership modeling, preliminary design, and initial public outreach.
- Final design includes the professional engineering, architectural and management services to complete all aspects of the design; and specialty services such as safety, security, vehicle support, and independent cost estimates.
- Project management and construction includes the cost of TriMet project staff and related expenses, contracted construction management, community relations and outreach, administration of the public art program, station area development, insurance broker, before-and-after study, and other contracted professional services required to manage the project.
- Legal; permits and review fees includes costs for outside legal counsel, environmental or other permits not included under the general construction contracts, and intergovernmental agreements for other agency staff.
- Agency Force Account Work includes the start up and related training costs.

### SCC 90 - Contingency

This SCC represents the entire unallocated contingency for the project. It provides a funding source to cover unknown but anticipated additional project execution costs and uncertainty due to risk factors such as unresolved design issues, market fluctuations, unanticipated site conditions and change orders. It also covers unforeseen expenses and variances between estimates and actual costs.

### SCC 100 - Financing

This SCC includes finance charges expected to be paid by the project sponsor/grantee prior to either the completion of the project or the fulfillment of the New Starts funding commitment, whichever occurs later in time. It also includes interim borrowing to provide Project cashflow and interest on bonds for local match.

**Attachment 3  
Baseline Cost Estimate**

Tri-County Metropolitan Transportation District  
Portland, Oregon  
South Corridor I-205/Portland Mall Light Rail Project

Table 1

<i>Applicable line items only.</i>	<b>Amount (YOE)</b>	
<b>10 GUIDEWAY &amp; TRACK ELEMENTS (8.24)</b>		
10.01 Guideway: At-grade exclusive right-of-way	\$ 9,058	
10.02 Guideway: At-grade semi-exclusive (allows cross-traffic)	\$ 1,552	
10.03 Guideway: At-grade in mixed traffic	\$ 4,022	
10.04 Guideway: Aerial structure	\$ 20,256	
10.06 Guideway: Underground cut & cover	\$ 1,994	
10.09 Track: Direct fixation	\$ 2,461	
10.10 Track: Embedded	\$ 6,155	
10.11 Track: Ballasted	\$ 10,553	
10.12 Track: Special (switches, turnouts)	\$ 7,508	
10.13 Track: Vibration and noise dampening	\$ 123	
Subtotal:	\$ 63,682	
<b>20 STATIONS, STOPS, TERMINALS, INTERMODAL (78)</b>		
20.01 At-grade station, stop, shelter, mall, terminal, platform	\$ 19,344	
20.04 Other stations, landings, terminals: Intermodal, ferry, trolley, etc.	\$ 780	
20.06 Automobile parking multi-story structure	\$ 10,975	
Subtotal:	\$ 31,099	
<b>30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN. BLDGS</b>		
30.02 Light Maintenance Facility	\$ 1,176	
30.03 Heavy Maintenance Facility	\$ 3,777	
30.04 Storage or Maintenance of Way Building	\$ 417	
30.05 Yard and Yard Track	\$ 1,353	
Subtotal:	\$ 6,723	
<b>40 SITEWORK &amp; SPECIAL CONDITIONS</b>		
40.01 Demolition, Clearing, Earthwork	\$ 3,754	
40.02 Site Utilities, Utility Relocation	\$ 30,886	
40.03 Haz. mat'l, contam'd soil removal/mitigation, ground water treatments	\$ 1,452	
40.05 Site structures including retaining walls, sound walls	\$ 27,973	
40.06 Pedestrian / bike access and accommodation, landscaping	\$ 14,251	
40.07 Automobile, bus, van accessways including roads, parking lots	\$ 14,695	
40.08 Temporary Facilities and other indirect costs during construction	\$ 54,527	
Subtotal:	\$ 147,538	
<b>50 SYSTEMS</b>		
50.01 Train control and signals	\$ 34,399	
50.02 Traffic signals and crossing protection	\$ 11,085	
50.03 Traction power supply: substations	\$ 3,905	
50.04 Traction power distribution: catenary and third rail	\$ 16,932	
50.05 Communications	\$ 4,752	
50.06 Fare collection system and equipment	\$ 2,514	
50.07 Central Control	\$ 777	
Subtotal:	\$ 74,364	
<b>Construction Subtotal (Sum Categories 10-50)</b>	\$ 323,406	
<b>60 ROW, LAND, EXISTING IMPROVEMENTS</b>		
60.01 Purchase or lease of real estate	\$ 15,590	
60.02 Relocation of existing households and businesses	\$ 562	
Subtotal:	\$ 16,152	
<b>70 VEHICLES ( 24 )</b>		
70.01 Light Rail	24	\$ 82,497
70.07 Spare Parts		\$ 5,198
Subtotal:		\$ 87,695
<b>80 PROFESSIONAL SERVICES</b>		
80.01 Preliminary Engineering	\$ 7,362	
80.02 Final Design	\$ 28,898	
80.03 Project Management for Design and Construction	\$ 32,687	
80.04 Construction Administration & Management	\$ 556	
80.06 Legal; Permits; Review Fees by other agencies, cities, etc.	\$ 7,762	
80.07 Surveys, testing and inspection	\$ 62	
80.08 Agency Force Account Work	\$ 5,250	
Subtotal:	\$ 82,577	
<b>90 UNALLOCATED CONTINGENCY</b>	\$ 42,230	
<b>Project Subtotal (Sum Categories 10-90)</b>	\$ 552,060	
<b>100 FINANCE CHARGES</b>	\$ 23,640	
<b>BASELINE COST ESTIMATE</b>	<b>GRAND TOTAL</b>	\$ 575,700

13.4

**Attachment 3  
Baseline Cost Estimate**

Tri-County Metropolitan Transportation District  
Portland, Oregon  
South Corridor I-205/Portland Mall Light Rail Project

Table 2 -- Escalated BCE Calculation

<b>STANDARD COST CATEGORY</b>	<b>2006 BASE YEAR COST ESTIMATE (X\$000)</b>	<b>CONTINGENCY (X\$000)</b>	<b>BASE YEAR COST ESTIMATE WITH CONTINGENCY (X\$000)</b>	<b>BASELINE COST ESTIMATE (X\$000)</b>
10 GUIDEWAY AND TRACK ELEMENTS	\$ 60,403			\$ 63,682
20 STATIONS, STOPS, TERMINALS, INTERMODAL	\$ 29,940			\$ 31,099
30 SUPPORT FACILITIES: YARDS, SHOPS, ADMIN BLDGS	\$ 6,395			\$ 6,723
40 SITEWORK AND SPECIAL CONDITIONS	\$ 141,528			\$ 147,538
50 SYSTEMS	\$ 68,775			\$ 74,364
<b>Construction Subtotal (sum categories 10-50)</b>	\$ 307,041			\$ 323,406
60 ROW, LAND, EXISTING IMPROVEMENTS	\$ 15,961			\$ 16,152
70 VEHICLES	\$ 81,071			\$ 87,695
80 PROFESSIONAL SERVICES	\$ 78,701			\$ 82,577
90 UNALLOCATED CONTINGENCY	\$ 40,857			\$ 42,230
<b>Project Subtotal (sum categories 10-90)</b>	\$ 523,631			\$ 552,060
100 FINANCE CHARGES	\$ 22,603			\$ 23,640
<b>TOTAL PROJECT COST (SUM CATEGORIES 10-100)</b>	\$ 546,234			\$ 575,700

**Attachment 3  
Baseline Cost Estimate**

Tri-County Metropolitan Transportation District  
Portland, Oregon  
South Corridor I-205/Portland Mall Light Rail Project

Table 3: BCE By Source of Funding

STANDARD COST CATEGORY	BASELINE BUDGET	FEDERAL SHARE 5309 NS	FEDERAL SHARE STP	FEDERAL MTIP GARVEE	FEDERAL SHARE 5309 BUS	FEDERAL SHARE 5307 CMAQ	LOCAL SHARE
10 Guideway & Track Elements	\$ 63,682	\$ 38,208	\$ 2,544	\$ 7,167	\$ 323	\$ 26	\$ 15,414
20 Stations, Stops, Terminals, Intermodal	\$ 31,099	\$ 18,659	\$ 1,242	\$ 3,500	\$ 158	\$ 12	\$ 7,527
30 Support Facilities: Yards, Shops, Admin. Bldgs	\$ 6,723	\$ 4,034	\$ 269	\$ 757	\$ 34	\$ 3	\$ 1,627
40 Sitework & Special Conditions	\$ 147,538	\$ 88,521	\$ 5,894	\$ 16,605	\$ 747	\$ 59	\$ 35,711
50 Systems	\$ 74,364	\$ 44,617	\$ 2,971	\$ 8,369	\$ 377	\$ 30	\$ 18,000
<i>Construction Subtotal (sum categories 10-50)</i>	\$ 323,406	\$ 194,040	\$ 12,921	\$ 36,398	\$ 1,638	\$ 130	\$ 78,280
60 ROW, Land, Existing Improvements	\$ 16,152	\$ 9,691	\$ 645	\$ 1,818	\$ 82	\$ 6	\$ 3,910
70 Vehicles	\$ 87,695	\$ 52,616	\$ 3,504	\$ 9,870	\$ 444	\$ 35	\$ 21,226
80 Professional Services	\$ 82,577	\$ 49,545	\$ 3,299	\$ 9,294	\$ 418	\$ 33	\$ 19,988
90 Unallocated Contingency	\$ 42,230	\$ 25,337	\$ 1,687	\$ 4,753	\$ 214	\$ 17	\$ 10,222
<i>Project Subtotal (sum categories 10-90)</i>	\$ 552,060	\$ 331,229	\$ 22,056	\$ 62,132	\$ 2,796	\$ 222	\$ 133,625
100 Finance Charges	\$ 23,640	\$ 14,184	\$ 944	\$ 2,661	\$ 120	\$ 9	\$ 5,722
<b>TOTAL PROJECT COST (sum categories 10-100)</b>	<b>\$ 575,700</b>	<b>\$ 345,413</b>	<b>\$ 23,000</b>	<b>\$ 64,793</b>	<b>\$ 2,916</b>	<b>\$ 231</b>	<b>\$ 139,347</b>

SOURCES OF FUNDS AND MATCHING SHARE RATIOS				
SOURCE OF FEDERAL FUNDS	Costs Attributed to Source of Funds (millions)	Federal/Local Matching Ratio within Source	Federal Funds (millions)	Local Funds (millions)
5309 New Starts	\$ 473.958	.7288/.2712	\$ 345.413	\$ 128.545
STP Flexible Funds	\$ 25.632	.8973/.1027	\$ 23.000	\$ 2.632
Other Federal MTIP/GARVEE	\$ 72.208	.8973/.1027	\$ 64.793	\$ 7.415
Other Federal Section 5309 Bus Funds	\$ 3.645	.80/.20	\$ 2.916	\$ 0.729
Other Federal Section 5307 CMAQ	\$ 0.257	.8973/.1027	\$ 0.231	\$ 0.026
<b>TOTAL</b>	<b>\$ 575.700</b>		<b>\$ 436.353</b>	<b>\$ 139.347</b>
Overall Federal Share of Project		75.80%		
		(345.413+23+64.793+2.916+.231)/575.7		
New Starts Share of Project		60.00%		
		(345.413/575.70)		

Attachment 3A  
Project Budget  
Tri-County Metropolitan Transportation District  
Portland, Oregon  
South Corridor I-205/Powder Mill Light Rail Project

Scope and Activity Description

Scope Code	ALI Code	Description	Qty	Total Fed %	Section 5309 New Starts			STP Flexible Funds			Other Federal METDP GARVER Bonds			Other Federal Section 5309 Bus Funds			Other Federal Section 5307 CMAQ			Project Totals		
					Federal	Local	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Total
140-10		GUIDEWAY AND TRACK ELEMENTS (Route Miles)	1.24																			
14.01.10		Guideway and Track Elements		0.7580	\$ 18,208	\$ 14,219	\$ 32,428	\$ 2,544	\$ 291	\$ 2,835	\$ 7,167	\$ 820	\$ 7,987	\$ 223	\$ 81	\$ 403	\$ 26	\$ 3	\$ 28	\$ 48,208	\$ 15,414	\$ 63,622
140-20		STATIONS, STOPS, TERMINALS, INTERMODAL	78																			
14.02.20		Stations, Stops, Terminals, Intermodal		0.7580	\$ 18,659	\$ 6,944	\$ 25,603	\$ 1,242	\$ 142	\$ 1,384	\$ 3,506	\$ 461	\$ 3,965	\$ 158	\$ 39	\$ 197	\$ 12	\$ 1	\$ 14	\$ 23,572	\$ 7,527	\$ 31,099
140-30		SUPPORT FACILITIES, YARDS, SHOPS, ADMIN BLDGS																				
14.03.30		Support Facilities, Yards, Shops, Admin Bldgs		0.7580	\$ 4,034	\$ 1,901	\$ 5,935	\$ 269	\$ 31	\$ 300	\$ 753	\$ 17	\$ 843	\$ 34	\$ 9	\$ 43	\$ 3	\$ 0	\$ 3	\$ 3,096	\$ 1,627	\$ 4,723
140-40		SITWORK AND SPECIAL CONDITIONS																				
14.04.40		Sitework and Special Conditions		0.7580	\$ 88,321	\$ 32,943	\$ 121,264	\$ 3,894	\$ 873	\$ 4,767	\$ 16,663	\$ 1,900	\$ 18,563	\$ 747	\$ 187	\$ 934	\$ 59	\$ 7	\$ 66	\$ 111,827	\$ 25,211	\$ 147,038
140-50		SYSTEMS																				
14.05.50		Systems		0.7580	\$ 44,617	\$ 16,604	\$ 61,222	\$ 2,971	\$ 346	\$ 3,317	\$ 8,369	\$ 998	\$ 9,367	\$ 377	\$ 94	\$ 471	\$ 30	\$ 3	\$ 33	\$ 56,364	\$ 18,000	\$ 74,364
140-60		ROW, LAND, EXISTING IMPROVEMENTS																				
14.06.60		ROW, Land, Existing Improvements		0.7580	\$ 9,691	\$ 3,604	\$ 13,295	\$ 645	\$ 74	\$ 719	\$ 1,818	\$ 208	\$ 2,026	\$ 82	\$ 20	\$ 102	\$ 6	\$ 1	\$ 7	\$ 12,242	\$ 3,910	\$ 16,152
140-70		VEHICLES																				
14.07.70		14.07.70 Vehicle (Use 14 Series ALI Codes for vehicle types)	24	0.7580	\$ 52,616	\$ 19,581	\$ 72,197	\$ 3,504	\$ 401	\$ 3,904	\$ 9,878	\$ 1,120	\$ 10,999	\$ 444	\$ 111	\$ 555	\$ 35	\$ 4	\$ 39	\$ 66,469	\$ 21,726	\$ 88,195
		14.07.70 Vehicle (Use multiple lines as appropriate, match to ALI #)																				
140-80		PROFESSIONAL SERVICES																				
14.08.80		Professional Services		0.7580	\$ 49,545	\$ 18,434	\$ 67,981	\$ 1,299	\$ 378	\$ 1,677	\$ 9,294	\$ 1,064	\$ 10,357	\$ 418	\$ 103	\$ 523	\$ 33	\$ 4	\$ 37	\$ 62,589	\$ 19,988	\$ 82,577
140-90		UNALLOCATED CONTINGENCY																				
14.09.90		Unallocated Contingency		0.7580	\$ 25,337	\$ 9,420	\$ 34,757	\$ 1,687	\$ 193	\$ 1,880	\$ 4,751	\$ 544	\$ 5,297	\$ 214	\$ 53	\$ 267	\$ 17	\$ 2	\$ 19	\$ 37,008	\$ 10,222	\$ 47,230
141-90		FINANCE CHARGES																				
14.10.10		Finance Charges		0.7580	\$ 14,184	\$ 5,278	\$ 19,462	\$ 944	\$ 108	\$ 1,053	\$ 2,661	\$ 304	\$ 2,965	\$ 120	\$ 30	\$ 150	\$ 9	\$ 1	\$ 11	\$ 17,918	\$ 5,722	\$ 23,640
		Total Project Cost		0.7580	\$ 345,413	\$ 128,545	\$ 473,958	\$ 33,080	\$ 3,632	\$ 36,712	\$ 64,793	\$ 7,415	\$ 72,208	\$ 2,916	\$ 739	\$ 3,645	\$ 331	\$ 24	\$ 357	\$ 456,343	\$ 139,547	\$ 595,890





Attachment 5

Tri-County Metropolitan Transportation District (TriMet)  
Portland, Oregon  
South Corridor I-205/Portland Mall Light Rail Project

Prior Grants and Related Documents

I. Prior Grants

<i>Project No.</i>	<i>Obligation Date</i>	<i>Federal Amount</i>	<i>Funding Source</i>	<i>Purpose</i>
OR-90-X131	30-June-06	\$4,000,000*	Section 5307 (STP)	Debt Service on Grant Anticipation Revenue (GARVEE) Bonds

\* GARVEE Bonds are also used to fund other TriMet capital projects. Funds from this grant will be used to pay debt service on the entire bond issue, 68% of which will be used for the South Corridor Light Rail Project.

II. Related Documents

1. Approval to Enter Preliminary Engineering - March 25, 2004
2. Final Environmental Impact Statement - November 30, 2004
3. Record of Decision - February 22, 2005
4. Approval to Initiate Final Design - October 13, 2005
5. Approval of Letter of No Prejudice (long-lead procurement for light rail vehicles and rail; bridge substructures) - March 9, 2006
6. Approval of Letter of No Prejudice (long-lead procurement for steel and systems elements; limited advanced civil construction) - December 28, 2006

III. FFGA Grant History  
(Grants under FFGA)

<i>Project No.</i>	<i>Obligation Date</i>	<i>Federal Amount</i>	<i>Funding Source</i>	<i>Purpose</i>
OR-03-0110	01-June-04	\$2,916,087	Section 5309 (Bus)	Prelim. Engineering
OR-90-X116	03-March-05	\$230,714	Section 5307 (CMAQ)	Prelim. Engineering
OR-90-X133	24-May-06	\$7,499,633	Section 5307 (STP)	Final Design and Construction
OR-90-X133-01	21-Aug-06	\$10,500,367	Section 5307 (STP)	Final Design and Construction

Note: The totals of the grants shown here may not be equal to the total amount of "Other Federal Funds" shown in attachment 6 due to the inclusion of GARVEE bonds being included in the amounts shown on attachment 6.

Attachment 6

Tri-County Metropolitan Transportation District (TriMet)  
Portland, Oregon  
South Corridor I-205/Portland Mall Light Rail Project

Schedule of Federal Funds

Section 3043(b)(27) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) (Pub.L. 109-59, 119 Stat. 1144; Aug. 10, 2005) authorizes FTA to award Federal capital new starts funds for final design and construction of the South Corridor I-205/Portland Mall Light Rail Project (the "Project"). In accordance with the Federal Transit Law, 49 U.S. C. Chapter 53 and FTA Circular 5200.1A, Full Funding Grant Agreements Guidance (December 5, 2002), by the execution of this Agreement the Government is limiting its commitment to provide funding for the Project to those funds that have been or may be appropriated under SAFETEA-LU and subsequent authorizations. The Government and the Grantee recognize, moreover, that the period of time necessary to complete the Project may extend beyond the expiration of SAFETEA-LU, as evidenced by Attachment 4 to this Agreement (Baseline Schedule).

Currently, the Government and the Grantee anticipate that the Federal capital new starts funds will be provided for the Project as follows:

Tri-County Metropolitan Transportation District  
South Corridor I-205/Portland Mall Light Rail Project  
Proposed Schedule of Federal Funds

Fiscal Year	Section 5309 New Starts Funds	Other Federal Funds	Local Funds	Total
2005 and before	\$0	\$3,146,801	\$360,145	\$3,506,946
2006	\$0	\$33,673,000	\$1,665,855	\$35,338,855
2007	\$80,000,000	\$19,204,000	\$25,313,000	\$124,517,000
2008	\$80,000,000	\$32,998,000	\$86,931,000	\$199,929,000
2009	\$80,000,000	\$1,918,199	\$4,679,000	\$86,597,199
2010	\$80,000,000	\$0	\$20,398,000	\$100,398,000
2011	\$25,413,000	\$0	\$0	\$25,413,000
Total	\$345,413,000	\$90,940,000	\$139,347,000	\$575,700,000

## Attachment 7

Tri-County Metropolitan Transportation District (TriMet)  
Portland, Oregon  
South Corridor I-205/Portland Mall Light Rail Project

### Measures to Mitigate Environmental Impacts

The environmental record for the Project includes the following documents:

1. Final Environmental Impact Statement – November 30, 2004
2. Record of Decision –  
FTA approval: February 11, 2005  
FHWA approval: February 22, 2005

The mitigation measures and other project features that reduce adverse environmental and community impacts to which FTA and TriMet committed in the environmental record may not be eliminated from the Project, except by FTA's written consent and in accordance with applicable laws and regulations. These mitigation measures include, but are not limited to, commitments to perform further consultation with any agency on environmental and related matters. By letter dated July 24, 2006, TriMet transmitted to FTA a table which lists the mitigation measures in the above environmental record that pertain to the Project and identifies the party responsible for implementing each mitigation measure as presented in the environmental record. The table's purpose is to facilitate monitoring the implementation of the mitigation measures during final design and construction. That table, and its periodic revisions to add the measures resulting from required consultations, permit approvals, and FTA-approved changes and to update the implementation status of the measures, are incorporate herein by reference.

## Attachment 8

Tri-County Metropolitan Transportation District (TriMet)  
Portland, Oregon  
South Corridor I-205/Portland Mall Light Rail Project

### “Before and After” Study

The Tri-County Metropolitan Transportation District (“TriMet”) will assemble information and conduct analyses to identify the actual performance of the South Corridor I-205/Portland Mall Light Rail Project (“Project”) in terms of its costs and impacts, evaluate the reliability of technical methods used during the planning and development of the Project, and identify potentially useful improvements to those methods. Specifically, TriMet’s plan to perform a “Before and After” study addresses the following requirements:

#### I. Required Information

TriMet will assemble information on five key characteristics of the Project and its associated transit services:

- a) Project scope: The physical components of the Project, including environmental mitigation and other related information;
- b) Service levels: The opening day operating service and service characteristics of the fixed guideway, feeder bus services, and other bus services in the corridor; a comparison with current characteristics;
- c) Capital costs: Final costs of the project compared with the Baseline Cost Estimate;
- d) Operation and maintenance costs: Operation and maintenance costs for the Project; and
- e) Ridership patterns: Incremental ridership, origin/destination patterns of TriMet riders, travel time savings for passengers, and associated farebox revenue.

#### II. Milestones

TriMet will assemble those data items that are available at three key milestones in the development and operation of the Project.

- a) Predictions: Baseline information available in environmental and other project or agency documents will be reviewed. Published predictive information will be

summarized. Actual data drawn during operation will be analyzed in relation to the baseline and predicted information;

- b) Prior conditions: Transit service levels, operating and maintenance costs, ridership patterns and farebox revenues immediately prior to any significant changes in transit levels service levels caused by either the construction or opening of the Project;
- c) After conditions: Actual data drawn two years after the opening of revenue operations will be analyzed in relation to the baseline and predicted information.

### III. Timetable

The plan is composed of four tasks:

Task 1: Organization and planning

Task 2: Documentation of forecasts

Task 3: Documentation of conditions before project implementation

Task 4: Documentation of conditions after project opening

TriMet will complete the study by June 30, 2012.