

**Board Report**

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**PLANNING AND PROGRAMMING COMMITTEE
JUNE 17, 2015**

SUBJECT: DORAN STREET AND BROADWAY/BRAZIL SAFETY AND ACCESS PROJECT

ACTION: ADOPT LOCALLY PREFERRED ALTERNATIVE

RECOMMENDATION

APPROVED AS AMENDED BY Najarian Motion:

- A. receiving the **Doran Street and Broadway/Brazil Safety and Access Project Study Report Equivalent** (PSRE); and
- B. adopting Locally Preferred Alternative (LPA) 2 from the PSRE to advance into the Final Environmental Document.

ISSUE

The Project Study Report for the Doran Street and Broadway/Brazil Safety and Access Project (Project) was completed in March, 2015. Three alternatives are proposed. It is the recommendation to proceed with Alternative 2 as the Locally Approved Alternative to advance into the Final Environmental Document.

DISCUSSION

The Los Angeles County Metropolitan Transportation Authority (Metro) is working towards improving safety, mobility and quality of life for the Glendale and Los Angeles communities by closing the Doran Street at-grade crossing. As with any at-grade railroad crossing, safety is of significant importance. Furthermore, a unique combination of limited access, high traffic volumes, adjacent industrial uses, and residential interests, make mobility improvements important to this Project. Doran Street has 13 incidents on record resulting in two fatalities and one injury since 1976. These safety statistics have made the Doran Street crossing the subject of safety hearings and arbitrations by the California Public Utilities Commission (CPUC). The at-grade crossing of Doran Street with the Metro owned right-of-way operated by Metrolink has been the subject of concern for several years. Additionally, this crossing has significant truck and vehicle traffic as well as 90 passenger and freight trains per day.

In May 2011, the Metro Board authorized \$6.6 million for improving the safety of the intersection of

Doran Street and the Metro owned right-of-way. A portion of these funds is being used to fund the engineering and environmental work necessary for the grade separation of this intersection. Since the Board motion was passed, additional funding has been obtained that will fund the construction of the grade separation of this roadway. Since the crossing is located along the route of the proposed California High Speed Rail Project, staff has worked with the California High Speed Rail Authority (CHSRA) and the Federal Railroad Administration (FRA) to gain additional funding. This project has been ranked as number seven in the region in the Advance Investment Memorandum of Understanding with the CHSRA.

Since the Metro Board action, staff has been working towards the advancement of a solution to the challenges related to this crossing. This has included examining several grade separation alternatives that will provide the maximum safety benefit while minimizing impacts to the communities. This analysis has included existing and the proposed future uses of the railroad corridor. The first phase of the project was completed in April, 2015 and the key deliverable was the Project Study Report Equivalent highlighting three alternatives to close Doran Street and/or Broadway/Brazil crossings.

Community Outreach

A comprehensive community outreach program is underway to inform the public about the Doran Street and Broadway/Brazil Safety and Access Project. Metro has hosted two rounds of community outreach meetings and presented at 19 meetings hosted by other stakeholders.

For the two rounds of Metro hosted Community Outreach meetings, residents were notified of the public process through mailings, direct calls to businesses within the project area, Metro Daily Briefs, Metro's The Source, email blasts, a public telephone hotline, fact sheets, and a dedicated webpage on Metro's website. The project received media coverage in the Glendale News Press, Los Angeles Times, and NBC Los Angeles with a total of eight stories written about the project. Communication also went out in local newsletters and distribution lists for the City of Glendale and other local stakeholder organizations.

Community Meetings: Round 1 (February 6, 2014)

Two community workshops were held in Atwater Village on February 6, 2014, 3-5pm and 6-8pm, to accommodate participation from all stakeholders, including businesses and residents. Notification of the meeting was sent to more than 1,500 owners and tenants using the Los Angeles County Assessor's database. Three email notifications were sent out to the project stakeholder database. Individual phone calls were also placed to 69 businesses within the area. An additional eight stakeholder meetings were held prior to Feb. 6th including individual business owners, Pelanconi Estates HOA, the Atwater Village NC and staff from the Cities of Glendale and Los Angeles.

A total of 60 stakeholders attended the February 6th workshops and Metro received 63 comments. Issues raised included access for first responders, traffic and circulation for vehicles and trucks, safety, and impacts to residential and business areas.

Community Meetings: Round 2 (December 9, 2014)

Two community workshops were held in Atwater Village (3-5pm) and Glendale (6-8pm) on December 9, 2014. Notification of the meeting was sent to nearly 2,000 owners and tenants using an updated list pulled from the Los Angeles County Assessor's database. Two email notifications were sent out to individuals in the exiting project stakeholder database. Individual phone calls were also placed to 100 businesses within the area. An additional six stakeholder meetings were held prior to Dec. 9th including Council District 13, business owners, Pelanconi Estates HOA, Atwater Village Neighborhood Council, Walk Bike Glendale and the Los Angeles River Cooperating Committee. After the meeting, Metro held additional briefings with legislative representatives and business owners who were unable to attend the meeting on December 9th.

A total of 89 stakeholders participated at the workshops. Metro received 68 comments. The Stakeholders were shown several alternatives at the workshop. Input from the Stakeholders regarding additional alternatives. These alternatives were evaluated. Aspects of some of these alternatives were incorporated into the ultimate designs. Overall, the comments touched on safety, points of access to North Atwater Village, eminent domain, pedestrian and bicycle access, traffic in the residential areas of Glendale, the timeline for High-Speed Rail, property impacts, air quality, Glendale's Riverwalk Bike project, and the need for a grade separation following the recent improvements to Broadway/Brazil. Business and property owners within the project area expressed concerns about potential impacts and property takings.

There will be additional opportunities for the public to comment during the environmental phase of the project.

ALTERNATIVES FROM PROJECT STUDY REPORT (EQUIVALENT) (PSRE)

During the Alternative Analysis portion of the study, several alternatives were examined that would provide the benefit of closing the Doran Street crossing while minimizing the impacts to the communities. During the study it became apparent that the Broadway/Brazil crossing was closely related to the Doran Street crossing and alternatives considered had to address this relationship. As part of the analysis, the railroad corridor was examined to raise or lower the railroad tracks to cross under or over Doran Street and Broadway/Brazil. These alternatives are not feasible due to the constraints of the I-134 Freeway, Colorado Blvd. and Verdugo Wash.

In addition, grade separations that would lower the roadway under the railroad were eliminated due to the community impacts of several roadway and railroad detours needed to complete the construction.

The following alternatives were carried forward with the PSRE.

No Build: This alternative would keep Doran Street and Broadway/Brazil as at-grade crossings. However, this does not meet the requirements of the CPUC Order to take steps to close the Doran Street crossing.

Alternative 1: Doran Overpass: Alternative 1 proposes to raise Doran Street over San Fernando

Road, the rail tracks, and West San Fernando Road. The existing intersection of Doran Street and San Fernando Road will be replaced with a new signalized intersection at a widened and realigned Commercial Street. This will facilitate traffic movements between San Fernando Road, Doran Street and the State Route 134 ramps. Milford Street will tie to Commercial Street in a tee-intersection. West San Fernando Road will pass under the Doran Street overpass bridge and connect to Doran Street. This alternative will close the Doran Street at-grade crossing while Broadway/Brazil will remain open as an at-grade crossing. Refer to Figure 1 of Attachment A - Executive Summary for a conceptual layout of this alternative.

Alternative 2: Fairmont Connector and Salem/Sperry Overpass: Alternative 2 has two components, the first consists of a connector road that extends West San Fernando Road to the Fairmont Avenue bridge and the second is an overpass crossing over San Fernando Road, the rail tracks, and West San Fernando Road in the vicinity of Salem Street and Sperry Street. This alternative will also consider two options for providing multi-modal movements over the Verdugo Wash as planned in the City of Glendale River Walk project. Alternative 2 will close both the Doran Street and Broadway/Brazil at-grade crossings. Refer to Figure 2 of Attachment A - Executive Summary for a conceptual layout of this alternative.

Alternative 3: Fairmont Connector and Zoo Drive Connector: Alternative 3 utilizes the same connector road from West San Fernando Road to the Fairmont Avenue Bridge as Alternative 2. However, this alternative proposes to construct this road in conjunction with a road that connects Doran Street across the Los Angeles River to Zoo Drive. Similar to Alternative 2, this alternative includes an option to construct a bridge to extend the Glendale River Walk across the Verdugo Wash. Alternative 3 will close the Doran Street at-grade crossing while Broadway/Brazil will remain an at-grade crossing. Refer to Figure 3 of Attachment A - Executive Summary for a conceptual layout of this alternative.

EVALUATION OF OPTION DISCUSSED AT MAY 20 PLANNING AND PROGRAMMING COMMITTEE MEETING

Alternatives 2 and 3 contained within the Project Study Report (Equivalent) (PSRE), dated May 18, 2015, include the Fairmont Connector which will extend West San Fernando Road to connect to the Fairmont Avenue bridge over the Verdugo Wash. The Fairmont Connector is planned to be striped for one lane of traffic in each direction and have a signalized intersection at Fairmont Avenue. During public comments at the Glendale Council Meeting on May 19, 2015, a community member suggested an option of making the Fairmont Connector available for first responders only and closed to the general public. The option is intended to address the CPUC and first responder's requirement to provide access for emergency vehicles to the northern Atwater Village area in the City of Los Angeles. The option would close the Doran Street at-grade crossing, facilitating a future quiet zone. The Metro Planning and Programming Committee confirmed the desire to evaluate this community option at their meeting on May 20, 2015 prior to selecting a preferred alternative for the Project. This

section summarizes the findings from the evaluation.

CONSIDERATIONS

The following considerations were factored into the evaluation of the option:

First Responders: Discussions with the first responders, both police and fire from the cities of Glendale and Los Angeles, were conducted via email and telephone in order to receive their input, feedback, and requirements on the proposed option.

LOSSAN Expansion: The LOSSAN Corridor Agency Strategic Implementation Plan will increase daily rail traffic from 84 trains to 124 trains by 2030, a 50% increase. This will result in additional vehicular delays at remaining at-grade crossings, such as Broadway/Brazil.

Los Angeles River: The cities of Glendale and Los Angeles voted to adopt Alternative 20 of the L.A. River Revitalization as the Locally Preferred Alternative (LPA). In May of 2014, the US Army Corps of Engineers adopted Alternative 20 and it is currently being advanced through the environmental clearance process. A goal of this project is to avoid or mitigate any encroachment into the Alternative 20 footprint.

Traffic Growth: The projected traffic forecast on Fairmont Avenue and in the vicinity of the eastbound and westbound SR-134 ramps is due primarily to the expansion of the Disney Grand Central Creative Campus (CG3).

Traffic Circulation: Overall circulation within the Atwater Village area must be considered with adequate Level of Service (LOS). The ability to reroute traffic and mitigate impacts of doing so will be challenging as existing right-of-way is narrow, 50-feet in width on most streets, and points of access to this area are limited.

CONCLUSION

The community option addresses a singular issue, providing access for first responders to the northern Atwater Village area that would address the CPUC and first responders concerns. The intent of this community option is to close the current Doran Street at-grade crossing, leading to a quiet zone.

The larger issue with the closure of the Doran Street at-grade crossing is the traffic circulation within Atwater Village and the ability to move traffic and goods through the West San Fernando Road/Brazil Street and San Fernando Road/Broadway intersections. Both of these intersections will be significantly impacted.

In summary, the closure of the Doran Street at-grade crossing, while it provides emergency responder access only, results in:

1. Closure of the Doran Street at-grade crossing that will result in 80% of the parcels in Atwater Village area, north of Colorado Street, being solely reliant upon the West San Fernando Road/Brazil Street intersection as the lifeline for their business.
 - Degradation of the West San Fernando Road/Brazil Street intersection from a Level of Services (LOS) D to LOS F.
 - Queuing in both the southbound and eastbound directions at the West San Fernando Road/Brazil Street intersection effectively gridlocks traffic to the west and north of this intersection.
 - Southbound left-turn queuing would require over 650 feet of turn pocket length where only 100 feet is available. Any queuing beyond 100 feet blocks through movements as well.
2. San Fernando Road/Broadway intersection remains a LOS F however operations are further impacted. Level of service is determined through Synchro analysis and is reflective of the signal operations. It does not, however, account for train delays. Inclusion of train delays will reduce available capacity resulting in even further degradation of the intersection operations.
 - Significant increase in southbound right-turn movement from San Fernando Road to Brazil Street (from 56 vehicles per hour (vph) to 452 vph in the AM peak hour), far exceeding capacity. This will significantly reduce capacity of the through traffic as the #2 southbound lane will be blocked by the right-turn queue.
 - To avoid the long queue and delay from the excessive southbound right-turn movement from San Fernando Road to Brazil Street, it could be expected that drivers will seek other routes with the most direct being Concord Avenue as a bypass to and from the SR-134 and Broadway.
3. If built in conjunction with Alternative 2 Salem/Sperry Overpass, excessive queuing would still exist and an additional lane of traffic at each intersection of the overpass would be required to address the turning movements. This will increase the right-of-way and construction costs.
4. If built in conjunction with Alternative 3 Zoo Drive Connector, the existing at-grade intersection would remain at Broadway/Brazil. While the Zoo Drive Connector redirects some traffic towards the I-5 Interchange, the remaining traffic still significantly impacts the West San Fernando Road/Brazil Street and San Fernando/Broadway intersections.

Based on the evaluation, the \$15 million expenditure for an emergency access only bridge does not outweigh the resultant impacts that closing the Doran Street at-grade crossing would have on overall traffic operations, local businesses, and the potential bypass traffic in Glendale. Staff does not recommend adopting this option.

RECOMMENDATION FROM METRO STAFF

A quantitative analysis was conducted to compare the three alternatives. A constraints analysis matrix was developed as part of this analysis. The constraints matrix included design considerations like cost/fundability, right-of-way impacts, environmental considerations, traffic circulation and diversion, constructability, railroad impacts, geometrics, utility impacts, consistency with the L.A. River revitalization plan and overall programmatic outlook keeping in mind future community impact. Please see Attachment B - Constraints Matrix Analysis for additional information about the development of the matrix.

Issue	Alt 1	Alt 2	Alt 3
Permanently closes Doran crossing	✓	✓	✓
Permanently closes Broadway/Brazil crossing		✓	
No future grade separation required		✓	
Keeps traffic on arterials	✓	✓	
Both crossings open during construction		✓	✓
Consistent with L.A. River Revitalization		✓	
Consistent with funding sources	✓	✓	

Figure 1: Alternatives Comparison

Metro Staff recommend Alternative 2 because it achieves the optimal safety goal to permanently close both Doran Street and Broadway/Brazil at-grade crossings. It eliminates the cumulative effects of constructing two separate grade separations at two different times. If a grade separation is constructed at only Doran Street right now, we anticipate another grade separation soon to improve safety at the Broadway/Brazil crossing. This will be required because of increased service levels from Metrolink and Amtrak and the proposed use of this corridor for high speed trains.

The effects of constructing two grade separations at two different times in Alternatives 1 and 3 will include cumulative impact on right-of-way because of the need for additional land acquisition and business relocation. This additional right-of-way need for Alternatives 1 and 3 in the future will be the same as the current need for the Salem/Sperry Overpass. Attachment C - Cumulative Right-of-Way Impact illustrates the cumulative right-of-way impacts for the three alternatives.

The overall programmatic costs accrued from adopting each alternative is shown in figure 2 below. In addition to the overall programmatic cost savings accrued from adopting alternative 2, significant cost savings are anticipated from economies of scale if a single grade separation is constructed to replace the two at-grade crossings. Alternative 2 ensures traffic stays on the arterials in the permanent condition, and keeps both crossing open during construction. Finally, this alternative is consistent with L.A. River Revitalization Plan and the requirements of the funding sources. A summary chart highlighting how each alternative meets the project objectives is shown in attachment D - Alternatives Comparison

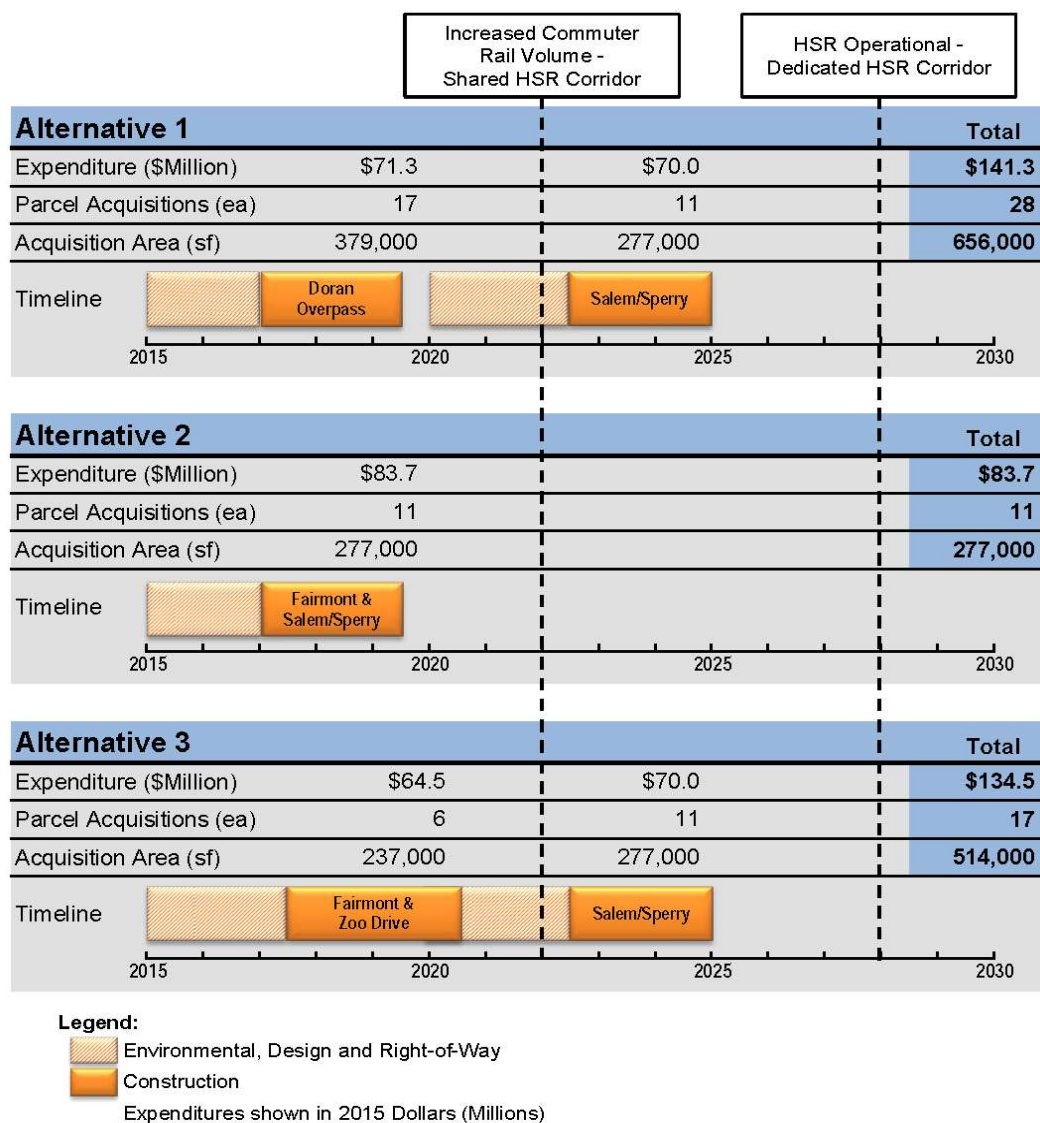


Figure 2: Project Programmatic Overview

DETERMINATION OF SAFETY IMPACT

Due to the urgent need to improve safety at this crossing, an Administrative Law Judge (ALJ) has ruled that the Doran Street at-grade crossing be closed permanently. However, there is a requirement to provide two points of access for emergency responders into the area west of the railroad corridor during an emergency. To accomplish this requirement, the ALJ required that Doran Street be converted to a one-way westbound movement until the crossing can be closed permanently.

The Broadway/Brazil at-grade crossing, located less than a half mile from the Doran Street crossing, has a similar safety record. Broadway/Brazil has 9 incidents resulting in five fatalities and three injuries. Broadway/Brazil was upgraded in December, 2014 as part of the mitigation agreement between the city of Glendale and other agencies and the CPUC. In addition, Metro staff been

involved with hearings and arbitrations initiated by the CPUC.

Irrespective of safety improvements adopted, at-grade crossings will always have the potential conflict between rail and vehicles, trucks and/or pedestrians. With a grade separation or closure, this conflict is eliminated. Over the coming years, Metrolink and Amtrak passenger service is expected to increase along this corridor. This further highlights the urgency to close these at-grade crossings. In addition to the increased service levels from Metrolink and Amtrak, the California High Speed Rail Authority (CHSRA) is also proposing this railroad corridor for their Palmdale/Los Angeles segment that is expected to be in service by 2022. In order for high speed rail to utilize this corridor, all at-grade crossings will have to be grade separated or closed.

This project has support from the Federal Railroad Administration (FRA), Caltrans, CPUC, Metrolink, Amtrak, and the CHSRA. The project comprises four phases: Alternative Analysis, Environmental Studies & Preliminary Engineering, Final Design, and Construction.

The project area includes a second at-grade crossing less than half mile south of Doran Street at Broadway/Brazil. With the two at-grade crossings being near each other, there is a higher chance for an accident occurring in the project area. Moreover, the number of incidents in Los Angeles County has continued to increase in the last five years, as shown in the Table 1 below. The ultimate safety enhancement would be to close both crossings and separate the vehicles and pedestrians from the trains.

Table 1: Los Angeles County Incident Table
(Source Federal Railroad Administration)

Year	Accidents	Fatalities	Injuries
2009	24	5	4
2010	20	6	9
2011	21	5	11
2012	20	9	19
2013	32	12	35
Totals	117	37	78

FINANCIAL IMPACT

\$2.5 million of Measure R 3% funding for design and construction of this project is included in cost center 2415, Regional Rail FY16 Budget in Project 460091 Doran Street Grade Separation. Since this is a multi-year contract, the Executive Officer, Regional Rail will be accountable to budget the costs in future years.

Impact to Budget

FUNDING SOURCE	AMOUNT
Local Measure R 3%	\$6.6 Million
State Proposition 1A	\$45.0 Million
Federal American Recovery and Reinvestment Act (ARRA)	\$15.8 Million
CHSRA and other sources	\$19.6 Million
TOTAL	\$87.0 Million

Measure R 3% funds are designated for Metrolink commuter rail capital improvements in Los Angeles County. These funds are not eligible to be used for Metro bus/rail operating or capital budget expenses. This programming action has no impact to the Proposition A and C, TDA or Measure R administration budgets.

The three alternatives studied have the following estimated project costs see table 3 below and the attached Project Study Report for additional information.

ALTERNATIVE	TOTAL PROJECT COST
1 Doran Overpass	\$71.31 Million
2 Fairmont Connector and Salem / Sperry Overpass	\$83.73 Million
3 Fairmont Connector and Zoo Drive Connector	\$64.49 Million

ALTERNATIVES CONSIDERED

The Board could choose not to select a locally preferred alternative. This alternative is not recommended due to the safety concerns at this crossing. The two at-grade crossings will still have the possibility of vehicle-train collisions. After several hearings and arbitrations with the CPUC, and the attempts by that agency to close the crossing, it was determined that there is a significant need to move to a grade separation.

NEXT STEPS

Upon selection of a locally preferred alternative by the Board, we will commence the environmental studies and preliminary engineering.

Upon approval of the request to program additional funds, Metro CEO will negotiate a design fee with Contractor HNTB Inc. and approve Modification 2 for signal engineering.

ATTACHMENTS

Attachment A - Project Study Report - Executive Summary
Attachment B - Constraints Analysis Matrix

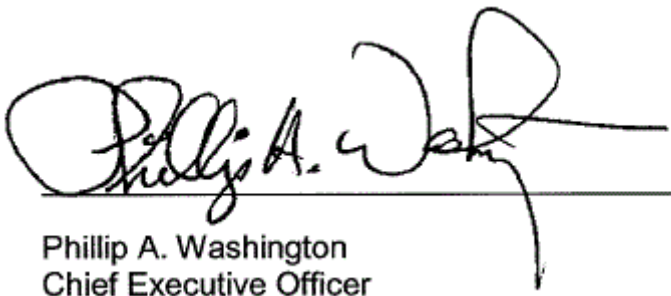
Attachment C - Cumulative Right-of-Way Impact
Attachment D - Alternatives Comparison

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