



U.S. Department  
of Transportation  
**Federal Transit  
Administration**

REGION IX  
Arizona, California,  
Hawaii, Nevada, Guam,  
American Samoa,  
Northern Mariana Islands

201 Mission Street  
Suite 1650  
San Francisco, CA 94105  
415-744-3133  
415-744-2726 (fax)

**JAN 4 2011**

Mr. Arthur T. Leahy  
Chief Executive Officer  
Los Angeles County Metropolitan Transportation Authority  
One Gateway Plaza  
Los Angeles, CA 90012

Re: Preliminary Engineering Approval for the Westside Subway Extension Transit Project

Dear Mr. Leahy:

The Federal Transit Administration (FTA) is pleased to inform you that the Los Angeles County Metropolitan Transportation Authority's (LACMTA) Westside Subway Extension heavy rail transit project has been approved into preliminary engineering (PE). This approval for the initiation of PE is a requirement of Federal transit laws governing the New Starts program (49 U.S.C. Section 5309(d)(5)).

With this approval, LACMTA has pre-award authority to incur costs for the PE activities discussed below prior to grant approval while retaining eligibility for future FTA grant assistance for the incurred costs. This pre-award authority does not constitute an FTA commitment that future Federal funds will be approved for the project. As with all pre-award authority, all Federal requirements must be met prior to incurring costs in order to retain eligibility of the costs for future FTA grant assistance. FTA's approval to initiate PE is not a commitment to approve or fund any final design or construction activities. Such a decision must await the outcome of the analyses to be performed during PE, including completion of the environmental review process.

FTA is required by law to evaluate a proposed project against a number of New Starts criteria and ensure that prospective grant recipients demonstrate the technical, legal, and financial capability to implement the project. As a result of FTA's evaluation, the Westside Subway Extension project has received an overall rating of *Medium* under the New Starts criteria. LACMTA's current total capital cost estimate for the project is \$5,340.08 million (year-of-expenditure dollars). Of this amount, LACMTA is seeking \$2,063.72 million (38.6 percent) in Section 5309 New Starts funds.

The Westside Subway Extension project, for which this PE approval is granted, is a below-grade heavy rail transit (HRT) line of approximately 8.9-miles, extends the Purple Line from the current terminus at the Wilshire/Western station to a new western terminus near the Veterans Affairs West Los Angeles Medical Center, west of the Interstate 405. The Westside Subway Extension project will be a double-tracked, third-rail exclusive guideway system built primarily under Wilshire Boulevard. The scope of the project includes the procurement of 104 new heavy rail vehicles

(HRVs) and the construction of seven stations, as well as improvements to the existing Division 20 Rail Storage and Maintenance Yard in downtown Los Angeles. When completed, the Westside Subway Extension project will be part of a future 26.3-mile heavy rail system connecting downtown Los Angeles, the San Fernando Valley, and Hollywood with major population and employment centers throughout the Westside of Los Angeles.

In August 2010, FTA initiated an assessment of scope, schedule and costs for the Westside Subway Extension project. In addition, a pre-PE risk assessment workshop was conducted in October 2010 to help LACMTA to identify the uncertainties, including risk management deliverables, associated with the project. A risk mitigation framework was prepared by FTA's Project Management Oversight Contractor (PMOC) to identify issues related to project risks that should be addressed during PE. The review was completed in early December 2010. Based on the findings, below is a list of major actions that should be addressed by LACMTA during PE:

#### ***Project Scope***

- Within 90 days of PE approval, develop an operations plan and complete all transit capacity analyses.
- Develop a concept of operations for the central control facility upgrade and secure remaining funding.
- Develop detailed construction staging and sequencing plans throughout the alignment and obtain public acceptance. Finally, constructability reviews should be conducted to assure that the design is constructible, and within the defined schedule, considering the identified constraints.

#### ***Project Schedule***

- Based on the preliminary results of FTA's pre-PE risk assessment, the schedule for the project appears aggressive. During PE, LACMTA should update the project schedule to reflect an additional two years for project implementation.
- Early in PE, develop a real estate acquisition schedule and a project permit schedule. Monitor the status throughout the project, and in particular during preliminary engineering, since it relates to any advanced design-build construction activities.
- Evaluate the necessity for implementing early construction activities for critical path items that could later pose a significant risk to the project schedule, such as station excavation to preserve expected paleontological and cultural resources.

#### ***Project Cost***

- In conjunction with the cost estimating activities, implement design-to-budget controls and procedures that would require the design team to continually monitor the affect of design development and evolution on the overall project cost. The design team should formally notify LACMTA and request approval of any significant cost or schedule impacts.
- Based on the preliminary results of FTA's pre-PE risk assessment, the capital cost estimate for the project appears to be understated. FTA believes the cost estimate to be more likely in the range of \$5.257 billion to \$8.301 billion (10 to 50 percent probability range). During PE, LACMTA should work with FTA to update the project cost estimate to address the findings of the risk assessment and the risk mitigation workshops.

### *Technical Capacity*

- Consider staffing the Executive Officer for Project Management position as a full-time position to oversee both the Regional Connector and Westside Extension Projects. Similarly, staff the Project Director for both of these projects as full-time positions dedicated to each project.
- Consider staffing a Senior Tunneling Engineer to oversee or supervise the design work of the consultant staff.
- Develop an independent risk team, led by a Risk Manager to continually manage project risk and control the use of contingency.

### *Management Plans*

- Within 30 days of PE approval, address all FTA comments and provide an updated Safety and Security Management Plan in compliance with FTA Circular 5800.1.
- Within 60 days of PE approval, update the Risk and Contingency Management Plan to incorporate FTA recommendations at the November 18, 2010 Risk and Contingency Management Workshop.

FTA's financial review demonstrates that LACMTA has the financial capacity to operate, maintain, and reinvest in its ongoing transit system, equipment and facilities. However, LACMTA's financial plan relies heavily on leveraging Measure R revenues through debt financing using a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan and Qualified Transit Improvement Bonds (QTIBs) that are pending legislative consideration. During PE, LACMTA should continue progress on securing the funding agreements discussed above and develop a more robust plan for addressing cost estimate adjustments discussed earlier, and possible cost overruns and funding shortfalls. In addition, FTA suggests that the following actions be taken as the project progresses through PE in order for the project to continue to advance:

- LACMTA assumes significantly more than \$100 million per year in New Starts funding for a number of years for the Westside Extension. LACMTA is pursuing the Westside Extension concurrently with the Regional Connector, and has also assumed more than \$100 million per year in New Starts funding for that project as well. During PE, LACMTA must work with FTA to address New Starts funding assumptions for the two projects.
- LACMTA is actively pursuing with Congress the legislative initiatives necessary to make the 30/10 plan possible. As the Westside Extension and Regional Connector projects progress through PE, LACMTA must gain commitments of non-New Starts funding sources, including showing progress on the legislative initiatives assumed in the plan. If progress is not demonstrated, FTA will require that the financial plan show how the projects could be implemented using existing funding and loan programs.

LACMTA must work with FTA during PE to address the concerns identified above, along with any others that are identified in FTA's assessment of scope, schedule, and costs as well as any issues that are identified as project development progresses. The objectives are to ensure that:

- All environmental impacts are identified and adequate provisions made for their mitigation in accordance with the requirements of 49 USC 5324(b);

- All major and critical project elements are designed to a level that no significant unknown impacts relative to their costs will result; and
- All cost estimating is complete to the level of confidence necessary for LACMTA to effectively implement the financing strategy, including establishing the maximum dollar amount of the requested New Starts financial contribution needed to implement the Westside Subway Extension project prior to entry into final design.

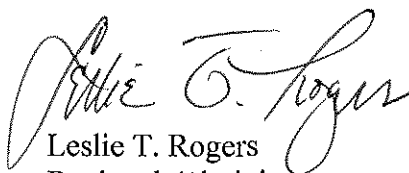
These items must be completed while maintaining at least a "*Medium*" overall New Starts rating in order for the project to advance into final design.

Consistent with FTA's May 2006 Guidance on New Starts Policies and Procedures, LACMTA should submit to FTA all information – including methodologies, assumptions, and results, if not previously submitted, pertaining to the development of the project's: (1) scope; (2) transit service level; (3) capital costs; (4) operating and maintenance costs; and (5) ridership patterns and revenues, within 60 days of this approval. This information will subsequently help inform a Before and After Study, as required by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users. FTA will work with LACMTA to further identify the requisite documentation and other information for the submission.

As PE proceeds, FTA will provide more detail to LACMTA regarding other deliverables that should be completed prior to requesting approval to enter final design.

We look forward to working closely with LACMTA during the development of the Westside Subway Extension project. We are ready to work with you and your staff in achieving the necessary milestones for the successful completion of the PE effort. If you have any questions regarding this letter please contact me at (415) 744-3133.

Sincerely,



Leslie T. Rogers  
Regional Administrator