

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

**GRANT AGREEMENT
(FTA G-6, October 1, 1999)**

Upon execution of this Grant Agreement by the Grantee named below, the Grantee affirms the U.S. Department of Transportation, Federal Transit Administration (FTA) Award covering the Project described below and enters into this Grant Agreement with FTA. The following documents are incorporated by reference and made part of this Grant Agreement:

- (1) "Federal Transit Administration Master Agreement," FTA MA(6), October 1, 1999, [Internet Address: <http://www.fta.dot.gov/library/legal/agreements/2000/ma.html>]; and
- (2) Any Award notification containing special conditions or requirements, if issued.

FTA OR THE FEDERAL GOVERNMENT MAY WITHDRAW ITS OBLIGATION TO PROVIDE FINANCIAL ASSISTANCE IF THE GRANTEE DOES NOT EXECUTE THIS GRANT AGREEMENT WITHIN 90 DAYS AFTER THE OBLIGATION DATE OF THE FTA AWARD.

FTA AWARD

FTA hereby awards a Federal grant as follows:

Project No.: OR-03-0076

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

Citation of Statute(s) Authorizing Project: 49 USC Section 5309 (a)(1)

Maximum Federal Financial Contribution: \$257,500,000

Estimated Total Eligible Cost: \$350,000,000

Maximum FTA Amount Approved [Including All Amendments]: \$0.00

Amount of This FTA Award: \$0.00

Maximum Percentage of Federal Section 5309 New Start Participation: Seventy-Three (73%)

Date of Department of Labor Certification(s) of Transit Employee Protective Arrangements:

Original Project or
(Amendment Number)
OR-03-0076

Certification Date
May 23, 2000

Project Description: The funds approved in this agreement will assist in financing the design and construction of the Interstate Max (IMAX) Light Rail Transit (LRT) Project. The Interstate Max LRT Project is an approximate 5.8-mile north/south LRT line, along Interstate Avenue between the Rose Quarter and Exposition and Recreation Center (Expo) in the Portland, Oregon metropolitan area. The IMAX Project will include 17 LRT vehicles, ten (10) new stations, two (2) park-and-ride lots for a total of approximately 600 vehicles and modifications to the existing Ruby Junction rail operations facility. See Attachments 1 and 2 for a more detailed description of the project.

Revenue Operation Date: September 30, 2004

Special Requirement:

The Grantee agrees to comply with applicable Federal statutory provisions prohibiting the use of Federal assistance funds for activities designed to influence Congress or a State legislature on legislation or appropriations, except through proper, official channels.

Conditions of Award:

The maximum Federal contribution of \$257,500,000 of New Start (49 U.S.C. Section 5309) funding is based on the addition of \$24,000,000 of Congestion Mitigation and Air Quality Improvement (23 U.S.C. Section 149) and Surface Transportation Program (23 U.S.C. Section 133) funds and \$68,500,000 in local funds for the Estimated Total Eligible project cost of \$350,000,000 as shown on Attachment 3a to the Full Funding Grant Agreement.

Obligation Date: SEP 22 2000

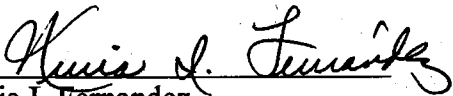
Signature: 
Name: Nuria I. Fernandez
Title: Acting Administrator

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Attachments:

- Attachment 1: Scope of the Project
- Attachment 2: Project Description
- Attachment 3: Baseline Cost Estimate
- Attachment 3a: TEAM Budget
- Attachment 4: Baseline Schedule
- Attachment 5: Prior Grants and Related Documents
- Attachment 6: Schedule of Federal Funds for the Project
- Attachment 7: Measures to Mitigate Environmental Impacts

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

PART I

FULL FUNDING GRANT AGREEMENT

THIS FEDERAL TRANSIT ADMINISTRATION 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 Department of Transportation, Federal Transit Administration (FTA or Government).

WHEREAS, the Grantee has determined through its local planning process that the construction and/or acquisition of a 5.8-mile light rail transit (LRT) extension (Project) from the Rose Quarter Transit Center to the Expo Center in North Portland to of its existing LRT east/west system will effectively and efficiently serve transportation needs of the communities of Portland and North Portland, Oregon.

WHEREAS, the Grantee has developed a Financing Plan, as herein defined, using a combination of local, State and Federal funds to finance the cost 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 Metro, the regional planning organization, \$21,607,782 in funds authorized under the Federal Transit Laws for development of the Project.

WHEREAS, the Government has determined to execute this Agreement and to support the final design and construction of the Project up to a Maximum Federal Financial Contribution of \$257,500,000 in capital new starts funds, subject to all the terms and conditions set forth in this agreement.

WHEREAS, the Grantee has submitted in its request for Federal assistance (the Application) and the Government has accepted all 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 level 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 recognize that Federal capital new starts funds totaling \$257,500,000 requested by the Grantee and determined by the Government to be the appropriate Federal funding commitment to the Project have not been appropriated by Congress, resulting in a shortage of funds which does and may continue to exist and which by the terms and conditions of this Agreement the Grantee is obligated to recover from other funding sources.

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 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 the Contents of Agreement, Section 19 of this Part I, 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), Part II 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 accepted 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 set forth in Section 1(a) of the Master Agreement, Part II of this Agreement.)

"Baseline Cost Estimate" means the Application document described in Section 12 of this Agreement and set forth in Attachment 3. The requirements of the Baseline Cost Estimate are set forth in FTA Circular 5200.1, "Full Funding Grant Agreement Guidance" (July 2, 1993).

"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 executes the award of this Full Funding Grant Agreement.

"Estimated Net Project Cost of the Total Project" means the total anticipated cost of the Project as of the Date of this Agreement, including amounts budgeted for contingencies. The Estimated Net Project Cost of the Total Project is set forth in Section 7 of this Agreement and is the Baseline Cost Estimate, Attachment 3 of this Agreement, less the cost that can reasonably be

financed from the Grantee's revenue.

"Federal Transit Laws" means the statutes codified at 49 U.S.C. Chapter 53.

"Financing 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, in Part I of this Agreement, the United States of America, acting through the Federal Transit Administration of the United States Department of Transportation.

"Grant(s)" means, in singular and plural forms, the obligation and award of Federal financial assistance by the Government pursuant to the Federal Transit Laws.

"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 included as Part II of this Agreement and identified in Federal Fiscal Year 2000 by FTA Form MA(6), (October 1, 1999).

"Maximum Federal Financial Contribution" means the limit of Federal capital new starts financial participation in the Project. (The amount of the "Maximum Federal Financial Contribution" is set forth in Section 8, Limitations of the Federal Funding Commitment and is only a portion of the Total Federal Financial Contribution to the Project.)

"Maximum Federal Funds Approved" means the amount of Federal funds obligated for the Project and available to the Grantee. (The amount is set forth in the Notification of Grant Award.)

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

"Notification of Grant Approval" means the first page of this Part I where the FTA sets forth the maximum Federal funds obligated and awarded for expenditure on the Project and sets forth the funding ratio of Federal and local funds to be expended for the Project.

"Project" means the transit/transportation improvements the Grantee has promised to implement. A description of the Project is contained in Attachment 1, Project Scope. Activities to carry out the project scope are depicted 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 the Master Agreement, Section 9, "Payments."

"Revenue Operation Date" means the date certain upon which the Grantee shall commence revenue operation of the Project as defined in Attachment 1, Project Scope.

SECTION 2 PURPOSE OF AGREEMENT

Pursuant to 49 U.S.C. Section 5309, the purpose of this Agreement is:

(a) to provide Federal financial assistance to the Grantee in the form of this Grant and possible future Grants as is and may be awarded under this Agreement and under the Federal Transit Laws for purposes which are consistent with the Federal Transit Laws, implementing regulations, and other applicable laws and regulations;

(b) to describe the Project and to set forth the mutual understandings, terms and 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 the Project real property and equipment will be used;

(c) to establish the Maximum Federal Financial Contribution in 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) to 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 of the Total Project, and its obligation to finance the future maintenance and operational costs of the Project; and,

(e) to facilitate timely and efficient management of the Project.

SECTION 3 PREVIOUS FEDERAL DOCUMENTS AND GRANTS

(a) The Government laws, policies and procedures require the completion of a project development process and environmental review prior to the execution of this Agreement. Prior Grants of Federal assistance awarded by the Government for this Project development process described in Attachment 5 of this Agreement. These Grants (and any other documents that are described in Attachment 5, including Letters of No Prejudice) are incorporated herein, except for the terms and conditions specifically superseded by this Agreement. Further, in executing this Agreement, the Grantee assures that the certifications and assurances (made by 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 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 execution of 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

The Government has no obligation to provide any financial assistance for the Project beyond the Maximum Federal Financial Contribution. If the total Federal financial assistance provided under Section 8, Limitations of Federal Funding Commitment, is insufficient to achieve revenue operation 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). The Grantee promises that it will secure and provide such additional resources as are necessary to pay these additional costs (overruns) and expeditiously Complete the Project without further Federal financial assistance. The Grantee further agrees to notify the Government when the total project cost is expected to exceed the funds available and identify the source of funds to cover any shortfall.

SECTION 5 REVENUE OPERATION DATE

(a) The Grantee agrees and promises to achieve revenue operation of the Project on or before September 30, 2004 (Revenue Operation Date), in accordance with the terms and conditions of this Agreement.

(b) The Revenue Operation Date (ROD) is a significant term of this Agreement. The Grantee's failure to achieve the operational functions of the Project on or before the ROD 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 and to extend the ROD 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 and extension of the ROD 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 ROD, 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 ROD.

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

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

SECTION 6 NET PROJECT COST

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

(b) In accordance with 49 USC Section 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 Net Project Cost that may be financed by the Government may not exceed the amount of the Maximum Federal Financial Contribution in this Project as stated in Section 8 of this Agreement, Limitations of the Federal Funding Commitment.

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 of this Agreement. The Estimated Net Project Cost of the Total Project reported in Attachment 3 is \$350,000,000.

(b) The Estimated Net Project Cost financed with the execution of this Agreement is limited by the amount of the Maximum Federal Funds Approved. The amount of the Estimated Net Project Cost and the amount of the Maximum Federal Funds Approved are stated in the Notification of Grant Award. The amount reimbursable by the Government is limited to the lesser of either the amount of the Maximum Federal Funds Approved or the maximum percentage of Federal participation permitted by Federal law and regulations. Additional funds will not be available for participation and reimbursement unless or until a Grant amendment is executed awarding additional funds and amending the Notification of Grant Award.

SECTION 8 LIMITATIONS OF THE FEDERAL FUNDING COMMITMENT

(a) With the execution of this Agreement, the Government obligates and awards a total of \$-0- in Federal financial assistance for the Project (the Maximum Federal Funds Approved on the Date of the Agreement). The sources of this Federal financial assistance are set forth in the Approved Project Budget. 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 the execution of this Agreement, the Government also acknowledges its intent to provide Federal capital new starts assistance for the Project in addition to the amount set forth in Paragraph (a) of this Section. The amount of funds that the Government may provide will not exceed \$257,500,000. The anticipated sources of Federal financial assistance of this additional amount are listed in Attachment 6 of this Agreement, Schedule of Federal Funds for the Project. Additional funds obligated pursuant to this Paragraph will be subject to all the terms, conditions and obligations set forth in this Agreement. Accordingly it is expected that the award of additional funds will be processed as amendments to this Agreement.

(2) The award by the Government of additional Federal financial assistance to the Project under Paragraph (b)(1) of this Section 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 Financial Contribution in this Project under the capital new starts category of funds is limited to \$257,500,000 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 Financial Contribution specified in Section 8(c) of this Agreement does not include funds other than from the 49 U.S.C. Section 5309 capital new starts program. Should federal funds under the Surface Transportation Program be provided for the Project, or should federal funds from any other source be provided for the Project, 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 the Maximum Federal 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 execution of this Agreement, the Grantee has developed and adopted a Financing Plan for financing all Project Costs necessary to complete the Project. In addition to the amount of Federal funds requested, the Financing Plan includes a statement of 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 Financing Plan, as accepted by the Government, with the supporting documentation (including formal funding agreements and commitments) is hereby incorporated by reference and made a 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 necessary to Complete the Project.

(c) The Grantee hereby commits and certifies that the Local Share portion of its financing 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 of the Total Project, as set forth in Section 7 of this Agreement, the Grantee's financial commitment to the Net Project Cost is estimated to total \$92,500,000. This amount constitutes the Local Share needed to match the Maximum Federal Financial Contribution to the Project. In the event that the actual Federal financial contribution in

the Project is reduced or is increased or the funding percentage as set forth in the Notification of Grant Award is changed, the portion of the Grantee's financial contribution to 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 which adversely affects the Grantee's plan to fund the Project Costs necessary to Complete the Project as set forth in the Financing 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.

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/MAINTENANCE COST

(a) As a condition of the Government's execution of this Agreement, the Grantee has developed and adopted a Financing Plan for financing 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 Financing 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 a 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 transit 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 Financing 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 Financing 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 comprising the Project. The Baseline Cost Estimate is accepted by the Government and is Attachment 3 of this Agreement. It is derived from cost estimates of the individual contracts that, in sum, comprise the Project. The Baseline Cost Estimate 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. As the measure of cost estimates as of the Date of this Agreement, the Baseline Cost Estimate established in Attachment 3 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 achieve the Revenue Operation Date. This submission 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 since 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 Operation Date and action planned to recover the schedule. The Government's acquiescence of such notice will not be deemed approval by the Government of an extension of a Revenue Operation Date unless an extension is expressly granted, in writing, by the Government.

SECTION 15 PROJECT MANAGEMENT OVERSIGHT

The Project is a "Major Capital Project" as described in the Federal Transit Laws and defined in the Government's Project Management regulations at 49 C.F.R. Section 633.5. Accordingly, the Grantee agrees that all of the requirements and conditions set forth in such regulations (49 C.F.R. Part 633) apply to the Project activities. Noncompliance with the 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 listed in Attachment 7 of this Agreement. These documents together with related agreements and supporting documentation

are hereby incorporated and made a part of this Agreement. To assist the Government in monitoring the implementation of the adopted mitigation measures, these measures are specifically described 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 formal environmental documents.

(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 the Master Agreement, Section 25, "Environmental Requirements." Under that provision at Paragraph (1), 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 Final Environmental Impact Statement without the express written approval of the Government.

(c) This Section is intended only to supplement the provisions set forth in the Master Agreement, Section 25, "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. Section 5333(b), and Department of Labor (DOL) Guidelines, 29 C.F.R. Part 215. These terms and conditions are identified in the letter(s) of certification from the DOL to the Government on the date(s) set forth in the Notification of Grant Award. The Grantee will carry out the Project in compliance with the conditions stated in the DOL certification letter(s). The letter(s) and any documents cited in the letter(s) are incorporated herein 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 the sixty (60) day period, the Government will notify the Grantee, in writing, within thirty (30) days of 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 Government approval or concurrence is needed on any matter under this Agreement, such 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 the Master Agreement, Section 11, "Right of the 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 14 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, "Right of the Government to Terminate," of the Master Agreement until any necessary corrective action, which may be required by the Government, is accomplished. Any breach of this Agreement which 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 the Master Agreement, Section 9 (c), "Costs Reimbursed," and so long as it remains within the limits of the Maximum Federal Financial Contribution set forth in Section 8 of the 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 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 Agreement consists of this Part I of II, "Notification of Grant Award and Federal Transit Administration, Full Funding Grant Agreement", including the Approved Project Budget and the Attachments to this Part I; Part II of II, "Federal Transit Administration Master Agreement", FTA Form MA(6), October 1, 1999, as may be revised from time to time; the Application; the Final Environmental Impact Statement, the Environmental Assessment and 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 herein by reference and made a part of this Agreement. Any inconsistency between the Application and the terms and conditions of this Part I will be resolved according to the clear meaning of the provisions of this Part I and Attachments hereto.

SECTION 21 SIMULTANEOUS CREATION OF ELECTRONIC AGREEMENT

This Agreement is being awarded and accepted simultaneously by electronic means. To the extent any discrepancy may arise between the electronic and written versions of this Agreement, the electronic version will prevail concerning the obligation amounts and the dates for award and execution of this Agreement; in all other respects the written version will prevail. Should the Electronic Notification of Award include special conditions for the Project, those conditions are

incorporated herein by reference and made a part of this Agreement.

SECTION 22 AMENDMENTS TO AGREEMENT

Amendments to any of the documents referred to in Section 19, Contents of Agreement, will be made in accordance with the requirements and procedures set forth in FTA Circular 5010.1C, "FTA Project Management Guidelines", dated October 1, 1998, as may be amended from time to time, and FTA Circular 5200.1 "Full Funding Grant Agreement Guidance" (July 2, 1993).

SECTION 23 ATTACHMENTS -- INCORPORATION

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

SECTION 24 NOTICES

Notices required by this Agreement will be addressed as follows:

As to the Government:

Ms. Helen M. Knoll
Regional Administrator
Federal Transit Administration
915 Second Ave., Rm. 3142
Seattle, Washington 98174

As to the Grantee:

Mr. Fred Hansen
General Manager
Tri-Met
710 N.E. Holladay Street
Portland, Oregon 97232

SECTION 25 APPLICABLE LAW

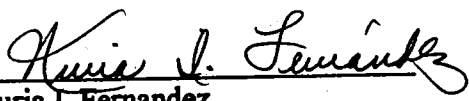
If neither Federal statute nor Federal common law govern the interpretation of the provisions of this Agreement, the state law of the State of Oregon will apply. This provision is intended only to supplement the Master Agreement, Section 2(c), "Application of Federal, State, and Local Laws and Regulations."

SECTION 26 EXECUTION OF AGREEMENT

This Agreement is comprised of several identical counterparts, each to be fully executed by the parties and each deemed to be an original having identical legal effect. When signed by the Government, this instrument will constitute an award that should be executed by the Grantee within ninety (90) days of the Government's execution of the Agreement. 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, the effective date will be the date the Government executed its award.

The Government has executed this award as of OCT 22 2000.

BY: 
Nuria I. Fernandez
Acting Administrator
FEDERAL TRANSIT ADMINISTRATION
U.S. DEPARTMENT OF TRANSPORTATION

The Grantee, by execution of this Agreement, ratifies and adopts all statements, representations, warranties, covenants and materials submitted by it; accepts the Government's award of financial assistance; and, agrees to all of the terms and conditions of this Agreement.

Executed this 24 day of October 2000.

AUTHORIZED OFFICIAL:

Juel Hansen

TITLE: General Manager

ORGANIZATION: Tri County Metropolitan Transportation
District of Oregon

ATTESTED BY:

Monika R. Johnson

CERTIFICATION BY ATTORNEY

I, M Brian Playfair, acting as Attorney for the Grantee, certify that I have examined this Agreement and the proceedings taken by the Grantee relating to it. As a result of this examination I find that the execution of the Agreement by the Grantee has been duly authorized by the Grantee's action, in the form of a resolution, dated February 24, 2000, (a copy of which is certified as true and conforming and is submitted to the Government along with this executed Agreement). Also, I find that in all respects the execution of this Agreement and of the authorizing resolution are 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 Agreement terms. Finally, I certify that to the best of my knowledge there is no legislation or litigation pending or threatened which might affect the full implementation of the Project in accordance with the terms of this Agreement.

Dated this 24 day of October 2000.

SIGNATURE: M Brian Playfair

TITLE: General Counsel

ORGANIZATION: Tri-Met

**TRI - COUNTY METROPOLITAN TRANSPORTATION DISTRICT
INTERSTATE MAX LIGHT RAIL PROJECT
PROJECT SCOPE**

The Project is a 5.8-mile northward extension of the existing 33-mile long east/west MAX line. The new light rail line will extend from a junction with the east/west line at the Rose Quarter Transit Center (TC) to a terminus station at the Expo Center. Interstate MAX operations will share approximately 1.6 miles of existing east/west line between Rose Quarter TC and the existing light rail transit (LRT) turnaround at SW 11th Avenue in downtown Portland. A track connection to and from the east at Rose Quarter TC will allow Interstate MAX LRVs to be stored at an expanded Ruby Junction Maintenance Facility.

The scope of the grant includes eligible final design, management, insurance, right-of-way, equipment acquisition and installation, materials acquisition, community relations, construction, public art program, station area development, start up expenses and interim financing costs.

In the Rose Quarter and Albina area, the alignment extends north on N. Interstate Avenue from the existing MAX line. The track proceeds through the Upper Interstate area to the Columbia Slough/Portland International Raceway area and concludes at the Expo Center. The project line includes ten LRT stations.

The new LRT stations will typically consist of concrete platforms, shelters, ticket vending machines, telephones, lighting, benches, trash receptacles, information pylons and signage, landscaping, cabinets for electrical and communications equipment and bicycle lockers. A third track and bays for connecting buses will be provided at Expo Station.

Throughout the alignment, utilities will be relocated to accommodate the LRT design, on-street parking will be accommodated to the greatest extent practical, and bike lanes will be provided on or adjacent to segments of Interstate Avenue. Reconstruction will also generally include sidewalks paralleling the alignment.

Tri-Met expects to acquire approximately seventeen (17) light rail vehicles for Interstate MAX which will be fully compatible with the existing vehicles and existing MAX wayside system.

The existing Ruby Junction Operations Facility will be modified and expanded to store, maintain and dispatch the new LRVs. Included in the expansion will be new or extended storage tracks, electrical facilities for the yard and expanded employee parking. The central control facility at Ruby Junction will be expanded and have the capability to remotely monitor and control Interstate MAX.

The traction electrification system will distribute direct current power to the Interstate MAX alignment from substations via an overhead catenary system and will be fully compatible with the existing LRT system. Trackway and street lighting will be provided along the alignment.

An Automatic Block System wayside signal system will control trains in the Expo Line Section. Traffic signals will be modified or added to allow left turns, auto crossings and signal preemption by the light rail trains. The existing MAX signal system will be modified to connect with the Interstate MAX line.

Ticket vending machines will be procured, installed, tested and commissioned to serve the Interstate MAX line.

Most of the project will occupy existing City of Portland and ODOT rights-of-way. However, some private property will be acquired for project right-of-way. Permanent and temporary easements and permits of entry will be acquired where needed to facilitate project construction and on-going operations. The project will coordinate facility design and property acquisition to facilitate station area development activities.

Revenue operations will commence by September 30, 2004.

**TRI - COUNTY METROPOLITAN TRANSPORTATION DISTRICT
INTERSTATE MAX LIGHT RAIL PROJECT
PROJECT DESCRIPTION**

Contract Unit 01 - Civil Construction

This contract unit encompasses all civil contracts along the 5.8-mile alignment the line travels from Rose Quarter along Interstate Avenue to the Kenton business district, then north along Denver Avenue to the Expo Center. The alignment is generally at-grade in a separate median. In the Rose Quarter and Albina area, the alignment extends north in the median of N Interstate Avenue from the junction with the existing MAX line to just north of N Greeley Avenue. There are stations at the Rose Quarter TC and near N Russell. Typically, a single travel lane, a bike lane and a sidewalk will flank both sides of the trackway. A track siding will be provided in the vicinity of the Broadway Bridge.

Through the Upper Interstate area, the trackway remains in the median of N Interstate Avenue from just north of N Greeley Avenue to N Argyle Street in the Kenton Neighborhood. On-street parking will be provided along blocks between stations and at some stations. Stations will be located near N Overlook, N Prescott Street, N Killingsworth Street, N Portland Boulevard, N Lombard Street and in Kenton near N Denver Avenue.

In the Columbia Slough/ Portland International Raceway / Expo area, from N Argyle north to the Expo terminus, the alignment will follow Denver Avenue on structure over Columbia Boulevard. A new LRT bridge will cross the Columbia Slough. The alignment will be grade separated from Highway 99W. North of N Victory Boulevard the trackway will parallel the existing N Expo Road to the Expo Center parking lot. Both stations in the line section, N Victory Boulevard and the Expo Center, will have park-and-ride facilities.

At-grade stations are located at the Rose Quarter Transit Center (at N Multnomah Street), N Russell Street, Edgar Kaiser Medical Center (at N Overlook Street), N Prescott Street, N Killingsworth Street, N Portland Boulevard, N Lombard Street, Kenton (at N Denver Street), the Portland International Raceway (at N Victory Boulevard) and the Expo Center.

A total of approximately 600 park-and-ride spaces will be constructed at the Portland International Raceway and Expo Center stations.

Civil work includes the construction of stations, station finishes, substation foundations, trackbed, at-grade crossings, traffic signals, and road reconstruction as necessary. It includes utility relocation and adjustments; drainage, tie-and-ballast and paved track installation, stray current protection, sidewalks, street furnishings, traffic signals and grade crossings, and landscaping and eligible mitigation measures identified in the Record of Decision.

Civil construction includes structures over Columbia Boulevard and the Columbia Slough.

Contract Unit 02 - Insurance

Tri-Met will develop an Owner Controlled Insurance Program (OCIP) to provide insurance for the construction contractors for Interstate MAX light rail project. Under the terms of this program, contractors do not include insurance costs in their bid prices, because Tri-Met provides the insurance coverage. The program will provide insurance for workers compensation, general liability, excess liability and builders risk for the full value of the project.

Contract Unit 03 - Track Materials Acquisition

This contract unit provides for the purchase of track materials, including girder rail, T-rail, direct fixation fasteners, special trackwork, concrete ties, turnouts, pads, electrical isolation boxes, and other track materials necessary for the alignment. Track installation is accomplished under individual construction contracts.

Contract Unit 04 - Light Rail Vehicles

This contract unit provides for the purchase of approximately 17 low floor light rail vehicles, as supported by the Fleet Management Plan dated November 1999. The vehicles will be capable of 55-mph maximum speed and operationally compatible with the existing fleet. This unit includes spare parts, special tools, associated capital maintenance items, training and field support, testing, and warranty support.

Contract Unit 05 - Ruby Junction Expansion

This contract unit encompasses the modification and expansion of the existing operations and maintenance facility at Ruby Junction to store and maintain the light rail vehicles for Interstate MAX. The expansion plan includes new or extended storage tracks, shop facilities necessary to maintain the expanded fleet, a yard electrical substation and expanded employee parking.

Contract Unit 06 - Traction Electrification System

This contract unit provides for 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, and supply of power to communications houses and to the signaling system. Pole foundations, substation buildings and ground mats, substation enclosures and underground conduit will be accomplished under the civil construction contracts.

Contract Unit 07 - Signals

This contract unit provides for the purchase, installation and testing of the automatic block signal system, including relay equipment, power transformers, wiring and cabling, cases, gated crossing equipment and signal enforcement equipment. This contract includes the development, procurement and installation of a train-to-wayside communications system, including loop detectors, control hardware and traffic signal interface. Insulated joints, power-bonding cables, underground conduit, and signal rooms will be accomplished under individual civil construction contracts.

Contract Unit 08 - Communications

This contract unit provides for the purchase and installation of the communications and central control system, including fiber optic, backbone, supervisory control and data acquisition equipment, terminals, displays, computer control hardware and software, central control furnishings, and provisions for a closed circuit television system. Conduit and communications rooms will be constructed under the civil construction contracts.

Contract Unit 09 - Fare Collection

This contract unit 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.

Contract Unit 10 - Real Property

This contract unit will provide for the cost of appraisals, the purchase of real property and construction easements. Demolition, relocation and allowable hazardous materials remediation costs, if required, are also provided here.

Contract Unit 11 - Engineering and Administration

This contract unit provides the contracted costs of professional services consultants (including engineers, architects and related services) for final engineering of civil elements and systems related components, and necessary construction phase services for the work described in contract units 1 through 10; Tri-Met direct and indirect administrative and overhead costs associated with management, design oversight and project control.

This unit includes contracted construction management and project control; community relations staff and activities; outside legal counsel; management, development and installation of the public art program; and station area development.

Contract Unit 12 - Contingency

This contract unit contains the overall project contingency to cover additional costs due to design changes, unforeseen expenses and variances between estimates and actual costs.

Contract Unit 13 - Interim Financing

This contract unit will provide the cost of an interim financing program to meet the construction schedule cash flow requirements. This contract will provide reimbursement for interest costs, fees and professional services associated with the financing program under which Tri-Met will issue grant anticipation notes, commercial paper or other financing instrument for the federal share of the project.

Contract Unit 14 - Start Up

This contract unit includes Tri-Met labor costs for vehicle commissioning, vehicle maintenance, electrification, signals and communications, and maintenance of way services during pre-revenue operations. The unit also includes qualifications training, systems training, public information and pre-revenue operations.

**ATTACHMENT 3
BASELINE COST ESTIMATE
INTERSTATE MAX LIGHT RAIL PROJECT**

CONTRACT UNIT NO.	DESCRIPTION	(A) MARCH 2000 ESTIMATE	(B) MIDPOINT OF CONSTRUCTION EXPENDITURES	(C) ONSTRUCTION DURATION (MONTHS)	(D) CONTRACT COMPLETION DATE	(E) ESCALATED AMOUNT
1.	CIVIL CONSTRUCTION	\$103,384,196	Apr-02	34	Sep-03	\$114,758,457
2.	INSURANCE	\$5,268,781	Dec-02	46	Sep-04	\$5,869,719
3.	TRACK MATERIALS	\$7,668,456	Nov-01	15	Nov-01	\$8,498,979
4.	TRANSIT VEHICLES	\$50,500,000	Feb-03	35	Jul-03	\$57,641,871
5.	OPERATIONS FACILITY	\$8,413,408	Dec-01	21	Aug-02	\$9,154,373
6.	TRACTION ELECTRIFICATION	\$14,799,403	Aug-03	40	Jul-04	\$16,792,935
7.	SIGNALS	\$11,862,892	Aug-03	40	Jul-04	\$13,492,574
8.	COMMUNICATION	\$4,291,636	Jan-04	40	Jul-04	\$4,898,572
9.	FARE COLLECTION	\$1,500,000	Jan-04	40	Jul-04	\$1,712,135
10.	RIGHT OF WAY / REAL ESTATE	\$5,751,528	Jan-01	19	Oct-01	\$6,705,448
11.	ENGINEERING & ADMINISTRATION	\$57,300,000	May-02	55	Sep-04	\$63,849,903
12.	CONTINGENCIES	\$31,039,771	Jul-02	50	Sep-04	\$34,725,035
13.	INTERIM FINANCING	\$6,781,275	Jul-02	50	Sep-04	\$7,595,000
14.	START-UP	<u>\$3,843,935</u>	Oct-03	23	Sep-04	<u>\$4,305,000</u>
		\$312,405,281				\$350,000,000

**INTERSTATE MAX LIGHT RAIL PROJECT
TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT
SUMMARY SCHEDULE
ATTACHMENT 4**

	Early Start	Early Finish	2000	2001	2002	2003	2004
			Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Civil Construction	Nov-00	Sep-03	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Insurance	Nov-00	Sep-04	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Track Materials	Aug-00	Nov-01	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Transit Vehicles	Aug-00	Jul-03	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Operations Facilities	Nov-00	Aug-02	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Traction Electrification System/Signals	Mar-01	Jul-04	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Communications/ Fare Collection	Mar-01	Jul-04	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Right-of-Way / Real Estate	Mar-00	Oct-01	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Engineering & Administration	Feb-00	Sep-04	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Contingency	Jul-00	Sep-04	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Interim Financing	Jul-00	Sep-04	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Start-Up	Oct-02	Sep-04	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4
Revenue Service	Sep-04	Sep-04	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4	Q1 Q2 Q3 Q4

**TRI - COUNTY METROPOLITAN TRANSPORTATION DISTRICT
INTERSTATE MAX LIGHT RAIL PROJECT
SUMMARY SCHEDULE NARRATIVE**

Contract Unit 01 - Civil Construction

Tri-Met will begin civil construction with the relocation of public utilities beginning November 1, 2000. Trackway construction along Interstate Avenue will begin in April 2001. Trackway construction for the Expo segment will begin in September 2001. Civil construction will conclude with station finishing work along Interstate Avenue on September 19, 2003.

Contract Unit 02 - Insurance

The insurance program will begin at the start of civil construction on November 1, 2000 and will conclude at the completion of construction/installation contract close-out on September 3, 2004.

Contract Unit 03 - Track Materials Acquisition

A Notice-to-Proceed for the Rose Quarter/Rose Garden tie-in track materials is scheduled for August 2, 2000. T-rail and other track materials will be manufactured and delivered beginning in December 2000. The first delivery of special trackwork is scheduled for April 2001. All trackwork deliveries are expected to be completed by November 29, 2001.

Contract Unit 04 - Light Rail Vehicles

Contract award for light rail vehicles is scheduled for August 24, 2000. The first vehicle is expected in Portland in late August 2002. All vehicles are scheduled to be delivered and commissioned by July 31, 2003.

Contract Unit 05 - Ruby Junction Expansion

Notice-to-proceed for this work is expected on November 16, 2000 at which time design interface will commence. Construction is scheduled to begin in April 2001. The yard and track areas are scheduled to be ready to accept the light rail vehicles by June 2002. The expansion of the entire facility is scheduled to be complete on August 19, 2002.

Contract Units 06 and 07 - Traction Electrification System and Signals

Systems design, furnish and install work from the Steel Bridge to the Expo Center is scheduled to be awarded March 29, 2001. Installation will be phased, with construction beginning in September 2002 and proceeding from the Steel Bridge northward. Overall systems installation and testing is scheduled to be complete by July 15, 2004.

Contract Units 08 and 09 - Communications and Fare Collection

The systems contractor responsible for traction electrification and signals will also design, furnish and install communications and fare collection equipment. Installation of these elements is scheduled for the period from June 2, 2003 to May 26, 2004.

Contract Unit 10 - Real Property

Beginning near the end of the preliminary engineering phase (March 20, 2000), Tri-Met commenced identification of the real property parcels and easements required for the alignment. The schedule outlines the required steps of appraisal, appraisal review, negotiations and condemnation (if required), all concluding in late April 2001. Final documentation is scheduled to be completed by October 12, 2001.

Contract Unit 11 - Engineering and Administration

Engineering and administration activities began with a limited Notice-to-Proceed for civil design work on February 24, 2000. Design deliverables (civil and systems) are due beginning in late April 2000, with 100% documents scheduled throughout the fall of 2000 and concluding with Ruby Junction expansion in March 2001. Design services during construction will continue through September 2004. Other activities, including project management, began with permission to enter final design and will conclude with grant closing.

Contract Unit 12 - Contingency

Contingency will be administered throughout the life of the project according to the contingency management plan.

Contract Unit 13 - Interim Financing

Tri-Met will institute an interim financing program according to the cashflow needs of the project and available funds. If necessary, Tri-Met will begin this process in the summer of 2000, and manage the program through 2004.

Contract Unit 14 - Start Up

Operations readiness preparation and other approved activities will begin on October 1, 2002 and conclude with the commencement of revenue service on September 30, 2004.

**TRI-COUNTY METROPOLITAN TRANSPORTATION DISTRICT
INTERSTATE MAX LIGHT RAIL PROJECT
PRIOR GRANTS AND RELATED DOCUMENTS**

I. Prior Grants

<i>Grant No.</i>	<i>Obligation Date</i>	<i>Federal Amt.</i>	<i>Fund Source</i>	<i>Purpose</i>
OR-29-9021	09/27/93	\$987,950	Transfer (e)(4)	AA, DEIS: S/N ¹
OR-29-9022	12/23/93	\$1,600,000	Transfer (e)(4)	AA, DEIS: S/N ¹
OR-29-9023	08/13/96	\$13,061,695	Transfer (e)(4)	EIS, PE: S/N ²
OR-03-0066	09/27/97	\$5,958,137	Sec. 5309	EIS, PE: S/N

II. Related Documents

1. Final Environmental Impact Statement – October 18, 1999
2. Record of Decision – January 5, 2000
3. Approval to Initiate Final Design – February 17, 2000

III. FFGA Grant History (This section of Attachment 5 is to be updated with each grant approval for this project. All grant actions, including formula and flexible funds included in Attachment 6 should be listed below included.)

Project No:	Federal Amount	Obligation Date
OR-03-0076	\$0	

¹ Alternatives Analysis and Draft Environmental Impact Statement for South/North Corridor

² Environmental Impact Statement and Preliminary Engineering for South/North Corridor

SCHEDULE OF FEDERAL FUNDS

Section 3030(a) of the Transportation Equity Act for the 21st Century (TEA-21) authorizes FTA to award Federal capital new starts funds for final design and construction of the Interstate MAX light rail extension (the "Project"). In accordance with the Federal Transit Laws, 49 U.S. C. Chapter 53, and FTA Circular 5200.1, Full Funding Grant Agreements Guidance (July 2, 1993), 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 TEA-21. The Government and the Grantee recognize, however, that the period of time necessary to complete the Project may extend beyond the expiration of TEA-21, 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:

<u>Fiscal Year</u>	<u>Federal</u> <u>Section 5309</u> <u>New Starts</u>	<u>CMAQ/STP</u>	<u>Local*</u>	<u>Total</u>
2000	\$0	\$6,000,000	\$5,160,000	\$11,160,000
2001	\$40,000,000	\$6,000,000	\$15,270,000	\$61,270,000
2002	\$70,000,000	\$6,000,000	\$48,070,000	\$124,070,000
2003	\$70,000,000	\$6,000,000	\$0	\$76,000,000
2004	<u>\$77,500,000</u>	<u>\$0</u>	<u>\$0</u>	<u>\$77,500,000</u>
Total	\$257,500,000	\$24,000,000	\$68,500,000	\$350,000,000

* Sources of local funding are Tri-Met payroll tax and City of Portland tax increment funding, backed by City of Portland General Funds.

MEASURES TO MITIGATE ENVIRONMENTAL IMPACTS

This document summarizes the mitigation measures for the North Corridor Interstate MAX Project that Tri-Met has committed to as elements of the Locally Preferred Strategy (LPS). Additional information can be found in the North Corridor Interstate MAX Project, Final Environmental Impact Statement (FTA: October 1999).

1. Land Use and Economic Development

The LPS causes no adverse impacts to land use and economic development. The LPS is supportive of Oregon's Statewide Planning *Goals and Guidelines* and the Portland *Regional Transportation Plan, Regional Urban Growth Goals and Objectives* and *Regional Framework Plan*. The LPS conforms with the City of Portland Comprehensive Plan, the Transportation Element of the Comprehensive Plan and the Albina Community Plan. If there is any disparity, State of Oregon legislation requires local jurisdictions to amend their plans to conform to the Land Use Final Order adopted by the Metro Council for the project. The LPS is also supportive of objectives stated in Washington State's Growth Management Act, in Clark County's comprehensive plan and in the City of Vancouver's comprehensive plan. The LPS stimulates short-term employment growth and is supportive of planning for long-term economic development in the region. For these reasons, no mitigation measures are needed.

2. Displacements and Relocation

- 2.1 The project as proposed has no displacements, but includes a number of partial acquisitions for right-of-way (ROW). In the event that displacement impacts can not be entirely avoided as the project moves into more detailed final design; a relocation assistance program will be available to mitigate those impacts and to assist eligible displaced residents, businesses and public facilities.
 - 2.1.1 The program will comply with guidelines of FTA, including the Uniform Relocation Assistance and Real Property Acquisition Regulations for Federally Assisted Programs.
 - 2.1.2 Specific relocation requirements for individual or business displacement cases, should they occur, will be determined during the Final Design phase of the project. The project will survey residents and businesses to be displaced and also survey available housing and business properties within the project area. If businesses or residents would be unable to relocate within the project area, a fixed payment would be made in lieu of other relocation benefits.

2.2 Additionally, access to all residences and businesses not displaced by the project will be maintained throughout the construction process, other than for temporary disruption of access to carry out construction directly in front of a doorway.

3. Neighborhoods

Impacts to neighborhood areas will be mitigated in the following ways:

3.1 Tri-Met will expand its security division to serve the Interstate MAX line. Elements of Tri-Met's system-wide *Transit Security Plan* that will be incorporated into the design and operation of the Interstate MAX line include: increased in-house training of transit district employees to prevent criminal activities; a high level of coordination with local law enforcement agencies and personnel; and improved facility design and operations standards that would increase visibility and security enforcement levels.

3.2 Mitigation for local traffic impacts as described in the Local Traffic section.

3.3 Mitigation for noise and vibration impacts in the Overlook, Arbor Lodge and Kenton Neighborhoods due primarily to proximity to track switch locations as described in the Noise and Vibration section.

3.4 Mitigation for construction impacts on local access and circulation as presented in the section on Traffic Impacts During Construction.

4. Visual and Aesthetic Resources

The following measures will be employed to mitigate visual and aesthetic impacts of the project:

4.1 Replace street trees removed along N Interstate Avenue between the Kaiser complex and Kenton with new trees planted in the planting strips to establish a continuous line of foliage along both sides of the street.

4.2 Plant low growing, low maintenance ground cover in traffic islands and, as possible, in a narrow median strip between stations.

4.3 Delineate pedestrian crosswalks at stations through paving treatments.

4.4 Use architectural treatments at the Russell and Kenton Stations for visual compatibility with adjacent historic structures.

4.5 Revegetate fill slopes near the Columbia Slough with native species that are consistent with the slough restoration project.

4.6 Provide landscape buffers along new rights-of-way for the alignment in the Expo Center Segment.

5. Air Quality

No adverse impacts to air quality are anticipated as a result of the project. Consequently, no mitigation is required.

6. Noise and Vibration

6.1 Wayside noise from LRT operations will be mitigated by employing these measures:

6.1.1 Use track switches with spring frogs at the proposed locations along N Interstate Avenue just north of N Going and N Lombard Streets.

6.1.2 Tri-Met will continue on-going research and development into maintenance practices to reduce LRT operational noises from air conditioning units, motors and other mechanical elements of light rail vehicles; improve wheel truing and rail grinding programs and emphasize proper techniques for quiet, proper light rail operation during the operator training program.

6.1.3 Use wayside lubricators to eliminate wheel squeal at the few, unavoidable, sharper curves along the alignment.

6.2 Vibration impacts will be mitigated by:

6.2.1 Using track switches with spring frogs to eliminate excessive vibration at four receptors, including three multi-family residential buildings and one hotel.

6.2.2 Conduct additional vibration propagation tests on the 10 other vibration receptors during final design to determine the vibration dampening effect of each individual structure. Use vibration-isolation technology (e.g., ballast mats, rail-attached vibration absorbers or resiliently-supported rail) to mitigate impact at those receptors determined to still be adversely affected in excess of the applicable criteria.

6.2.3 Maintain "true" wheels and uncorrugated rail.

6.3 Tri-Met will continue its participation in the US Department of Transportation's Transit Cooperative Research Program for research and development into methods to further reduce LRT noise and vibration.

7. Ecosystems

The following measures will be utilized to mitigate ecosystem impacts:

7.1. Tri-Met will obtain permits from the US Army Corps of Engineers (Corps), Oregon Division of State Lands (DSL) and the City of Portland for anticipated impacts to vegetation, wetlands, wildlife and fisheries. Specific mitigation plans will be defined in the

permits and be developed with the comment and advice of the agencies. Conceptual elements of the mitigation plans are as follows:

- 7.1.1 Replace trees removed during construction according to ratios identified in the City of Portland Environmental Conservation Overlay Zone, *Natural Resources Management Plan for Peninsula Drainage District No. 1*, and the Forestry Code requirements. Potential planting locations include: the south bank of Columbia Slough in proximity of the proposed LRT bridge; the area east of N Denver Avenue, north of N Schmeer Road and south of N Victory Boulevard; along the east and west sides of N Expo Road; and on the banks of several slough systems located within the PIR property.
- 7.1.2 Enhance or restore from one to three acres of wetlands in accordance with mitigation-to-impact ratios required by the Corps, DSL and the City of Portland. Four potential mitigation site options include: the Southern Slough enhancement area (up to 9.1 acres available); Inside Slough restoration area (up to 3.2 acres available); Expo Site restoration (up to 3.5 acres available); and Forebay restoration area (up to 3.2 acres available).
- 7.1.3 To protect fishery resources, conservation measures identified in the *North Corridor Interstate MAX Light Rail Project: Biological Assessment for the Columbia Slough* (Metro: October 1999) will be employed during construction activities in and around the Columbia Slough; including limiting in-water construction work to the July 15 through September 15 window.

8. Water Quality and Hydrology

Water quality and hydrology impact mitigation will employ these measures:

- 8.1 Mitigation for storm water runoff will be designed into and constructed as elements of the project. Measures include: mechanical treatment of storm water from LRT facilities in the Albina Segment, connections to the existing City of Portland sewers in the Upper Interstate Segment and water quality swales/ponds and/or mechanical treatment devices where there are no existing sewers.
- 8.2 Fill placed in the 100-year floodplain (2,900 cubic yards for relocation of N Expo Road and 5,000 cubic yards for expansion of the Ruby Junction Operations and Maintenance Facility) will be balanced by equivalent cuts within the floodplain in the vicinity of the impact sites.

9. Energy

Implementation of the Interstate MAX Project would result in lower energy consumption for future transportation system operations than would the No-Build Alternative. Therefore, no mitigation is required.

10. Geology and Soils

To minimize the risk of adverse impact to the environment through which the project is constructed and also to minimize the risk of adverse impact to the project from geological and soils conditions, the following mitigation measures will be implemented:

- 10.1 A geotechnical investigation of all construction locations will be conducted during final design. Investigation results will be used to modify the project design where poor foundation conditions exist and/or seismic risks warrant.
- 10.2 An erosion control plan for construction activities will be prepared by Tri-Met during final design and implemented by the contractors.

11. Hazardous Materials

Implementing these measures will mitigate potential hazardous materials impacts:

- 11.1 Prior to any excavation for advance utilities work, Tri-Met, in coordination with the DEQ, will investigate all locations within the project right-of-way that are adjacent to parcels identified in the FEIS as having a documented hazardous materials history and, based on the results, take appropriate actions with DEQ concurrence.
- 11.2 Where full or partial acquisition of properties is unavoidable, Tri-Met will coordinate with DEQ (and other agencies as advised by DEQ), property owners and operators and other responsible parties to investigate the properties for hazardous materials and for review and approval of specific remediation plans.
- 11.3 A health and safety plan will be prepared during final design to guide construction activities proactively with respect to the potential encounter of hazardous substances during construction.
- 11.4 An emergency response plan will be developed to guide a response to potential hazardous substance releases on or near the alignment from nearby properties.

12. Local Traffic

Mitigation measures for local traffic impacts are listed below by project segment.

12.1 Downtown Portland:

- 12.1.1 Install a traffic signal on the northbound NW Naito Parkway ramp onto the Steel Bridge that would display a flashing yellow, allowing northbound traffic to merge with traffic from southbound NW Naito Parkway. Coordinate the signal with the existing traffic signal controller at NW 1st Avenue and NW Everett Street.

12.1.2 Tri-Met and the City of Portland will explore the use of the latest generation of "smart" signal software to maximize the operations of both light rail and automobile traffic through the NW 1st Avenue at NW Everett intersection and the bridge traffic merge area.

12.1.3 Tri-Met and the City will monitor traffic demand across the Steel Bridge to determine if traffic management measures such as signs, channelization and signals are warranted to direct through traffic to adjacent bridges with available capacity.

12.1.4 After start-up of Interstate MAX service (added to East/West MAX and Airport MAX service), Tri-Met and the City will monitor traffic operations at the intersections of SW Broadway at SW Morrison Street and at SW 4th Avenue at SW Yamhill Street to determine whether traffic mitigation measures should be considered for these intersections.

12.2 Rose Quarter:

12.2.1 Tri-Met and the City will develop and implement "smart" traffic signal software to maximize the operations of light rail, bus and automobile traffic through the intersection of N Multnomah Street and N Interstate Avenue in order to accommodate 28 peak direction trains with full preemption through this intersection.

12.2.2 The Portland Development Commission (PDC), as part of its broad-based study of land use and transportation issues in the Rose Quarter and adjacent areas, will consider strategies such as grade-separation to maintain light rail signal preemption while maximizing efficient traffic movement in the vicinity of the N Interstate Avenue intersection with N Multnomah Street. The PDC study will also evaluate the need for two southbound traffic lanes on N Interstate Avenue between N Larrabee Avenue and N Multnomah Street.

12.2.3 Tri-Met will work with the City of Portland and Rose Quarter operations staff during final design to develop measures to minimize post-event traffic congestion at the N Larrabee Avenue and N Interstate Avenue intersection. Traffic volumes and delays at this intersection will be monitored after startup to determine if the measures result in significant reduction of egress delay.

12.3 Upper Interstate:

12.3.1 Lengthen left-turn pockets at N Going Street, N Portland Boulevard and N Lombard Street.

12.3.2 Revise the alignment design in the vicinity of N Denver Avenue and N Argyle Street to reduce auto/train crossings and include advance directional signing to alert traffic that northbound right turns from N Interstate Avenue at N Argyle Street will be prohibited. Also, add a northbound left turn signal and pocket at N Fenwick Avenue and close the small portion of N McClellan Street between N Fenwick Avenue and N Interstate Avenue.

- 12.3.3 Add left-turn pockets on N Killingsworth Street and N Alberta Street at their intersections with N Interstate Avenue.
- 12.3.4 Modify the signal operations to ensure adequate east/west green time for N Going Street and N Lombard Street.
- 12.3.5 Tri-Met and the City will work with ODOT to develop long-term improvements to I-5 that will help reduce the spillover of through traffic onto local streets and collectors.
- 12.3.6 Tri-Met and the City will develop a traffic management plan for the area between N Greeley Avenue and NE Martin Luther King Jr. Boulevard to address problems that may emerge with the diversion of traffic from N Interstate Avenue onto other north/south streets. Baseline information will be based on traffic counts taken before ODOT's I-5 resurfacing project and Interstate MAX construction. Follow-up counts will be taken as necessary during Interstate MAX construction, during pre-revenue service testing and shortly after revenue service begins.

12.4 Expo Segment:

- 12.4.1 Tri-Met and the City will work with ODOT to improve queuing problems at the N Victory Boulevard northbound onramp to I-5.
- 12.4.2 Tri-Met and/or PIR will supply additional personnel to adequately manage both pedestrian and automobile traffic in the vicinity of the light rail at-grade crossing of N Victory Boulevard during major events in the area. Additionally, Tri-Met will examine other design improvements at this location during final design.

13. Traffic Impacts During Construction

- 13.1 Implementing the following measures will mitigate impacts to traffic movement and local access during project construction:
 - 13.1.1 Tri-Met will develop during final design and maintain through construction a program of coordination and outreach with affected business and community interests to oversee the development and implementation of a transportation management plan. The plan will address a variety of traffic, transit and alternative mode strategies designed to minimize the transportation impacts of light rail construction. The plan will also identify detour routes where necessary to keep traffic moving, to the extent possible, with a special emphasis on truck traffic.
 - 13.1.2 Establish a telephone complaint and information system, as part of the outreach program, to be staffed around the clock by personnel with direct communication to Tri-Met's Project Engineer, who will have authority to require the contractor to initiate immediate corrective action.

- 13.1.3 Consider limiting work areas to three or four blocks in length. As practical, complete work in one of these areas before beginning work in another, adjacent area.
- 13.1.4 Program construction of roadway and sidewalk elements to minimize disruption of access to properties adjacent to project construction areas.
- 13.1.5 Where practical within City of Portland zoning constraints, provide temporary parking to replace parking temporarily displaced by project construction.
- 13.1.6 Relocate affected loading zones, property accesses, bus stops and other specially designated parking and access points before construction begins to allow traffic patterns to be reestablished before construction.
- 13.1.7 As appropriate given project budget and schedule considerations and in accord with local construction ordinances, develop and implement practical and reasonable alternative construction techniques to minimize traffic impacts.
- 13.1.8 Consider use of incentive payments, payment penalties or other alternative payment techniques to reduce construction duration and impacts.
- 13.1.9 Select the prime contractor early in order to allow involvement in final design and identification of design features that could reduce construction impacts.
- 13.2 Other measures may be required to address unanticipated construction impact issues.

14. Parkland, Historic and Archaeological Resources

The following measures will prevent direct or constructive use of parkland by the project:

- 14.1 Continuous access to all parkland will be maintained during project construction. If necessary to avoid temporary constructive use of parkland, existing sidewalks adjacent to public parkland will be retained.
- 14.2 Removal of street trees will be minimized adjacent to public parks to avoid visual impact within the parks.
- 14.3 Tri-Met will consult with the State Historic Preservation Office (SHPO) during final design of project elements in the vicinity of the Russell Street Conservation District, in accord with the Memorandum of Understanding (MOU) between Tri-Met, the SHPO and the FTA (found in FEIS Appendix B). The MOU also presents specific mitigation commitments to address issues with the Russell Street Conservation District.

PORTLAND REGIONAL TRANSIT SYSTEM

