



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

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Mr. James W. Glock  
Director  
Tucson Department of Transportation  
201 N. Stone, 6th floor  
Tucson, AZ 85701

**JAN 25 2011**

Re: Finding of No Significant Impact for  
Tucson Modern Streetcar Project

Dear Mr. Glock,

Based on our review of the Final Supplemental Environmental Assessment dated December 2010, we have issued a Finding of No Significant Impact (FONSI) for the Tucson Modern Streetcar Project. This Supplemental Environmental Assessment supplements the Final Environmental Assessment FONSI issued on January 22, 2009.

A copy of the FONSI is enclosed. Copies of the FONSI and any supporting assessment information should be made available to affected units of government and to the public. Notice of this availability should be published in local newspapers and provided directly by you to affected units of Federal, State and Local governments as well as the State intergovernmental review contact established under Executive Order 1272.

Please note, the standard terms and conditions of the grant contract will require the City of Tucson to undertake any mitigation actions as identified in the FONSI and the Supplemental Environmental Assessment.

According to the terms of Stipulation 7 in the Memorandum of Agreement (MOA) between the Federal Transit Administration (FTA), the Arizona State Historic Preservation Office, and the City of Tucson, executed December 20, 2007, FTA will present a written amendment to include the Cushing Street Bridge as part of the transit project. The current MOA indicates the Cushing Street Bridge is an independent project.

Thank you for your cooperation in meeting the requirements of the National Environmental Policy Act. If you have any questions, please contact your Transportation Representative, Mr. Alex Smith, at (415) 744-2599.

Sincerely,

Leslie T. Rogers  
Regional Administrator

## Addendum to the Finding of No Significant Impact

### **TUCSON URBAN CORRIDOR – TUCSON MODERN STREETCAR**

**Project Location:** Tucson, Pima County, Arizona

**Grant Applicant:** City of Tucson Department of Transportation

#### **Introduction**

The Federal Transit Administration (FTA) determined on January 22, 2009, that the Tucson Modern Streetcar Project sponsored by the City of Tucson Department of Transportation (TDOT) will not have any significant impact on the environment. Subsequent to FTA's issue of that Finding of No Significant Impact (FONSI), TDOT made several design changes to the proposed project. With the exception of the proposed design changes cited herein, the original FONSI approved on January 22, 2009, remains in effect. FTA, as a joint lead agency with TDOT, has participated in preparing the SEA, has independently evaluated the SEA, and has determined that it adequately and accurately assess the environmental issues and impacts of design changes to the proposed project. Such documents provide sufficient evidence and analysis for determining that an Environmental Impact Statement is not required for the proposed design changes.

The Final Supplemental Environmental Assessment (EA) for this Project was prepared by the Grant Applicant in cooperation with the Federal Transit Administration pursuant to the National Environmental Policy Act of 1969, 102(42 U.S.C. 4332); Federal Transit Laws (49 U.S.C. 5301[e], 5323[b], and 5324[b]); Title 49 U.S.C. 303 (formerly Department of Transportation Act of 1966, 4[f]); and Executive Order 12898 (Environmental Justice).

#### **Project Description**

The City of Tucson adopted a Locally Preferred Alternative (LPA) for the Tucson Urban Corridor in January 2006 and March 2007. The LPA extends approximately 3.9 miles between Downtown Tucson and the UA campus. The LPA was adopted into the Pima Association of Governments 2030 Regional Transportation Plan (RTP), the financially-constrained long-range transportation plan, on June 29, 2006. The LPA was also included in the adopted 2009-2013 PAG Transportation Improvement Program. Local funding for the Modern Streetcar Project was approved as part of the Regional Transportation Authority (RTA) Plan approved by voters in May 2006.

Since the January 22, 2009 FONSI, TDOT has identified design changes and is now planning to construct a 3.74 route mile (7.04 track mile) modern streetcar line in the Tucson Urban Corridor, which includes Downtown Tucson, the Downtown redevelopment area, the 4<sup>th</sup> Avenue and Main Gate business districts, the University of Arizona (UA), and the Arizona Health Sciences Center (AHSC). The proposed changes to the project definition since the January 22, 2009 FONSI are as follows:

- Inclusion of the Cushing Street Bridge;
- Realignment of the track at the west end to include a single track loop;
- Realignment of the track on Granada Avenue to operate in the curb lanes;
- Realignment of the track on Broadway Boulevard to operate on the south side in a transit only lane;

- Elimination of the 5<sup>th</sup> Avenue loop turnaround;
- Relocation of stops on 4<sup>th</sup> Avenue and University Boulevard;
- Realignment of the track at the east end to use Warren Avenue; and
- Change in Location for Traction Power Substations.

The Modern Streetcar Project includes tracks with streetcar vehicles operating at-grade. In most cases, the tracks are in shared travel lanes with automobiles where the system will operate in mixed traffic. Track placement will primarily be in the middle of the travel lane, with stations located in the median or on the outside of the roadway. There are two single track segments in the project; the first is a one-way clockwise loop at the west end of the alignment and the second is a two-way single track segment at the east end of the alignment.

The Modern Streetcar Project stations include platforms that are level with the vehicle to facilitate boardings and alightings. The platforms include shelter canopies, benches, trash receptacles, and real-time transit information. These stations offer consistent amenities throughout the alignment, although many stations will include site-specific design elements. The platforms are designed so they can be used by buses, when applicable. A total of 23 platforms at 17 paired stations will be constructed.

#### **Agency Coordination and Public Opportunity to Comment**

TDOT conducted public and agency scoping at the initiation of the project. Public involvement is documented in Section 4.0 of the Final Supplemental EA. The Draft Supplemental EA was made available for public and agency comment from November 2, 2010 to December 2, 2010. Hard copies were made available for viewing at the TDOT office, RTA office, Tucson Main Library, and UA Library. The Supplemental EA was also available on the project website at [www.tucsonstreetcar.com](http://www.tucsonstreetcar.com), TDOT website at [www.dot.tucsonaz.gov](http://www.dot.tucsonaz.gov), and RTA website at [www.rtamobility.com](http://www.rtamobility.com).

#### **Comments on the Supplemental EA**

A list of comments received during the public comment period and responses to those comments is included as Appendix J of the Final Supplemental EA.

#### **Mitigation Measures to Minimize Harm**

TDOT has adopted specific environmental commitments as part of the project description to address typical impacts that occur from construction. TDOT has incorporated mitigation measures into the project changes to reduce or eliminate potentially adverse environmental impacts, specifically pertaining to noise and vibration levels. The mitigation measures are the same as identified in the Tucson Urban Corridor Final EA (August 2008), except for the following:

- The use of flange bearing frogs for the 5<sup>th</sup> Avenue loop turnaround is no longer needed because the 5<sup>th</sup> Avenue loop turnaround is being eliminated.
- The windows in the sorority on the northwest corner of 2<sup>nd</sup> Street and Cherry Avenue will not be replaced or upgraded to the equivalent of Sound Transmission Class 30 because

the track is being realigned to continue east on 2<sup>nd</sup> Street instead of turning north on Cherry Avenue, thereby eliminating the potential for wheel squeal that was the basis of the potential impact.

- The City of Tucson shall mitigate groundborne vibration impacts caused by the Modern Streetcar project to the National Optical Astronomy Observatory's optical and interferometric testing facility located at 950 N. Cherry Avenue, Tucson Arizona. Mitigation shall reduce or eliminate project generated groundborne vibration to the extent that post project vibrations levels exceed the pre-project conditions. The pre-project conditions will be determined by conducting site specific vibration monitoring. Post project vibration will be estimated using vibration propagation testing and measurements procedures that follow the guidelines in the FTA Manual "Transit Noise and Vibration Impact Assessment" (May 2006). Project generated groundborne vibration that exceeds the current ambient levels and exceeds acceptability limits mutually agreed upon by the City of Tucson and NOAO will be mitigated by the most practical means. Potential mitigation techniques include isolation mat separating rail and/or track slab from surrounding materials, several different versions of floating trackbed, and/or vibration-isolation devices for sensitive equipment.

FTA finds that with the implementation of these mitigation measures, TDOT will have taken all reasonable, prudent, and feasible means to avoid or minimize impacts from the proposed project changes.

### **Determinations and Findings**

#### National Environmental Policy Act (NEPA) Finding

FTA served as lead agency and TDOT served as a joint-lead agency in the preparation of the SEA in compliance with the NEPA, 42 U.S. C. Section 4321 et. seq. and with FTA's regulations, 23 CFR Part 771. The SEA analyzes and describes the project's potential significant impacts. The Supplemental EA was issued in November, 2010. The Supplemental EA found that the project's construction and operation would cause no significant adverse environmental effects that would not be mitigated.

After carefully considering the Supplemental EA, its supporting documents, and the public comments and responses, FTA finds under 23 CFR 771.121 that the proposed project changes, with the mitigation to which the TDOT has committed, will have no significant adverse impacts on the environment. The record provides sufficient evidence and analysis for determining that an EIS is not required.

#### Air Quality Conformity

The Clean Air Act (CAA) requires that Federal agencies and Metropolitan Planning Organizations (MPOs) not approve any transportation project, program, or plan which does not conform with the approved State Implementation Plan (SIP). The Federal Transportation Conformity Rule requires that FTA projects must be found to conform before they are adopted, accepted, approved, or funded.

The proposed design changes to the project do not require additional air quality analysis beyond what was included in the Tucson Urban Corridor Final EA (August 2008). The Air Quality Report

is included as Appendix D in the Tucson Urban Corridor Final EA (August 2008). There are no air quality impacts for the proposed changes to the project definition, as the proposed changes fall within the limits of the previous air quality analysis. Both the regional and hot-spot analyses comply with the Federal Transportation Rule and indicates that the modern streetcar will not (1) cause or contribute to any new violation of any standard in any area, (2) increase the frequency or severity of any existing violation of any standard in any area, or (3) delay timely attainment of any standard or any required interim emission reductions or other milestones in any area.

FTA finds that the proposed project changes will not change the conformity determination made in the initial Finding of No Significant Impact.

#### Floodplain Findings

Pursuant to Executive Order 11988 (Floodplain Management), TDOT assessed floodplains within the 100-year floodplains and floodways defined by the Federal Emergency Management Agency (FEMA) and locations with reported flooding problems or within locally managed floodplains. The modern streetcar project will use the Cushing Street Bridge to cross the Santa Cruz River, which is a surface body of water that is a river characterized by intermittent flow. The City of Tucson received a Nationwide Permit 25 and 33 Authorization from the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act for the construction of the bridge.

FTA finds that that there is no practicable alternative to placement of the project within the floodplain and that the proposed project changes have been designed to minimize potential harm within the floodplain.

#### Endangered Species Act Findings

The Endangered Species Act of 1973, as amended (ESA), intends to protect threatened and endangered species and the ecosystems upon which they depend. The proposed changes to the project definition in the Supplemental EA do not require additional analysis beyond what was included in the Tucson Urban Corridor Final EA (August 2008) because there are no threatened, endangered, and candidate species within a two mile radius of the modern streetcar project. A Biological Review was prepared for the Cushing Street Bridge that determined no effect to threatened, endangered, proposed, and candidate species.

FTA finds that the proposed project changes will have no effect on endangered species or their critical habitat for the proposed changes to the project definition.

#### Section 106 Compliance

FTA and the City have consulted with the SHPO on the proposed project changes under the terms stipulated in the City of Tucson Modern Streetcar Memorandum of Agreement (MOA) executed in December 2007. FTA determined that the proposed project changes would not result in new adverse effect determinations on historic properties. FTA and the City are continuing work with the SHPO on implementing the terms of the MOA.

#### Environmental Justice Findings

Executive Order 12898 provides that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high

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and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations.”

TDOT performed an environmental justice analysis as part of the Supplemental EA. Based on that analysis, FTA finds that the proposed project changes would not have disproportionately high and adverse effects on low-income or minority populations.

Section 4(f) Finding

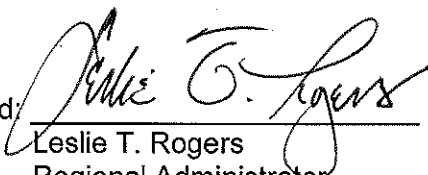
The Department of Transportation Act of 1966 (as amended) established Section 4(f) as a national policy which states that the Secretary of Transportation] may not approve transportation projects that use publicly owned parks, recreation areas, wildlife and waterfowl refuges, or any significant historic site unless a determination is made that there is no prudent and feasible alternative to using that land, and that all possible planning has been done to minimize harm.

The Cushing Street Bridge has the potential of impacting public park land, and therefore a Section 4(f) Analysis has been prepared which documents potential impacts to the Santa Cruz River Park associated with the Cushing Street Bridge. The analysis determined that the proposed bridge qualifies as a de minimis impact in accordance with 23 CFR 774.3(b), 774.5(b) and 774.7(b). A de minimis impact is one that will not adversely affect the activities, features, or attributes of the property. The City of Tucson concurs with this determination. The other proposed project changes do not utilize land subject to Section 4(f) protection and are outside of areas of known archaeological resources.

FTA has determined that the proposed project changes have included all measures to minimize harm, and that there is no potential for impacts to Section 4(f) resources.

Environmental Findings

Based on the Supplemental Environmental Assessment and its associated supporting documents, the Federal Transit Administration finds pursuant to 23 CFR 771.121 that there are no significant impacts on the environment associated with the construction and operation of the proposed Tucson Urban Corridor – Tucson Modern Streetcar project.

Approved:  Date: **JAN 25 2011**  
Leslie T. Rogers  
Regional Administrator  
Federal Transit Administration, Region IX