



# Memorandum

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Public Works Department

DATE: Nov. 8, 2013

TO: Mayor and City Council

FROM: Eric Iwersen, Principal Planner (350-8810)  
Shelly Seyler, Deputy Public Works Director - Transportation (350-8854)

THROUGH: Don Bessler, Public Works Director (350-8205)

**SUBJECT: BROADWAY ROAD BICYCLE & PEDESTRIAN STREETScape ENHANCEMENTS**

## Background

The city of Tempe is implementing a project to improve pedestrian and bicycle facilities, and enhance the streetscape on Broadway Road between Mill Avenue and Rural Road. A Broadway Road Corridor Study was completed in 2001, and in 2004 the project was included in the Tempe Comprehensive Transportation Plan. In 2004, City staff wrote grant applications and successfully obtained federal funds for construction of the project. The project was then added to the Tempe Capital Improvement Program in the 207/2008 fiscal year. The current Maricopa Association of Governments Transportation Improvements Program includes \$3.8 million in federal funds programmed for this project.

Public meetings for the project began in 2008 and continued until a preferred concept was supported at the last public meeting held in October 2010. The preferred concept included significant right-of-way purchases and other design measures. Staff determined that the extensive need for new right-of-way for this federally funded project would have been very complicated and time consuming and eventually the design concept was abandoned. In summer 2012, staff obtained permission from the Arizona Department of Transportation and Maricopa Association of Governments to preserve the project funding and begin a final attempt to design a project that could be built.

## Public Input and Community Outreach

On Feb. 25, June 13, and Oct. 17 of 2013 staff held public meetings to present design concepts and move the project toward a final design concept. Residents, businesses and property owners in the area between Apache Boulevard and Alameda Drive from ¼ mile west of Mill Avenue to ¼ mile east of Rural Road were invited to attend all of the public meetings and comment online through a variety of methods. Social media and press releases were also part

of the public communication. Targeted outreach was conducted to stakeholders directly on Broadway Lane and Broadway Road to make them aware of the project and to gather input.

Smaller resident, business owner and property owner meetings occurred throughout the year to address concerns and adjust the project design accordingly. Staff also attended area neighborhood association meetings to update the community on the project and receive feedback. Each of the public meetings was well attended.

**Public feedback received throughout the process indicates, there is broad and majority support for the current final design concept. (See public feedback summaries attached.)**

**At the May 30, 2013 City Council Issue Review Session, staff presented a project update and a preferred design concept.**

#### Design Concept and Process

Early concepts for the project included a total of five alternatives; three options with one lane removed in the eastbound direction, and two options preserving the existing three lanes eastbound.

Based on the federal transportation funds guidelines and the concepts identified in the Transportation and General Plans each alternative presented included:

- Bicycle lanes on Broadway Road
- Landscaped median islands with left-turn pockets
- Wider sidewalks on the south side of the road, with street trees
- Enhanced pedestrian crosswalks at Rural, Mill, and College
- A buffer area (wall or landscape material) between Broadway Road and Broadway Lane on the north side of the street

Variation on the project design was with the issue of lane removal, the location for a signalized crossing between College Avenue and Rural Road, and the specific treatment of the Broadway Lane areas.

**At the May 30, 2013 IRS, the Council supported the staff effort to advance the proposed preferred design concept showing a lane removal, and to conduct a simulation in September of the lane removal and share data with the Council.**

#### Project Data and Lane Closure Simulation

Traffic volumes along Broadway Road have continued to decline. At peak volume (2003) this mile of Broadway Road was carrying nearly 39,000 vehicles per day. In fall 2012, the same mile was carrying 25,209 vehicles per day. There has been a nearly 35 percent decline in the volumes on this particular mile. Traffic volumes on this five lane arterial are similar or lower than other four lane arterials like Mill Avenue, Apache Boulevard and University Drive. Therefore, the concept of removing one lane of traffic has been proposed.

From Sept.16 to 30, Traffic Engineering staff conducted an impact analysis of the proposed lane closure by temporarily closing the third eastbound lane on Broadway Road. Twenty five area streets (including Broadway Road and most neighborhood streets connected to Broadway Road) as well as Apache Boulevard, Mill Avenue and Southern Avenue had traffic volume counters to document how the streets performed during the closure. The traffic engineering community generally accepts that daily traffic volumes can fluctuate by up to 10 percent based on variations in travel behavior and demand. With that in mind, staff collected and reviewed data to determine if there was significant backup on Broadway Road or cut-through traffic problems on streets adjacent to Broadway Road that likely would have been used as alternative routes. The following observations and conclusions are made based upon the lane closure simulation (See attached data):

- Broadway Road volumes stayed the same or went down
- No street identified as a potential cut-through or alternative route experienced greater than a 10 percent increase in daily traffic volume
- Most volumes fluctuations in the area were within the 5 percent range, which is considered negligible
- Neither Apache Boulevard or Southern Avenue experienced a significant change in volume
- No additional back up occurred eastbound on Broadway Road at Rural Road or at Mill Avenue in the A.M. peak travel times
- The impact to P.M. peak travel back up on eastbound Broadway Road at Rural Road and at Mill Avenue was minimal.

**The data collected during the lane closure simulation produced strong results that showed the roadway and adjacent roadways performed well and did not cause new or displaced traffic problems.**

#### Fiscal Impact

Current annual landscape maintenance per year is approximately \$5,300 for the irrigation and maintenance costs related to the ornamental orange hedge on the north side of the road. It is anticipated that this amount would increase, even doubling in cost, due to the proposed landscaped areas. Total construction cost for the project is estimated not to exceed the \$3,857,670 in federal grant funding. Recently staff has also been awarded approximately \$700,000 in federal safety funds to upgrade and replace the lighting along the street.

#### Next Steps & Action Requested

**Staff is requesting consensus to move forward with the project and advance the final concept that includes one lane removal in the eastbound direction, bicycle lanes, wider sidewalks and street trees on the south side of the road, landscaped median islands and a buffer/wall treatment on the north side of Broadway Road.**

After acceptance of the design concept by the Council, staff will coordinate with ADOT and federal partners to finalize the construction documents and complete the environmental

approvals and necessary steps for funding obligation request in summer 2014. Construction could begin as early as fall 2014.

Attachments

- A- Project Summary PowerPoint
- B- Public Comments
- C- Traffic Data
- D- Board and Commission Minutes