



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

REGION IX
Arizona, California,
Hawaii, Nevada, Guam
American Samoa,
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OCT 27 2015

Mr. Wulf Grote, P.E.
Director, Planning and Development
Valley Metro
101 North First Avenue, Suite 1300
Phoenix, AZ 85003

Re: Environmental Assessment and Finding
of No Significant Impact for the Proposed
Tempe Streetcar Project


Dear Mr. Grote,

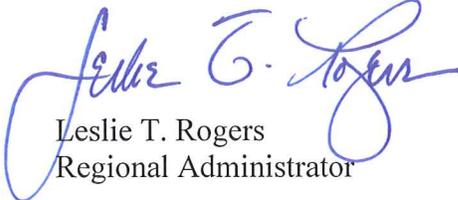
Based on our review of the Environmental Assessment, dated August 5, 2015, the Federal Transit Administration (FTA) has issued a Finding of No Significant Impact (FONSI) for the proposed Tempe Streetcar project. A copy of the FONSI is enclosed.

The FONSI and supporting documentation should be made available to affected government agencies and the public and should be posted on the project website. A Notice of Availability for the FONSI should be published in local newspapers and should also be provided directly to affected government agencies, including State intergovernmental review contacts established under Executive Order 12372.

Please note that the standard terms and conditions of the grant contract will require Valley Metro to undertake the mitigation actions identified in the Environmental Assessment and FONSI.

Thank you for your cooperation in meeting the requirements of the National Environmental Policy Act. If you have any questions about our review, please contact Dominique Paukowits, Community Planner, at (415) 744-2735 or dominique.paukowits@dot.gov.

Sincerely,


Leslie T. Rogers
Regional Administrator

Enclosure

Finding of No Significant Impact

Grant Applicant: Valley Metro

Project: Tempe Streetcar

Project Location: City of Tempe, Maricopa County, Arizona

The July 2015 Environmental Assessment (EA) for the Tempe Streetcar Project (the “Project”) was prepared by Valley Metro in cooperation with the Federal Transit Administration (FTA) pursuant to the requirements of the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [U.S.C.] 4321 et seq.), the Federal Transit Law (49 U.S.C. Chapter 53), the Clean Air Act (42 U.S.C. 7401 et seq.), the National Historic Preservation Act (54 U.S.C. 300101 et seq.), Section 4(f) of the Department of Transportation Act of 1966 (49 U.S.C. 303), the Endangered Species Act of 1973 (16 U.S.C. 1531-1544) and Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations). This Finding of No Significant Impact (FONSI) hereby incorporates the EA by reference.

Description of the Project

Valley Metro in coordination with the City of Tempe proposes to construct the Tempe Streetcar Project. The Project is an approximately three-mile long streetcar line that connects the emerging commercial district of Rio Salado Parkway along the Tempe Town Lake waterfront with Downtown Tempe and Arizona State University’s (ASU’s) main campus along Apache Boulevard to the Dorsey/Apache Boulevard light rail station. The Project includes fourteen stops: three stops on Rio Salado Parkway (at Marina Heights, Hayden Ferry and Tempe Beach), three stops on Ash Avenue (at 3rd Street, 5th, University Drive), four stops on Mill Avenue (3rd Street, 6th Street, 9th Street and 11th Street), and four stops on Apache Boulevard (College Avenue, McAllister Avenue, Rural Road, and Dorsey). The streetcar would operate bi-directionally on Rio Salado Parkway between the new Marina Heights development near Packard Drive and the intersection of Mill Avenue and Rio Salado Parkway. The streetcar would then operate in a one-way loop around Downtown Tempe, counter-clockwise west on Rio Salado Parkway, south on Ash Avenue and east on University Drive to Mill Avenue. Trains would then turn south to travel bi-directionally on Mill Avenue to 11th Street near ASU’s Gammage Auditorium. The bi-directional trackway would then follow the roadway curve around the southwestern perimeter of Gammage Auditorium, turning onto Apache Boulevard and continuing in an east-to-west direction, eventually terminating just south of the Dorsey/Apache Boulevard light rail station.

The Project intends to use electric streetcar vehicles. Streetcar vehicles will be powered by an overhead catenary system (overhead power lines). Streetcar vehicle lengths typically range from 66 to 82 feet, with passenger capacities of 125 to 150 persons. The streetcar system will operate with a single car and primarily share the existing auto travel lanes, with the exception of Rio Salado Parkway, Ash Avenue, University Drive and a portion of Mill Avenue south of University Drive, where it will operate in either exclusive or semi-exclusive guideway. Where streetcars operate in exclusive guideway automobile traffic will not be allowed to drive on the guideway. Where tracks share guideway with vehicle lanes, traffic will be allowed to travel on the guideway. In some locations the streetcar will share the left-turn lanes with auto traffic.

The existing number of traffic lanes would be maintained with two exceptions: 1) Mill Avenue between University Drive and 11th Street and 2) Ash Avenue between Rio Salado Parkway and University Drive. Along Mill Avenue between University Drive and 11th Street, the existing three southbound through lanes would be reduced to two lanes and a southbound bicycle lane would be added. An additional northbound through lane would be added to provide a total of two northbound through lanes and a bicycle lane. At Mill Avenue and 10th Street, the left-turn lane would be removed. On Ash Avenue between Rio Salado Parkway and University Drive, the existing two southbound through lanes would be reduced to one lane and the southbound bicycle lane would be moved adjacent to the remaining southbound through lane.

The Project requires the minor right-of-way (ROW) acquisition, which will not entail the demolition of any buildings or displacement of any residences or businesses. ROW would be necessary to accommodate some streetcar stops, traction power substations (TPSSs) and signal buildings. The TPSSs would be spaced approximately 1 mile apart from one another to provide electrical power for streetcar vehicles and special trackwork. Signal buildings are used to electronically activate special trackwork switches, allowing the streetcar to switch from one track to another. The existing Valley Metro Operations and Maintenance center will be used to maintain and store the streetcars.

Alternatives Considered

The EA evaluated two alternatives: a No-Build Alternative, which describes future transportation facilities and services in 2035 if the Project is not built, and a Build Alternative, which is the Project described above.

The No-Build Alternative is defined as the existing transit and roadway/highway system plus programmed (committed) transportation improvement projects as part of the Maricopa County Association of Governments (MAG) Regional Transportation Plan (RTP) and corresponding Transportation Improvement Program (TIP) by 2035, along with any city-programmed transportation or transportation infrastructure improvements. Under the No-Build Alternative, the Project corridor would remain in its current state for the foreseeable future, and no construction would occur other than what has been previously programmed.

Public Review

The EA was circulated for a 30-day public review from August 19, 2015 until September 18, 2015. Hard copies were made available for viewing at the Valley Metro office and the Tempe Public Library. The EA was also available on the Valley Metro website at http://www.valleymetro.org/projects_and_planning/project_detail/tempe_streetcar/.

A public open house meeting was held at the Tempe Transportation Center on September 2, 2015. During the review period, five comments were received via email and eight written submissions were received at the public meeting. No comments were received from federal, state, or local agencies or Native American groups. A list of comments received during the public comment period and responses to those comments are included in Attachment 1.

Environmental Impacts

Valley Metro, in cooperation with FTA, prepared an EA in July 2015 to evaluate the environmental impacts of the Project pursuant to the requirements of NEPA (42 U.S.C. 4321 et seq.), codified in 23 Code of Federal Regulations [CFR] Part 771.119 and 23 U.S.C. 139. FTA

served as the federal lead agency under NEPA. The EA concluded that construction and operation of the Project, with the incorporation of mitigation and avoidance measures, would not result in a significant impact on the environment. This conclusion applies to all applicable environmental elements, including air quality and greenhouse gas emissions, biological resources, cultural and archaeological resources, energy, hazardous materials, water quality, land use, noise and vibration, safety and security, Section 4(f) resources, socioeconomics and environmental justice, traffic and transportation and visual resources.

The EA addressed the Project's compliance with all applicable statutory, regulatory, and federal requirements, as outlined below.

Air Quality Conformity. The Project satisfies the Environmental Protection Agency (EPA) transportation conformity requirements for air quality under 40 CFR part 93. The Project is included in the amended MAG 2035 RTP and Fiscal Year 2014–2018 TIP that were adopted by the MAG Regional Council in June 2015 and were found conforming by FTA and the Federal Highway Administration in July 2015. A carbon monoxide hot-spot analysis was also completed for the Project as documented in Section 3.7.3.1. The Project involves an electrically-powered streetcar line. The Project would not cause or contribute to any new violation of any standard in any area; increase the frequency or severity of any existing violation of any standard in any area or delay timely attainment of any standard or any required interim emission reductions or other milestones in any area. The Project was determined not to be a project of air quality concern per 40 CFR § 93.123(b)(1). FTA finds that the Project would not result in a significant impact on air quality.

National Historic Preservation Act Compliance. In accordance with the National Historic Preservation Act (54 U.S.C. 300101 *et seq.*), and its implementing regulations at (36 CFR Part 800), FTA, in coordination with Valley Metro and the City of Tempe Historic Preservation Office, defined an area of potential effect (APE). The State Historic Preservation Office (SHPO) concurred with the delineation of the APE on June 5, 2015. No ROW acquisitions would occur on contributing properties in historic districts or on individual properties listed on or eligible for listing on the National Register of Historic Places. As discussed in Section 3.10.3 of the EA, the Project includes measures to minimize and avoid effects to historic resources.

FTA and Valley Metro initiated consultation with Native American groups and other parties in April 2008 and provided an update in 2015. Native American tribes were provided opportunities to share information or concerns regarding potential impacts on prehistoric sites, sacred sites and/or traditional cultural properties consistent with 36 CFR 36 § 800.2 and 36 CFR § 800.4. No consulting party objected to the finding or provided any comments on the EA. On October 23, 2015, SHPO concurred with FTA's determination that, with the measures taken to minimize and avoid effects to historic resources, the Project would result in no adverse effect to historic and archaeological resources (See Attachment 2).

Section 4(f) Compliance. As discussed in Section 3.11 of the EA, the Project would be located within the vicinity of a locally significant park and other historic and archeological resources that qualify as Section 4(f) resources under Section 4(f) of the U.S. Department of Transportation Act of 1966, codified in 49 USC Section 303, or its implementing regulations at 49 C.F.R. part 774. The Project would be located primarily in the existing ROW and would not result in the acquisition or conversion of any portion of a Section 4(f) property to a transportation use. FTA

finds the Project would not result in a use, constructive use, or temporary occupancy of Section 4(f) protected parks, recreation areas, or refuges or historic resources.

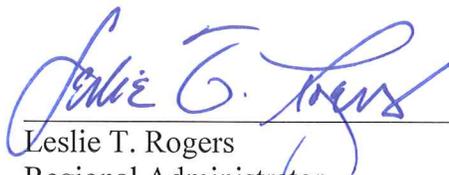
Executive Order 13609 and 11988: Floodplain Management. The Project, although adjacent to Tempe Town Lake, is not located within the 100-year flood zones and, therefore, no modifications to the established 100-year floodplain will result from implementation of the Project. The alignment is located in an area already developed with impervious surfaces as well as well-developed drainage infrastructure and will not increase the risk of flooding. FTA finds there would be no significant impact to the 100-year floodplain from the Project.

Endangered Species Act Compliance. The U.S. Fish and Wildlife Service (USFWS) was contacted to determine whether federally listed threatened or endangered species are known to occur in the Project area. Bald eagles, which have been delisted from the endangered species list but are protected under the Bald and Golden Eagle Act, are known to be present in the Project vicinity. In coordination with USFWS, it was determined that no suitable habitat for any threatened or endangered species exists within the Project area. FTA finds that implementing the Project would not result in a significant impact to federally-listed threatened or endangered species.

Executive Order 12898 (Environmental Justice) Compliance. The potential for disproportionately high and adverse human health or environmental effects on minority and low-income populations were evaluated in the EA in accordance with Executive Order 12898, the U.S. Department of Transportation Order 5610.2(a) and FTA's Environmental Justice Circular 4703.1. Environmental justice populations occur throughout the study area. Effects resulting from construction and operations related to right-of-way, traffic, air quality and noise would occur equally in all neighborhoods adjacent to the alignment. Mitigation measures to reduce these effects are identified in Table ES-2 in the Executive Summary and discussed in Chapter 3 of the EA. The communities near the Project corridor are anticipated to benefit from increased transit accessibility and decreased congestion on many local streets, improved air quality, and improved connectivity and travel times between neighborhoods and businesses within the study area. FTA finds that the Project would not have disproportionately high and adverse human health or environmental effects on minority populations or low-income.

Environmental Finding

In accordance with 23 CFR 771.121(a), FTA finds, based on the analysis, reviews, concurrence letters from applicable resource agencies, and mitigation measures described in the EA, that no significant impacts to the environment would result from the implementation of the Project. Valley Metro shall implement the mitigation measures and measures to avoid and minimize environmental impacts, as listed in Table ES-2 in the Executive Summary and discussed in Chapter 3 of the EA.



Leslie T. Rogers
Regional Administrator
Federal Transit Administration, Region IX

Date: OCT 27 2015

Attachments

Attachment 1: Comments and Responses to Comments on the Environmental Assessment

Attachment 2: Relevant Correspondence

ATTACHMENT 1

PUBLIC COMMENTS ON THE DRAFT ENVIRONMENTAL ASSESSMENT AND VALLEY METRO'S RESPONSE

Valley Metro, in coordination with the FTA prepared an Environmental Assessment (EA) for the Tempe Streetcar project that evaluated the environmental features and potential impacts to the environment related to the construction and operation of the streetcar project (referred to in the EA as the Build Alternative). In August 2015, the FTA approved the EA for public circulation and comment. Valley Metro and the City of Tempe initiated a 30-day public review and comment period (August 18 through September 18, 2015) and held a public open house meeting on September 2, 2015. During the comment period the EA was available in print at the Tempe Public Library and Valley Metro headquarters and was available for download from Valley Metro's website (http://www.valleymetro.org/projects_and_planning/project_detail/tempe_streetcar). In addition, Valley Metro provided electronic copies of the EA at the public open house meeting. The EA will remain on Valley Metro's website through the duration of the project. Valley Metro received 5 comments through email and 8 written comments at the project's open house meeting. The comments that Valley Metro received do not require any revisions the EA. The table below provides a response to each comment received. The personal information for the commenters has been redacted.

No.	Comment	Community Comments	Valley Metro Response to Comment
1	<p>Please send me a copy of the Environmental Assessment Report. It was not online as promised.</p> <p>I cannot attend the meeting on September 2.</p> <p>I live on Rio Salado on the proposed route, and I travel almost every day on Rio Salado and on Mill Ave. by car or by bike. I am very worried about what the streetcar is going to do to traffic and safety! There really isn't room for cars, bike lanes and parking spaces, as well as streetcar tracks. Have you ever hit a streetcar track with a bike tire at a bad angle? I have, and it wasn't pretty. Broke my sunglasses, and clobbered my shoulder as I fell down. I was wearing a helmet thank goodness. I know the project is pretty far along at this stage, but it's not too late to abort it by sensible people. I get the impression that the project is only for economic gain. The disruption during construction is too scary to contemplate.</p> <p>Please include my comments as my response to the report.</p> <p>Thank you,</p>		<p>Commenter received assistance and was directed to Valley Metro's website and the Tempe Library for a copy of the Environmental Assessment (EA) to review. Valley Metro subsequently contacted commenter on 8/25/2015 to ensure she was able to obtain a copy of the EA. Commenter indicated she was able to get the EA. Commenter reiterated her concerns regarding the safety aspects for bicycles and pedestrians, per her emailed comment received on 8/18/15. The commenter did not provide any additional written or verbal comments on the EA.</p> <p>Valley Metro has taken a very close look at how the streetcar tracks, bike lanes, and general traffic lanes will fit in Mill Avenue and on Rio Salado Parkway. There is enough room to fit all these into the existing roadway. Where there is a streetcar stop, the roadway will be widened. Figures 2-5 to 2-11 Figures 2-5 through 2-11 show cross sections of the existing roadway, roadway with the streetcar trackway and representative stop locations along the Build Alternative, including dimensions.</p>

	<p>Sandra Palais 8/18/2015</p>	<p>Valley Metro also evaluated the potential impacts to transportation facilities including traffic, bicycles, and pedestrian walkways along the entire length of the project. The transportation technical report, outlined in Section 3.6 of the EA and full analysis available in Appendix D to the EA, did not identify any adverse impacts as a result of implementing the streetcar project.</p> <p>Valley Metro has conducted analyses and designed the project to minimize the potential conflict with the rail and bike crossings. Section 3.6.3.3 beginning on Page 3-25 provides a specific review of bicycle and pedestrian facilities with respect to implementation of the Build Alternative. Bicycle lanes at intersections along the alignment were designed to have bicyclist cross the tracks perpendicular to avoid getting their tires caught in the track. Implementation of the streetcar project would not have an adverse impact to either bicycles or pedestrians.</p>
2	<p>Hi, just a quick comment re: Tempe streetcar proposal, I very much support the Tempe streetcar project and think it would be a great asset to the community. I look forward to hearing more about this project.</p> <p>From DeAnna Soth 8/23/2015</p>	<p>Commenter's support of the Tempe Streetcar Project is noted.</p>
3	<p>Hello,</p> <p>I just received a notice about a New Tempe street car to be constructed and begin operation in Downtown Tempe. I believe this is a gigantic waste of tax payer money. I own a home at 706 S Beck Ave. I see buses consistently on the roadways with little to no passengers on them.</p> <p>This idea to me seems like another attempt to spend money for which the public does not have. The general cost and maintenance of these streetcars, plus the labor costs could easily be better spent towards paying down past educational bonds and other debts the city of Tempe has accumulated.</p> <p>I am sick of paying for these "Improvements." I understand that Tempe probably gets a lot of so called "Free" federal funds. However, we all know that is not true. Nothing is free!</p>	<p>Commenter's opposition to the Tempe Streetcar Project is noted**.</p> <p>Transit options are important to Tempe residents and streetcar would add another mobility choice to serve the denser, high-traffic areas in central Tempe and connect to the Valley's regional transit system. The purpose and need for the project are outlined in Section 1.2 of Chapter 1 of the EA.</p> <p>The proposed project, similar to the Tempe Town Lake and Valley Metro rail projects, has the potential to be a long-term investment that can transform Tempe to serve existing and planned high-density development and the need for efficient transportation while improving overall quality of life in the community. See Section 1.2 of the EA for additional information on why high-capacity transit service is needed in the study area.</p> <p>You are correct that a portion of the Tempe Streetcar project will be paid for by federal money, but it will also be paid for with voter-approved Prop 400 and Congestion Mitigation and Air Quality (CMAQ) funds. All of the funding is required to be used for transportation related projects and cannot</p>

	<p>Stop the spending!</p> <p>Respectfully,</p> <p>Branden Reeves Tempe Property Owner and "Taxpayer" 8/23/2015</p>	<p>be used for other areas like educational bonds or other non-transportation related debts the city of Tempe has accumulated. Annual operations are estimated to cost about \$4 million with funding identified annually in the city's Transit Tax Fund beginning in 2018. The city's Transit Tax is a half-cent dedicated sales tax for transit use only. It was approved by Tempe voters in 1996. Chapter 5, Page 5-1, and Tables 5-1 and 5-2 of the EA provide a discussion of the project cost and sources of funding.</p> <p>The Orbit Venus route carries about 30,000 passengers a month. The majority of riders using the Orbit system take it during rush hour and may not take it from one end of the route to the other, but instead get on and off in downtown Tempe and ride for a few blocks or get on Orbit in the neighborhood and take Orbit to downtown Tempe. This is why you may not see large ridership on it given where you live along the route. Please refer to Chapter 1 for a clear understanding of the purpose and need for the project.</p> <p>Please feel free to contact us if you have any other questions.</p> <p>**The City of Tempe responded directly to the comment received by Mr. Reeves via email. The email can be found on the last page of this comment matrix.</p>
4	<p>I like the idea of the streetcar but I do not like how it is not going to the Tempe library or anywhere near Tempe transit center. I hope that with the upcoming meeting that there will be more consideration placed in covering locations that do not already have an Orbit or Bus route.</p> <p>-- Thank You From Chloe Smith – 8/22/2015</p>	<p>Thank you for your comments and suggestions with regard to the Tempe Streetcar project. Commenter's support of the Tempe Streetcar Project is noted.</p> <p>Section 1.2 of the EA provides information on why high-capacity transit service is needed in the study area. The proposed project will serve a portion of the city that currently does not have regularly scheduled year-round transit service, and is intended to compliment the Orbit routes and other local bus routes.</p> <p>Section 2.1 of Chapter 2 of this EA discusses the alternatives considered in detail, and the process used to determine the proposed project, referred to as the Build Alternative. The proposed alignment and stop locations were determined through a public process that included a community advisory group, meetings with key stakeholders and several public meetings to receive public input and feedback.</p> <p>As part of the planning process, consideration of an alignment on Mill Avenue to Southern Avenue was considered, with a future extension to the</p>

		<p>Tempe Public Library at Rural Road and Southern Avenue. Page 2-4 of Section 2.1 includes a discussion of the alternative previously considered to Southern Avenue, an alignment that previously included an unfunded but planned streetcar extension to the Tempe Public Library. However, after further consultation with the FTA, and at the request of the City of Tempe Council, Valley Metro and City of Tempe staff reevaluated the location of the project Build Alternative to capitalize on emerging growth and development concentrating in the downtown core and ASU campus area.</p> <p>The Tempe Public Library is served by Orbit Jupiter bus service. Future streetcar system extensions may include an alignment south on Mill Avenue to Southern Avenue with an extension to the library. Separate public involvement and environmental compliance with NEPA, if applicable, would be necessary if an expansion is planned in the future.</p> <p>As noted, Chapter 2 provides an overview of the alternatives considered for the project. Chapter 3, Section 3.6 beginning on Page 3-14 of this EA discusses the interaction of the streetcar with other transportation resources and services in Tempe. Additional information on the interaction between the proposed streetcar and transportation facilities and resources is also available in Appendix D, Transportation Technical Report, to the EA.</p> <p>Thank you for your comments and suggestions with regard to the Tempe Streetcar project.</p>
5	<p>Greetings, Valley Metro:</p> <p>I would like to share with you a proposal that I recently sent to the Tempe City Council on modifying just the southern portion of the Streetcar route. Please see the presentation slides in the attachment. You may find this information to be relevant and important. The slides are very brief and to the point and will only take up just a few minutes of your time. Thank you for your time and attention and feel free to share this information with anyone else who may find interest in this.</p> <p>-S.R. Sanjeev Ramchandra 9/6/2015</p>	<p>Section 2.1 of Chapter 2 of this Environmental Assessment (EA) discusses the alternatives considered in detail, and the process used to determine the proposed project, referred to as the Build Alternative. The current route alignment and stop locations were determined through a public process that included a community advisory group, meetings with key stakeholders and several public meetings to receive public input and feedback. The Tempe City Council has also approved the route and streetcar stops as proposed by the community. User access, economic development potential, and regional transit connections were key factors that were considered in determining the route and stop locations. Future expansions may include east and west on Rio Salado Parkway, and south on Mill Avenue to Southern Avenue. Future expansions are supported by the Tempe City Council, but currently unfunded. Separate public involvement and environmental compliance with NEPA, if applicable, would be necessary if an expansion is planned in the future.</p> <p>Commenter's comments have also been shared with the City of Tempe.</p>

Written Comments Received during Public Open House		
6	<p>Fast-track project, get final design and construction started together. Improve commute to ASU, State Farm development and redevelop area along Apache Boulevard.</p> <p>Anonymous</p>	<p>Commenter's support of the Tempe Streetcar Project is noted.</p>
7	<p>Please modify the layout plans to confirm that full access will remain on Ash to parcels on the West at:</p> <ul style="list-style-type: none"> • Rio Salado / Ash intersection • Macayo's / OTS / TL shared parking • Lots between Rio Salado and 3rd Street and the Ash / 3rd Street intersection <p>Please provide ridership data by segment (N,S, Loop) and the anticipated per board cost of ridership.</p> <p>Steven Voss</p>	<p>As illustrated in Appendix A of the EA, the conceptual engineering design drawings show no access changes to existing driveways along the west side of Ash Avenue between Rio Salado Parkway south to University Drive. Vehicular traffic will be able to access all properties along the west side of Ash Avenue from the northbound and southbound directions, and westbound Rio Salado Parkway.</p> <p>At the planning level, travel forecasts are produced at an aggregate level for the entire alignment of the project. As discussed on Page 2-10, Section 2.2.2.1 in Chapter 2 of this EA, average weekday ridership is conservatively forecast to be between 2,250 and 2,750 riders in the opening year, rising to 3,500 to 4,000 riders in 2035. On an annualized basis, the project anticipates between 800,000 and 1,000,000 trips in the opening year.</p> <p>Section 5.0 of the EA provides a discussion of the project cost and sources of funding. At present, the anticipated annual gross operating cost of the streetcar is estimated at \$4.017M in year 2019 dollars. Assuming a conservative approach that uses the lower end of the ridership range, the estimated gross cost per trip is \$5.02. This cost does not account for fare revenue or other sources of revenue received that would help pay for operating costs.</p>
8	<p>The Tempe Streetcar is a \$200 million dollar proposal that should have been explained and put to the voters. The financial impact will be felt for years to come.</p> <p>Philip E Yates</p>	<p>As stated in Section 1 of the EA, the Build Alternative is part of the 2004 voter-approved Regional Transportation Plan's concept to build 57 miles of high-capacity transit improvements in the Maricopa Association of Governments region. In addition, the Tempe City Council approved the project in its current configuration in June 2014, as noted on Page 2-5, Section 2.1 of Chapter 2.</p> <p>The voters of Maricopa County approved Proposition 400 in 2004, which is a measure that provides a ½ cent sales tax for highways, roads, and transit projects, including the proposed Tempe Streetcar Project. Section 5.0 of the EA provides a discussion of the project cost and sources of funding.</p>
9	<p>I am totally against this project – it will be a burden to the City for years to come. The City will never be able to maintain the</p>	<p>Commenter's opposition to the Tempe Streetcar Project is noted.</p>

	<p>maintenance of the cars while trying to maintain the rest of City projects. It will be a great burden to the downtown Mill Ave assoc. and arts and craft show. There is no available parking south of Apache – its all residential and west of mill its mostly business.</p> <p>Damien Cafarelli</p>	<p>The City of Tempe currently has a transit tax that will be used in part to pay for the operations and maintenance of the streetcar. In addition, the fares that are collected on the streetcar will be used to pay for operations and maintenance.</p> <p>As discussed in Section 2.2.2.2 of the EA, when special events occur in downtown on Mill Avenue and the road is closed, the streetcar will operate counter flow to traffic on University, Ash Avenue, and Rio Salado between Ash Avenue and Mill Avenue to maintain streetcar service from the State Farm Complex to the light rail station at Dorsey and Apache Boulevard. During this operation, temporary traffic cones or barriers would be installed to preclude vehicles from driving on the trackway to prevent operational conflicts. The City of Tempe Police Department will also assist with the planning and operation of streetcar service during special events when Mill Avenue is closed. With this operation there would be no significant impact to special events occurring on Mill Avenue.</p> <p>On-street parking will continue to be available on Apache Boulevard. As shown in Table 3-8 on Page 3-23 of Chapter 3, Section 3.6.3.1, 14 on-street parking spaces will be removed near the intersection of Rural Road and Terrace Road. This is due to the installation of special trackwork and as a result of land developments on the south side of Apache Boulevard. However, the current number of spaces along Apache Boulevard west of Rural Road will be retained.</p>
10	<p>Everything looks great. The one concern/complaint that I hear over and over is why can't it go to Tempe Marketplace and Cubs stadium. Otherwise "I Love It" (sic) Lane Carraway</p>	<p>Thank you for your comments and suggestions with regard to the Tempe Streetcar project. Commenter's support of the Tempe Streetcar Project is noted.</p> <p>Chapter 2 of this Environmental Assessment (EA) discusses the alternatives considered in detail, and the process used to determine the proposed project, referred to as the Build Alternative. Valley Metro and the City of Tempe as well as the City of Mesa recognize the importance of extending streetcar on Rio Salado to serve Tempe Marketplace and the Cubs stadium as well as an extension down Mill Avenue to Southern Avenue. These future expansions are supported by the Tempe City Council, but are currently unfunded. Separate public involvement and environmental compliance with NEPA, if applicable, would be necessary if an expansion is planned in the future.</p>
11	<p>Design structure of streetcar should be old style San Francisco streetcar. Jump in jump out. The fare should be free. Shawna Peshlakai</p>	<p>Thank you for your comments and suggestions with regard to the style and operation of Tempe Streetcar.</p>

12	Building this streetcar will put Tempe AZ on development map throughout the world. Dan Colter	Comment noted.
13	Would like to have input on the car design, especially how bicycles will be accommodated on the train. Issues with the bike crossing the rail – will there be any significant problems Brian	Thank you for your interest in the car design for the Tempe Streetcar. Valley Metro does not solicit public inputs on vehicle designs during vehicle procurement. However, Valley Metro is always interested in hearing customer feedback on the transit amenities that they would like to see. Valley Metro has taken a very close look at how the streetcar tracks, bike lanes, and general traffic lanes will fit in Mill Avenue and on Rio Salado Parkway. There is enough room to fit all these into the existing roadway. Where there is a streetcar stop, the roadway will be widened. Figures 2-5 to 2-11 Figures 2-5 through 2-11 show cross sections of the existing roadway, roadway with the streetcar trackway and representative stop locations along the Build Alternative, including dimensions. Valley Metro also evaluated the potential impacts to transportation facilities including traffic, bicycles, and pedestrian walkways along the entire length of the project. The transportation technical report, outlined in Section 3.6 of the EA and full analysis available in Appendix D to the EA, did not identify any adverse impacts as a result of implementing the streetcar project. Valley Metro has conducted analyses and designed the project to minimize the potential conflict with the rail and bike crossings. Section 3.6.3.3 beginning on Page 3-25 provides a specific review of bicycle and pedestrian facilities with respect to implementation of the Build Alternative. Bicycle lanes at intersections along the alignment were designed to have bicyclist cross the tracks perpendicular to avoid getting their tires caught in the track. Implementation of the streetcar project would not have an adverse impact to either bicycles or pedestrians.

ATTACHMENT 2

RELEVANT CORRESPONDENCE

Paukowits, Dominique (FTA)

From: Forrest, Robert <rforrest@valleymetro.org>
Sent: Wednesday, October 21, 2015 7:43 AM
To: Paukowits, Dominique (FTA)
Subject: FW: Tempe Street Car

Dominique,

Tempe responded to comment #3 by email and not by formal letter. Below is the email comment that we received and the response that Tempe provided. Please let me know if you need this in a different format.

Thank you,

Robert Forrest
Environmental Program Manager
Valley Metro
101 N. 1st Ave.
Suite 1300
Phoenix, AZ 85003
602-322-4514
rforrest@valleymetro.org
www.valleymetro.org

Travel with Valley Metro on:

-----Original Message-----

From: Kurtenbach, Anne [<mailto:Anne.Kurtenbach@hdrinc.com>]
Sent: Tuesday, August 25, 2015 3:11 PM
To: More, Thomas; Forrest, Robert
Subject: FW: Tempe Street Car

Fyi...response from Tempe.

-----Original Message-----

From: Taaffe, Sue [mailto:sue_taaffe@tempe.gov]
Sent: Tuesday, August 25, 2015 2:59 PM
To: 'branden.reeves@gmail.com'
Cc: Nelson, Amanda; Seyler, Shelly; Steere, Howard; Kurtenbach, Anne; Iwersen, Eric; Warner, Shauna
Subject: RE: Tempe Street Car

Branden,
Thank you for the email.

Transit options are important to Tempe residents and streetcar would add another mobility choice to serve the denser, high-traffic areas in central Tempe and connect to the Valley's regional transit system. The project, similar to the Tempe Town Lake and Valley Metro rail projects, has the potential to be a long-term investment that can transform Tempe to serve existing and planned high-density development and the need for efficient transportation while improving overall quality of life in the community.

You are correct that a portion of the Tempe Streetcar project will be paid for by federal money, but it will also be paid for with voter-approved Prop 400 and Congestion Mitigation and Air Quality (CMAQ) funds. All of the funding is required to be used for transportation related projects and cannot be used for other areas like educational bonds or other non-transportation related debts the city of Tempe has accumulated. Annual operations are estimated to cost about \$4 million with funding identified annually in the city's Transit Tax Fund beginning in 2018. The city's Transit Tax is a half-cent dedicated sales tax for transit use only. It was approved by Tempe voters in 1996.

The Orbit Venus route carries about 30,000 passengers a month. Oftentimes, the majority of the people using the Orbit system take it during rush hour and may not take it from one end of the route to the other, but instead get on and off in downtown Tempe and ride for a few blocks or get on Orbit in the neighborhood and take Orbit to downtown Tempe. This is why you may not see a lot of people on it given where you live along the route.

Please feel free to contact us if you have any other questions.

Sincerely,

Eric Iwersen
City of Tempe
Principal Planner
480-350-8810
eric_iwersen@tempe.gov

Anne Kurtenbach
Community Outreach Coordinator
Valley Metro
D 602.523-6008 | C 602.315.9159
akurtenbach@valleymetro.org

-----Original Message-----

From: GMAIL [<mailto:branden.reeves@gmail.com>]
Sent: Sunday, August 23, 2015 10:40 AM
To: Kurtenbach, Anne
Subject: Tempe Street Car

Hello,

I just recieved a notice about a New Tempe street car to be comstructed and begin operation in Downtown Tempe. I believe this is a gigantic waste of tax payer money. I own a home at 706 S Beck Ave. I see buses consistently on the roadways with little to no passengers on them.

This idea to me seems like another attempt to spend money for which the public does not have. The general cost and maintenance of these street cars, plus the labor costs could easily be better spent towards paying down past educational bonds and other debts the city of Tempe has accumulated.

I am sick of paying for these "Improvements." I understand that Tempe probably gets alot of so called "Free" federal funds. However, we all know that is not true. Nothing is free!

Stop the spending!

Respectfully,

Branden Reeves
Tempe Property Owner and "Taxpayer"



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

SHPO - 2009-0061 (127843)
ARIZONA STATE HISTORIC PRESERVATION OFFICE

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

201 Mission Street
Suite 1650
San Francisco, CA 94105-1839
415-744-3133
415-744-2726 (fax)

OCT 8 2015



Mr. Jim Garrison
State Historic Preservation Office
1300 West Washington
Phoenix, Arizona 85007
Attention: David Jacobs, Compliance Specialist

Re: Tempe Streetcar Project – Section 106
Consultation/36 CFR Part 800

Dear Mr. Garrison:

The Federal Transit Administration (FTA), in coordination with Valley Metro and the City of Tempe, is continuing consultation with Arizona State Historic Preservation Office (SHPO) under Section 106 of the National Historic Preservation Act for the Tempe Streetcar Project. The SHPO previously concurred with the delineation of the Area of Potential Effect (APE) on July 26, 2011 and the finding of effect and historic property eligibility determinations on May 14, 2012. Since that time, the project alignment had been revised. As a result, the APE was revised and additional properties have been evaluated for eligibility to the National Register of Historic Places (NRHP). FTA re-initiated consultation with SHPO on the revised APE and received concurrence on June 5, 2015. In accordance with 36 CFR § 800.4, this letter requests your concurrence on the additional eligibility recommendations and determination of “no adverse effect” to historic resources.

Enclosed for your review are two reports: *Inventory and Evaluation of Historic Resources* and the *Assessment of Archaeological Resources*.

Overview of the Proposed Undertaking

The original streetcar project was a 2.6-mile alignment that ran from Downtown to Southern Avenue. In the Downtown area (north of University Drive), the streetcar line would traverse a one-way, counter-clockwise loop north on Mill Avenue, west on Rio Salado Parkway, south on Ash Avenue, and east on University Drive until again turning south on Mill Avenue where it would resume a double-track operation to its terminus at Southern Avenue.

Since 2012, Valley Metro and the City of Tempe re-evaluated the project and revised the Build Alternative to include extensions east on Rio Salado Parkway and east on Apache Boulevard. The segment from Apache Boulevard to Southern Avenue was eliminated. The current Build Alternative is a 3.1-mile streetcar alignment that would begin on Rio Salado Parkway at the Marina Heights development near Packard Drive and run west to Ash Avenue, south on Ash to University Drive, east on University Drive to Mill Avenue, south on Mill Avenue to Apache Boulevard to its terminus at the Dorsey light rail station. The alignment maintains the downtown loop consisting of Rio Salado Parkway, Ash Avenue, University Drive, and Mill Avenue.

The proposed streetcar system would operate with a single car and would generally share the existing auto travel lanes. The project would use the existing Operations and Maintenance Center for the maintenance and storage of light rail vehicles for the Valley Metro light rail system.

Public Outreach and Consultation

The FTA initiated consultation with the Native American tribes in January 2008 during the alternatives analysis phase of the project and re-initiated consultation in January 2015. The Hopi Tribe and the Gila River Indian Community requested to continue consultation and to be provided a copy of the historic resources and archaeological reports for their review. Valley Metro also made presentations to the Tempe Historic Preservation Commission and received input that helped with the development of the historic resources and archaeological reports. In addition, Valley Metro held two project scoping meetings in April 2011 and in December 2014 and held a public meeting on September 2, 2015 during the public circulation of the project's Environmental Assessment. No comments were received on historic or archaeological resources.

Survey Results and Determinations of Eligibility

The 2012 inventory and evaluation of properties within the APE documented 76 historic properties and nine historic districts, of which 43 individual historic properties and three historic districts (Gage Addition, Park Tract, and University Park) fall within the current project's APE for the proposed Build Alternative. With the revised APE, a survey within the modified portions of the project APE was conducted and found no additional properties or districts listed in the NRHP. FTA has determined that the following additional properties within the revised APE meet the criteria for listing on the NRHP (See page 59 of the *Inventory and Evaluation of Historic Resources Report*) :

- Sun Devil Stadium (500 E. Veterans Way), Eligible under Criterion A
- Charles Hayden Hall (250 E. Apache Way), Eligible under Criteria A and C
- Best Hall (1215 S. Forest Avenue), Eligible under Criteria A and C
- Irish Hall (1201 S. Forest Avenue), Eligible under Criteria A and C

In total, the inventory and research from both studies identified 47 buildings and three districts within the APE, including 13 individual properties and one historic district previously listed on the NRHP. A summary of the listed, eligible, and recommended eligible properties may be found in Tables 1, 2, and 3 of the *Inventory and Evaluation of Historic Resources Report*.

The previous inventory and evaluation of archaeological sites conducted in 2012 documented 11 archaeological sites within the original APE of the Build Alternative. Of these 11 sites, only ten sites occur within the revised APE. Two additional archaeological sites were identified within the revised APE that were previously determined eligible for the NRHP:

- AZ U:9:165(ASM), La Plaza site, Eligible under Criterion D
- AZ U:9:299 (ASM), Phoenix & Eastern Railroad, Eligible under Criterion A and D

In total, the inventory and research from both studies identified 12 archaeological sites within the APE. Eleven of these sites were previously determined eligible for the NRHP. The twelfth site is the original settlement of Hayden's Ferry and has been assigned an Arizona State Museum (ASM) site number, although it was never defined archaeologically and evaluated (See Section 4.0, page 15 of the *Assessment of Archaeological Resources*). A summary table of the

archaeological sites documented within the APE is provided in the *Assessment of Archaeological Resources* (page iii).

In accordance with 36 CFR § 800.4, the FTA is requesting your concurrence with finding that the four properties listed above are eligible for the NRHP.

Finding of Effect

FTA applied the Criteria of Adverse Effect per 36 CFR 800.5(a) and has determined that the undertaking would result in “no adverse effect” on historic properties and districts. The Build Alternative is nearly all within the existing street curbs with the exception of minimal right-of-way acquisitions to accommodate a few streetcar stops and the traction power substations (TPSS) facilities which provide electric power to operate the streetcar. None of these acquisitions would be on contributing properties in historic districts or on individual properties listed on or eligible for listing on the NRHP. The project features, including traffic and pedestrian signals and stations, will not introduce structures taller than existing buildings and street features. Therefore, these new features would not introduce an adverse visual effect or disruption of the historic setting. Therefore, there would be no adverse effects to historic resources.

The project will require construction of TPSSs (final number and locations will be confirmed during final design) near or adjacent to the historic properties and/or districts at the following locations:

- Approximately 400 feet from the Hayden Flour Mill and potentially two others between 726 and 557 feet from Sun Devil Stadium.
- Adjacent to the historic district (University Park) and approximately 120 feet from the Park Tract Historic District and the Tempe Women’s Club (west side of Mill Avenue north of 13th Street).
- Adjacent to the Gage Addition Historic District (west side of Mill Avenue north of 9th Street).

Appropriate shielding, such as screen walls or vegetation that fits into the existing character of the surrounding area, would be provided for the TPSSs on properties next to historic properties. With the implementation of appropriate shielding for each of the TPSSs, the Build Alternative would have no adverse visual impacts to these historic properties.

Several historic properties are located where potential noise or vibration impacts have been identified. These properties include:

- Four single-family residences in the 1100 block of Mill Avenue
- Hayden Residence Hall (250 East Apache Boulevard)
- Four single-family residences near University Drive and Mill Avenue within the Gage Addition Historic District
- University Inn on Mill Avenue and Mullen House on Mill Avenue

Friction control would be included in the design of the project to reduce the occurrence of wheel squeal, reducing the predicted noise levels to below the FTA moderate noise impact threshold at these sites. The TPSSs’s cooling fans would be oriented toward Mill Avenue, away from historic residences. Installation of low-impact frogs for the special trackwork would reduce the predicted

vibration levels to below the FTA impact threshold and avoid impacts to these resources. Therefore, the Build Alternative would not result in noise or vibration impacts to historic resources.

Although no adverse vibration impacts are anticipated as a result of the streetcar construction or operation, documentation of the existing conditions of the Hayden House adobe building would occur prior to construction to create a baseline for monitoring potential future architectural or structural changes. The survey would include inspection of the building foundation, photographs of preconstruction conditions, and documentation of any existing cracks.

Regarding archeological resources, construction of the Build Alternative would occur within the boundaries of four NRHP-eligible archaeological sites:

1. AZ U:9:115(ASM), Terraced Butte site
2. AZ U:9:165(ASM), La Plaza site
3. AZ U:9:189(ASM), Hayden Canal
4. AZ U:9:190(ASM), Hayden Blacksmith and Wagon Shop

Previous data recovery efforts have occurred at the Terraced Butte site, the Hayden Canal site, and the Hayden Backsmith and Wagon Shop site. Therefore, the project will have no adverse effects to these resources.

A plan will be developed for the Build Alternative that defines the methods and procedures to be used for the monitoring and for any unanticipated discovery situations. In particular, a qualified archaeologist will monitor the following two locations in areas where ground disturbing activities exceed a depth of 3 feet so that any discoveries can be documented and properly managed:

1. Apache Boulevard, East of Rural Road. Segment is within the La Plaza site, which has not been archaeologically investigated.
2. 1st Street, Ash Avenue and Mill Avenue between 1st and 5th streets. Segments are within the original settlement of Hayden's Ferry, which has been documented through historical records but not defined archaeologically.

In accordance with 36 CFR § 800.4, the FTA is requesting your concurrence with the historic property eligibility determinations discussed above and the determination no adverse of effect.

If you have any questions or need additional information, please contact Dominique M. Paukowits, FTA Region IX Community Planner at (415)744-2735 or dominique.paukowits@dot.gov.

Sincerely,



Leslie T. Rogers
Regional Administrator



David Jacobs, Compliance Specialist
SHPO Concurrence

28 OCT 15

Date

Enclosures:

- Inventory and Evaluation of Historic Resources
- Assessment of Archaeological Resources

c: Robert Forrest, Environmental Program Manager, Valley Metro
John Southard, Tempe Historic Preservation Office, City of Tempe