SUBJECT: AIRPORT METRO CONNECTOR

ACTION: APPROVE MODIFICATIONS TO CRENSHAW/LAX TO ACCOMMODATE THE AIRPORT METRO CONNECTOR

RECOMMENDATION

Approve Design Option 3 for the Crenshaw/LAX track alignment to accommodate the future Airport Metro Connector (AMC) transit station.

ISSUE

Over the last several months, staff has explored possible changes to the Crenshaw/LAX design to accommodate the future AMC transit station (96th Street Station). In March, staff presented to the Board two possible options: Option 1 includes building the Crenshaw/LAX Transit project as originally designed (Baseline), plus minor modifications within the current Metro-owned Right-of-Way (ROW); Option 2 entails potentially delaying the Crenshaw/LAX Transit project for up to two years in order to acquire additional ROW on the East side of the Crenshaw alignment, relocate utilities and construct the light rail tracks and turn back facility in their ultimate configuration.

In April, staff returned to the Board with a receive and file report on Options 1 and 2 and also presented a new, third option on the west side of the Crenshaw alignment (Option 3) which could potentially avoid the need for additional ROW and utility relocation. It was reported that this option showed promise. However, more investigation was needed to determine any unknown utilities and potential long-term operational impacts to Metro Rail and/or the Southwest Maintenance Yard. Based on the analysis and updated information, staff is requesting Board authorization to proceed with Design Option 3.

Background

On June 26, 2014, the Board approved adding a future, additional Metro Rail station on the
Crenshaw/LAX Transit corridor as the preferred alternative for the AMC Project. At the July 2014 meeting, the Board approved increasing the total contract value for the Crenshaw/LAX design builder by $3 million to design and construct accommodations so as not to preclude the future Metro Rail station being developed as part of the AMC project. The accommodations presented in July 2014 included relatively minor modifications to the alignment design and involved work within the current Metro-owned ROW.

Since July 2014, the AMC and Crenshaw/LAX staff have explored expanding the scope of the accommodations, beyond the current Metro-owned ROW, in an attempt to capitalize on current construction activities as well as reduce the impacts to future Metro Rail service and Southwest Maintenance Yard operations. This analysis was initiated in response to the Board’s directive to explore strategic steps necessary to accelerate completion of the AMC project.

AMC staff, Crenshaw/LAX staff and Metro Operations began working on a parallel design for the best configuration of 96th Street Station platforms, track alignment, relocation of turn back facility from Aviation/Century station, and other accommodations that could be constructed as part of the Crenshaw/LAX Transit project. This work was funded by the AMC project and undertaken as a parallel design so as not to delay the Crenshaw/LAX Baseline design.

In November 2014, the Board approved pursuing up to $33.2 million planned for the AMC project to cover the cost of additional accommodations being evaluated for implementation as part of the Crenshaw/LAX Transit project. With additional funding identified, staff initiated the next steps to pursue ROW acquisition and utility investigation outside of the current Metro-owned ROW. Since November, staff developed more detailed information for two design options that go beyond the minor accommodations proposed as part of Option 1.

In March 2015, based on further analysis and coordination with the Los Angeles World Airport (LAWA), staff informed the Board that the AMC station would open with LAWA’s Automated People Mover (APM), currently scheduled for 2023, subject to funding availability. It should be noted that the adopted Long Range Transportation Plan (LRTP) includes the AMC project with a 2028 revenue service date. The 2023 time frame accelerates the project by five years, should funding be available.

**Design Options**

During the March and April 2015 Board meetings, staff presented several options for the accommodations, including the advantages and disadvantages associated with each option.

*Design Option 1* includes building the Crenshaw/LAX Baseline with a few minor accommodations (Attachment A), but does so with no delay to the Crenshaw/LAX construction schedule. Option 1 will require Baseline track to be reconstructed in its ultimate configuration and the turn back facility to be relocated north of Aviation/Century after the Crenshaw/LAX line is in revenue operations.

*Design Option 2* requires additional ROW to accommodate the ultimate track concept including a three platform station and turn back facility for efficient north/south operations of the Green Line.
This option requires a 22.5' sliver of property on the east side of the Metro ROW and relocation of major utilities under the northbound track and future station platforms (Attachment B). Property acquisition and utility relocation could take up to 2-years and delay the Crenshaw/LAX line opening date.

Design Option 3 requires shifting the ultimate track configuration to the west side of the Crenshaw alignment to confine all of the track-work on Metro ROW (Attachment C). If implemented as part of the Crenshaw/LAX Transit project, minimal property acquisition or relocation of utilities outside of Metro ROW will be required as part of the Crenshaw/LAX Transit project. Note that relocation of utilities outside of the Metro ROW may be required for the future 96th Street Station project.

Design Option 3 provides advantages over Options 1 and 2 for implementation of accommodations and installing the ultimate track configuration as part of the Crenshaw/LAX Transit project contract. However, some cost and potential for schedule impacts up to 6 months (subject to negotiation with the contractor and Metro approval) could result from redesign of the Crenshaw/LAX baseline track configuration and the Southwestern Maintenance Yard (scheduled for award in 2015) including potential redesign of access, yard circulation and storage capacity.

Cost/Benefit Analysis

Cost and schedule impacts to the Crenshaw/LAX project as directed by the Board in March 2015 (Attachment D) for implementing accommodations for Option 1, Option 2 and Option 3 are summarized in Attachment E.

Recommendation

Staff have evaluated the feasibility of constructing the accommodations under Options 1 and 2 with regard to physical configuration, the need to reconstruct the Baseline, constructing the AMC station while the Crenshaw/LAX and Metro Green lines are in service, utility relocations, and impacts to Crenshaw/LAX Transit project cost and schedule. Given these impacts, staff does not recommend implementation of Option 1 or Option 2 for the AMC transit station.

Staff has completed engineering analysis for Option 3 including track alignment, operational impacts to mainline and Southwest Maintenance Yard, property requirements, review of utility drawings and some investigative trenching to identify utilities that are not on the drawings; no major impacts have been identified.

For the above stated reasons staff recommends proceeding with Option 3 and including as a change to the Crenshaw/LAX contract to be paid for by the AMC project.

DETERMINATION OF SAFETY IMPACT

There is no impact to the safety of our customers and/or employees.
FINANCIAL IMPACT

The FY 15 budget contains $5 million for the AMC project. Funding is included in cost centers 4330 (System-wide Planning) and 4350 (Transit Corridor Planning), project 460303 (Airport Metro Connector). These funds are for the AMC project environmental clearance and for accommodations to the Crenshaw/LAX Line funded by the AMC project. Since this is a multi-year project, the Cost Center Managers and Chief Planning Officer will be responsible for budgeting in future years.

Impact to Budget

The source of funds is Measure R Transit Capital 35% Funds. No other sources of funds were considered because the Measure R dollars are designated for the Airport Metro Connector project. These funds are not available for use on bus and rail capital and operations.

NEXT STEPS

Upon Board approval, staff will proceed with the negotiations of the necessary contract modification to the Crenshaw/LAX Design Build contract and will continue to further the design for Option 3.

Staff will also proceed with the award of the Southwestern Maintenance Yard contract according to standard processes. If a change to the contract becomes necessary for modifications for access, circulation or storage, staff will seek authorization from the Board.

ATTACHMENTS

A. Option 1 track design
B. Option 2 track design
C. Option 3 track design
D. March Board motion
E. Cost/Benefit Summary for Options 1, 2 and 3

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Option 1: Baseline Track Design
Option 2: Ultimate Track Design (Eastside)

Option 2: Cross Section AA'

OVERLAY OF CURRENT CRENSHAW/LAX PROJECT WORK AND 96TH ST STATION ACCOMMODATION

LEGEND
- Metro Existing ROW
- Temporary Construction Easement
- Proposed ROW
- 30' Gas Line
- Ultimate (Additional ROW)

Airport Metro Connector
ATTACHMENT C

Option 3: Ultimate Track Design (Westside)

Option 3: Cross Section BB'

96TH ST STATION ACCOMMODATION MODIFICATION

TYPICAL SECTION - AT STATION APPROX. STA 86+05.44

NOTE: THE DEPTHS OF THE UTILITIES ARE APPROXIMATE AND DO NOT REFLECT WIDER UTILITIES WHICH WILL BE ADDRESSED IN A LATER PHASE OF PROGRESS.

Airport Metro Connector
MOTION BY
DIRECTORS KNABE, GARCETTI, DUPONT-WALKER, BONIN,
BUTTS AND RIDLEY-THOMAS

Airport Metro Connector

Measure R was passed in 2008, with over two-thirds support of voters in Los Angeles County, and funds a promised transit connection to Los Angeles International Airport (LAX). Today, almost seven years later, as we contemplate the options for maximizing transit connectivity to LAX, the convenience to our transit riders, many of whom will be making the airport connection, must remain among Metro’s highest priorities.

At the request of the Board, staff has continued to brief both the Planning and Programming and Construction Committees on a monthly basis so that the proposed 96th Street Airport Metro Connector Station design (including platforms and tracks) and construction will be properly integrated with the construction of the Crenshaw/LAX Line, and not precluded by circumstances under Metro’s control, such as unresolved coordination, planning, or project sequencing issues during the immediate and near term efforts to construct the adjacent (Crenshaw/LAX) Line. Therefore, in order to maintain both viability and efficient connectivity for the Airport Metro Connector and the Crenshaw/LAX Transit projects, it is important to have Metro staff report back to the Board during the April Board cycle with a comparison of optimal and baseline station design, cost, schedule and timeline, and a recommendation from staff based on a cost/benefit analysis for the Board’s review and consideration.

WE, THEREFORE, MOVE THAT THE MTA BOARD:

Instruct the CEO to report back to the Board during the April 2015 Board cycle with 1) a timeline for optimal 96th Street Station design and construction, 2) a cost and schedule comparison between constructing the optimal 96th Street Station as A) part of the Crenshaw/LAX Project, or B) a separate project after Crenshaw/LAX Project is completed, and 3) a recommendation based on a cost/benefit analysis.
### Cost/Benefit Summary for Options 1, 2 and 3

<table>
<thead>
<tr>
<th>Element of Work</th>
<th>Option 1</th>
<th>Option 2 (Eastside)</th>
<th>Option 3 (Westside)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reconstruct to ultimate configuration after opening Crenshaw</td>
<td>Delay AMC Station Segment for up to 2 years and build ultimate</td>
<td>Shift Ultimate Configuration West, design and construct now</td>
<td></td>
</tr>
<tr>
<td>Benefit</td>
<td>No Delay to Crenshaw/LAX</td>
<td>No reconstruction of baseline after AMC Complete</td>
<td>All on Metro ROW, No utility Relocate</td>
</tr>
<tr>
<td>Cost Range 40% - Includes Direct, Delay, Inefficiencies, Acceleration, Contingency</td>
<td>$12,900,000 - $21,500,000</td>
<td>$83,700,000 - $139,500,000</td>
<td>$9,852,000 - $16,420,000</td>
</tr>
</tbody>
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**Notes:**

1. Utility relocation will be AMC Project Cost
2. Will require LRT system Interruptions

1. High Risk due to real estate and utility relocation requirements
2. High Risk due to potential delay to Crenshaw/LAX for up to 2 years

1. Moderate risk, potential delay or acceleration costs to Crenshaw/LAX