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61

PLANNING AND PROGRAMMING COMMITTEE
JUNE 17, 2009

SUBJECT: CRENSHAW TRANSIT CORRIDOR PROJECT – STATUS REPORT

ACTION: RECEIVE AND FILE

RECOMMENDATION

Receive and file this update on the Crenshaw Transit Corridor Alternatives Analysis (AA)/Draft Environmental Impact Statement (DEIS)/Draft Environmental Impact Report (DEIR).

ISSUE

At its April 26, 2007 meeting, the Board approved professional services contracts to complete the Alternatives Analysis, federal and state environmental clearance and conceptual engineering, and to conduct public outreach. In March 2008, the Board received a report which identified the two build alternatives – one Bus Rapid Transit (BRT) alternative and one Light Rail Transit (LRT) alternative – to be analyzed in detail in the AA/DEIS/DEIR in addition to the Transportation Systems Management (TSM) and No-Build Alternatives. These two alternatives have been conceptually designed and their preliminary environmental impacts have been analyzed. Design options have been defined to address some of the opportunities and constraints identified during the environmental analysis.

This report updates the Board on the status of the AA/DEIS/DEIR, including refinements to alternatives being evaluated, and community participation efforts.

DISCUSSION

During the past year and a half, the project team has been conducting a combined Alternatives Analysis and environmental review for the Crenshaw Transit Corridor which extends from Wilshire Boulevard on the north, Arlington Avenue on the east, La Brea/La Tijera/Sepulveda on the west, and El Segundo Boulevard on the south. Attachment A shows the study area. The purpose of this effort is to identify and environmentally clear appropriate transit improvements for the corridor between the South Bay and the Mid-City area of Los Angeles based on a thorough evaluation of alternatives and their associated environmental impacts.

During the environmental analysis, we have been conducting community outreach that includes a series of Working Group meetings and stakeholder briefings. Comments from stakeholders are being incorporated into the environmental review process and the continued refinement of the alternatives.

Analysis and Environmental Review of Alternatives

Base Definition of Alternatives

The BRT and LRT Alternatives follow one general alignment that uses Crenshaw Boulevard and portions of the Harbor Subdivision (a railroad right-of-way owned by us). Attachment A shows the BRT and LRT Alternatives.

- LRT Alternative (from Exposition/Crenshaw to Metro Green Line via the Harbor Subdivision) – This alternative operates from the Exposition LRT line (under construction) south along Crenshaw Boulevard and west and south along the Harbor Subdivision right-of-way toward LAX and a connection to the existing Metro Green Line near the Aviation Station. This connection would enable continuing service toward the South Bay, ending at the existing Metro Green Line Redondo Beach Station.

  Based on preliminary analyses of right-of-way, traffic conditions, safety, and environmental impacts, the LRT Alternative incorporates several grade separations: along Crenshaw Boulevard between Martin Luther King Jr. Boulevard and Vernon Avenue (below grade), along Crenshaw Boulevard between 60th Street and the Harbor Subdivision (aerial), across La Brea Avenue in downtown Inglewood (aerial), across the I-405 Freeway and La Cienega Boulevard (aerial), across Century Boulevard near LAX (aerial), adjacent to the south LAX runway (below grade), and an aerial connection to the Metro Green Line. With these features, the LRT alternative is estimated to connect the Exposition Line to the Metro Green Line in 20 minutes, a 43% travel time savings, when compared to the 35 minutes required for an equivalent Metro Rapid route.

  Ridership forecasts generated in August 2008 estimated that daily LRT ridership would carry 15,200 to 21,300 daily passengers along the entire line between Redondo Beach Station and the Exposition Line (12,800 to 15,600 in the section between the Metro Green Line and the Exposition Line). Depending upon what design features are included, this alternative has a potential estimated cost between $1.5 and $1.8 billion in 2008 dollars.

  Ridership forecasts were generated prior to the passage of Measure R. Therefore, the ridership forecasts attributed to the new projects approved by the voters in November 2008 are not included. Further, we are developing an airport passenger module to be included in our regional model. The regional model is currently being updated to incorporate these changes and revised ridership forecasts and the cost estimates will be incorporated as appropriate. Attachment B presents a summary comparison of the LRT and BRT Alternatives.

Although not carried forward into environmental review, a potential future northern extension of the LRT Alternative in the direction of Wilshire/La Brea is being documented in a separate feasibility study.

- BRT Alternative (from the Metro Purple Line Wilshire/Western station to the Metro Green Line via the Harbor Subdivision) – This alternative operates from the Metro Purple Line Wilshire/Western station west toward Crenshaw Boulevard where it turns south along Crenshaw Boulevard. Along Crenshaw Boulevard it operates in mixed-flow traffic between Wilshire Boulevard and the Exposition Line and in semi-exclusive BRT lanes between the Exposition Line and the Harbor Subdivision. In a few locations along Crenshaw Boulevard, the creation of the semi-exclusive lanes requires the conversion of parking or general purpose travel lanes. The alignment turns west along the Harbor Subdivision and follows the right-of-way in an exclusive busway configuration west and south toward LAX and a connection to the existing Metro Green Line at the existing Aviation Station. With the potential future extension of the Metro Purple Line along Wilshire Boulevard, the mixed flow operation in the northern portion of the BRT route may be re-aligned to create a more westerly BRT connection to the Wilshire Boulevard corridor, such as at Wilshire Boulevard and La Brea Avenue.

  Based on preliminary analyses of right-of-way, traffic conditions, safety, and environmental impacts, BRT vehicles would be constrained in two sections of the alignment. Along the Harbor Subdivision, the BRT vehicles would be required to slow down to 10 miles per hour at intersections due to safety requirements for exclusive busway crossings. This is similar to the operation of the Metro Orange Line. Also, the conversion of lanes to create exclusive lanes along Crenshaw Boulevard between Martin Luther King Jr. Boulevard and Vernon Avenue creates impacts to mixed flow traffic that exceed City standards. We have had discussions with City of Los Angeles Department of Transportation staff to determine whether they would support the conversion as it may likely result in unmitigable traffic impacts. Should the City not support the lane conversion, the BRT vehicles would need to operate in mixed-flow lanes, which would limit the travel time benefits for BRT vehicles in this section. The BRT alternative is estimated to connect the Exposition Line to the Metro Green Line in 28 to 30 minutes with the exclusive lanes, compared to the 35 minutes required for an equivalent Metro Rapid route. The BRT Alternative travel time is 40% longer than the equivalent LRT travel time of 20 minutes for the same distance.

  Ridership forecasts generated in August 2008 shows that the BRT Alternative is estimated to carry 17,200 to 24,100 daily passengers along the entire line between the Metro Green Line and the Wilshire Corridor. These estimates reflect the longer length of the BRT Alternative compared to the LRT Alternative and its connection with the Wilshire Corridor. The BRT Alternative's ridership is estimated to carry 10,200 to 14,400 in the section between the Metro Green Line and the Exposition Line. These ridership estimates assume the semi-exclusive lanes. Should this not be the case, estimated ridership would decrease due to increased travel time. This

alternative has an estimated cost between $500 and $600 million in 2008 dollars. The regional model is currently being updated and revised ridership forecasts and the cost estimates will be incorporated as appropriate.

Grade Separation Analysis

An analysis of grade separations, consistent with our adopted Grade Separation Policy (December 4, 2003), is being accelerated to the draft environmental phase in order to provide more substantive detail to support evaluations presented in the DEIS/DEIR. The Grade Separation Analysis will consider factors related to traffic delay, safety, and impacts to transit operations.

Design Options

In addition to the LRT alternative base definition described above, potential design options are being considered to respond to physical constraints and potential environmental impacts (such as traffic, safety, noise, visual impacts) in specified locations. Design options include adjustments to grade separations already considered, additional grade separations, and modifications to stations (Attachment C). Each of the design options will be taken to an appropriate level of conceptual design and will be analyzed in the DEIS/DEIR.

Supplemental Screening Analysis for Alternatives in the City of Inglewood

During public outreach activities in Fall 2008, stakeholders requested additional consideration of alternatives that can serve areas of redevelopment activity clustered around the intersection of Prairie Avenue and Century Boulevard in the City of Inglewood. These redevelopment projects are not yet approved by the City of Inglewood and are therefore, not included in official forecasts of regional land use. We performed a supplemental analysis to determine whether additional alternatives should be carried forward into the environmental review. An alternative alignment serving Prairie and Century was developed in consultation with stakeholders for comparison to the alignment serving downtown Inglewood along the Harbor Subdivision, which is included in the BRT and LRT Alternatives. Factors such as population and employment served, environmental impacts, transit connections, service to existing development and potential service to new development, cost and ridership were evaluated. The analysis revealed that the alternative alignment serving Prairie/Century would serve fewer transit connections, would create more environmental impacts (adjacent to the Inglewood Park Cemetery and along Century Boulevard), would not result in an appreciable increase in riders (even accounting for the developments yet to be approved), and would cost several hundred million dollars more than the alignment serving downtown Inglewood along the Harbor Subdivision (Attachment D).

Based on this analysis, it was determined that the alternative alignment serving Prairie/Century would not perform favorably and would not be carried forward into more detailed environmental review. The project team continues to refine plans to improve connections between stations and surrounding neighborhoods.

Air Passenger Mode Choice Model Development

We are developing a specialized Airport Passenger Mode Choice Module for the Regional Travel Demand Forecasting model. This module is being developed to account for potential benefits associated with serving airports and to properly estimate the number of airport passengers attracted to regional transit investments, such as the Crenshaw Transit Corridor. The existing travel demand forecasting model already accounts for transit travel associated with trips between residential locations and employment centers (including employment associated with airports.)

Community Participation

The stakeholder outreach effort has included public meetings and the formation of Crenshaw Transit Corridor Working Groups. We have shared information about the project through briefings to stakeholder groups such as neighborhood associations, block clubs, chambers of commerce, business groups, schools, churches, cities, and other public agencies. All stakeholders have also been invited to participate in the Project Working Group meetings.

In August and September 2008, two rounds of working group meetings were held. Topics included review of alignments and design features, environmental review process, station locations, urban design and land use, project funding and evaluation, and transit connections. A third round of two Working Group meetings to update the public on the progress of the alternatives analysis and environmental review was held on March 16th and 19th.

At these later meetings, we presented characteristics of the BRT and LRT Alternatives as well as potential design options associated with the two alternatives. Participants weighed in on the various design options and offered criteria that they felt were important in evaluating and selecting the potential investment for the Corridor. Criteria highlighted by participants included safety, security, long-term cost-effectiveness, connectivity, traffic impacts, aesthetics and integration with urban design, environmental justice, economic development and job creation, as well as travel time savings and reliability.

NEXT STEPS

We have submitted the Administrative Draft of the AA/DEIS/DEIR to the Federal Transit Administration (FTA) for review. After FTA comments are incorporated, the DEIS/DEIR will be released for public review. The release of the DEIS/DEIR will be formally announced in a Notice of Availability. After considering the technical analysis presented in the AA/DEIS/DEIR and public comment, the Board will adopt a Locally Preferred Alternative (LPA) in Fall 2009. This alternative will be carried into more detailed design analysis and ridership and cost estimates will be further refined in the final environmental review. In anticipation of the next phase of the project, we are preparing to proceed with Preliminary Engineering (PE). Throughout this process, we will continue public outreach efforts.

ATTACHMENTS

A. Alternatives Considered in the DEIS/DEIR
B. Summary of Build Alternatives
C. Design Options for Alternatives Considered in the DEIS/DEIR
D. Inglewood Alternative Alignment Comparison

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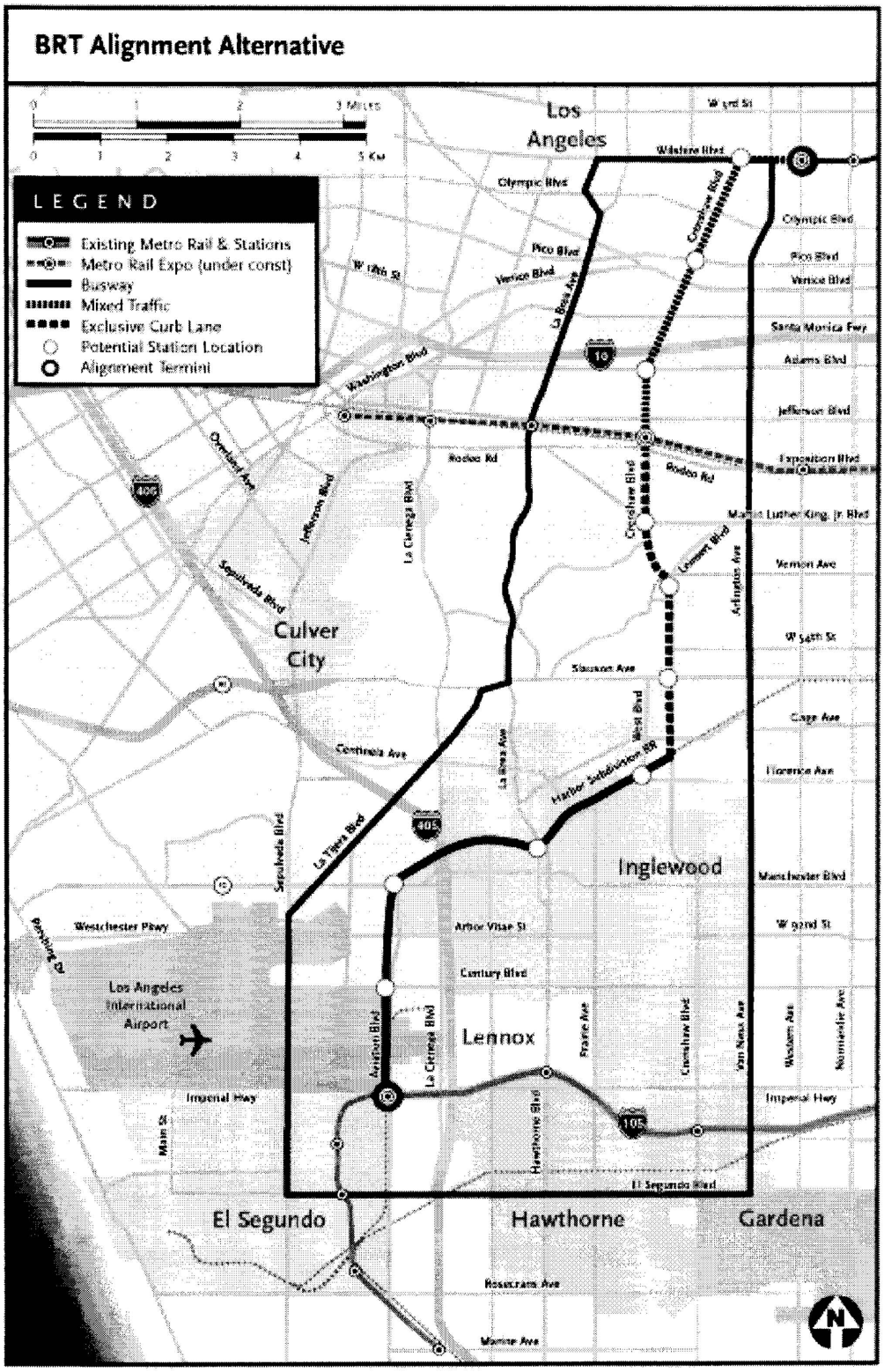
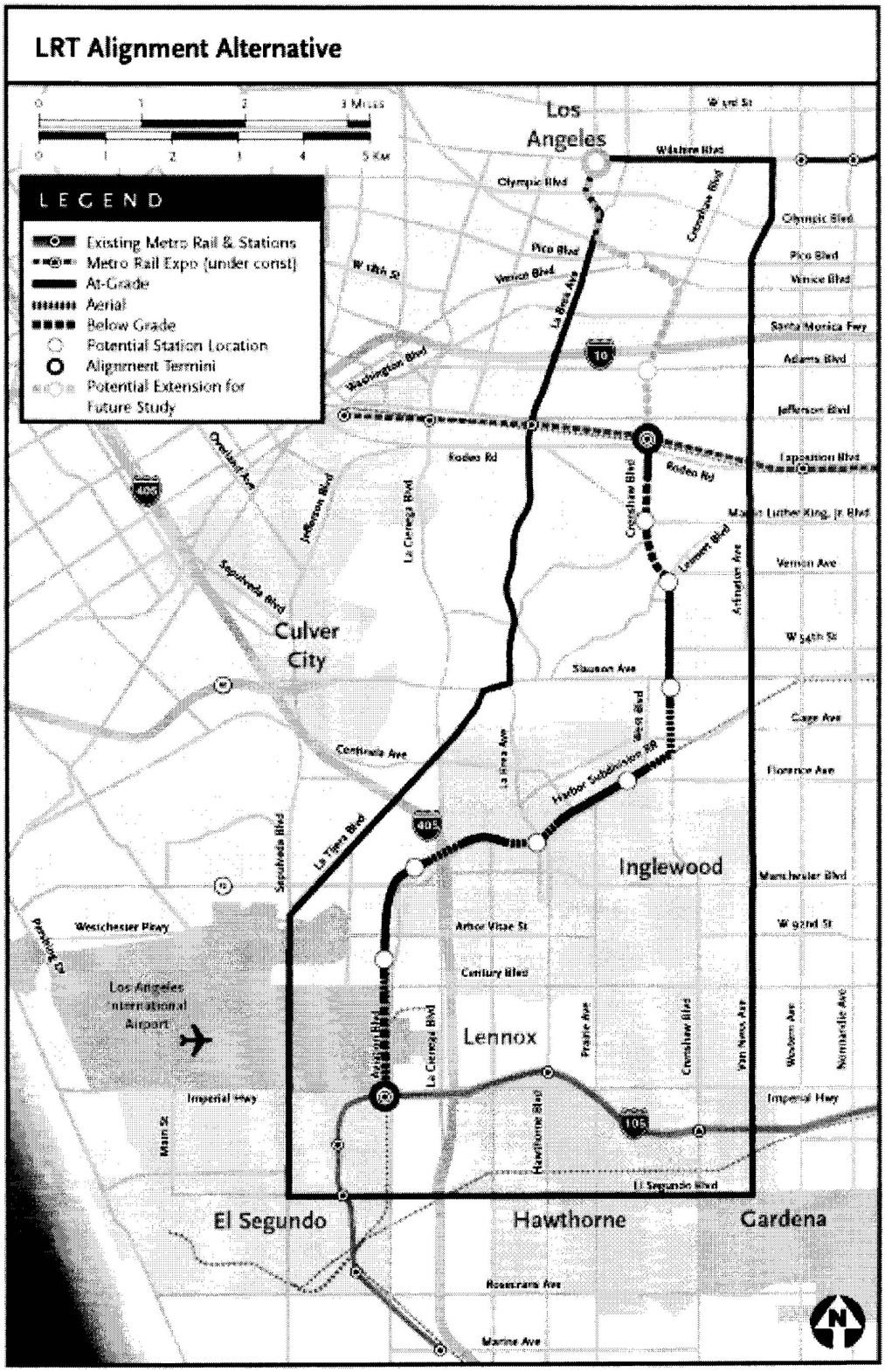
Attachment A – 1
Alternatives Considered in the DEIS / DEIR
BRT Alternative



Attachment A – 2
Alternatives Considered in the DEIS / DEIR
LRT Alternative



Summary of Build Alternatives

	BRT Alternative	LRT Alternative
Travel Time		
Metro Green Line to Exposition Line	28-30 minutes (20% savings compared to equivalent Rapid Bus travel time of 35 minutes)	20 minutes (43% savings compared to equivalent Rapid Bus travel time of 35 minutes)
Metro Green Line to Wilshire Boulevard	39-41 minutes	-
Ridership (Preliminary Estimates, as of October 2008, Higher end of ranges accounts for extra ridership from airport passengers)	17,200 - 24,100 (Wilshire / Western to Aviation / Imperial)	15,200 - 21,300 (Expo to Marine)
	10,200 - 14,400 (Expo to Aviation / Imperial) Assumes ability to secure exclusive lanes along entire section of Crenshaw Bl between the Expo Line and Harbor Subdivision. Higher travel times may reduce ridership estimates..	12,800 - 15,600 (Expo to Aviation/Imperial)
Estimated Capital Cost (September 2008$) (subject do decisions to include/not include design options)	$500 to 600 million (Costs rise if unable to secure City of LA approval of lane conversion along Crenshaw)	$1.5 - $1.8 billion (Includes shared infrastructure with Green Line North Extension to LAX [1 mile + 1 station], estimated at $325M as of September 2008)

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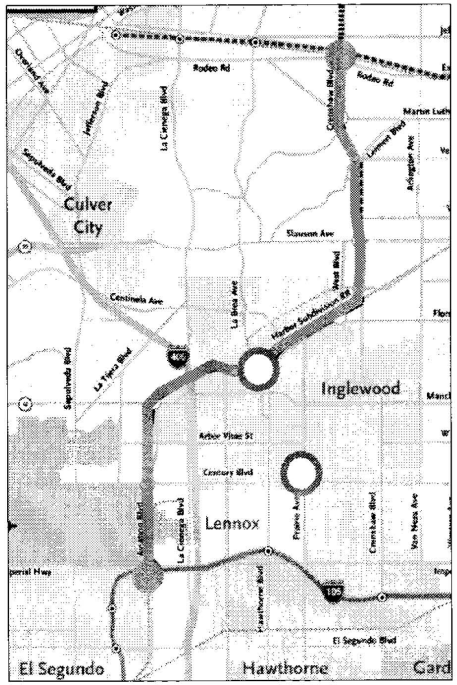
Summary Base LRT Alternative and Design Options

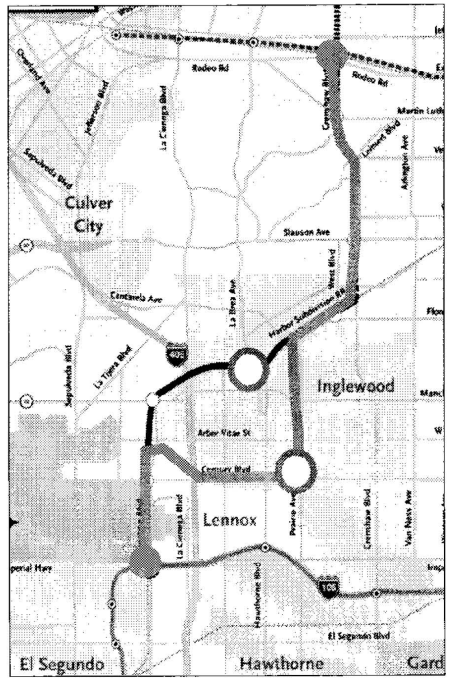
Base LRT Alternative	Design Option
At-grade station at LAX	Option 1 - Aerial station at Century Blvd.
At-grade crossing at Manchester Ave.	Option 2 -Aerial crossing at Manchester Ave.
At-grade crossing at Centinela Ave.	Option 3 -Cut and cover crossing at Centinela Ave.
Aerial alignment between Victoria Ave. and 60th St.	Option 4- Cut and cover alignment
No station at Vernon Ave. in Leimert Park	Option 5 -Subway station north of Vernon Ave. in Leimert Park
At-grade alignment north of 39th St. with connection to Expo and at-grade station	Option 6 - Below-grade alignment between 39th and Expo with subway station

Inglewood Alternative Alignment Comparison

Harbor Subdivision



Prairie / Century



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Summary of Inglewood Alternatives Evaluation

	Harbor Subdivision	Prairie/Century
Length	8.25 miles	9 miles
Travel Time Metro Green Line to Exposition Line	20 minutes	20 minutes
Capital Cost (2008$)	$1.58 - $1.8 billion	$2.29 - $2.47 billion
Minimize Environmental Impact	◕	○
Population	◑	◑
Employment	◕	◑
Existing Development	●	◑
New Development	◕	●
Ridership Base Estimate	15,200	14,800 (according to current plans) 15,100 (with potential development)
Potential Estimate with LAX Pax	21,300	20, 700 (current plans) 21,100 (with potential development)
Transit Connections	11 lines served at Downtown Inglewood (La Brea / Florence) station	3 lines served at Prairie / Century station

● Best ◑ ○ Worst

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The Harbor Subdivision Alignment remains the most reasonable alignment alternative