Rail to River
Intermediate Active Transportation Corridor Feasibility Study - Final

10/01/14

Metro

alta
PLANNING + DESIGN

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Executive Summary

INTRODUCTION & BACKGROUND

The purpose of the Rail to River Intermediate Active Transportation Corridor (Rail to River Intermediate ATC) feasibility study is to determine the viability, benefits, and cost considerations of developing an intermediate active transportation corridor along the 8.3 mile Los Angeles County Metropolitan Transportation Authority (Metro)-owned local North segment of the Harbor Subdivision in South Los Angeles. An Active Transportation Corridor is an off-street facility for pedestrians and bicyclists providing multi-modal connections to public transit and key destinations. The project area boundary spans from Redondo Junction and Washington Boulevard near the Los Angeles River, traverse south along the Harbor Subdivision and continue along the Slauson Avenue Corridor. The right-of-way (ROW) drops southwest off Slauson Avenue extending to Florence Boulevard and the new West Boulevard station for the Crenshaw/LAX Transit Corridor project (**Figure 1**). Interim active transportation use is being considered to increase the utility of the corridor as part of the transportation network until such time as rail or other major transit is identified for the ROW.

The Los Angeles County Transportation Commission (LACTC), Metro's predecessor, purchased the Harbor Subdivision in 1992 from Atchison, Topeka, and Santa Fe Railroad (ATSF), the predecessor of the Burlington Northern Santa Fe (BNSF) Railway for the purpose of rail service expansion. Under the purchase agreement, BNSF retained freight rail operating rights and currently operates limited freight service along only a small segment of the subdivision from approximately Slauson Avenue and Santa Fe Avenue to Washington Boulevard (Malabar Segment).

METRO HAS UNDERTAKEN THREE PRIOR STUDIES TO DETERMINE POTENTIAL USE OF THE CORRIDOR FOR LIGHT RAIL TRANSIT (LRT) OR OTHER TRANSIT MODE UTILIZATION:

2006: the Metro Harbor Subdivision ROW was considered for various transit modes along the corridor. The study resulted in the evaluation of six transit service alternatives.

2009: Metro Harbor Subdivision Transit Corridor Alternatives Analysis Report (AA) analyzed both existing and forecasted transportation conditions and addressed specific mobility challenges. The South Bay Metro Green Line Extension to Torrance was the build alternative recommended for further study.

2010: The Metro Board approved the Subregion's recommendation to include the ROW (Slauson Avenue from Crenshaw Boulevard to Downtown Los Angeles) as an unfunded strategic project in the supplemental portion of the Long Range Transportation Plan (LRTP).

2012-2014: Bus Rapid Transit and Street Design Improvement Study originally considered one hundred corridors ultimately narrowing the alternatives to five. The Slauson Ave Corridor was not one of those selected for further analysis.

In 2009, the Board approved the Harbor Subdivision Alternatives Analysis including the Phased Implementation Strategy for rail transit on the corridor. The adopted Strategy included as a first priority segment, the South Bay Metro Green Line Extension which is currently in the draft environmental process. Subsequent project phases may include providing rail service using portions of the Subdivision to ultimately extend the Green Line further south to San Pedro, and for potential connections to Union Station, provided technical challenges in allocation of track space along the river and across the 101 freeway are resolved.

The Harbor Subdivision ROW is approximately 40' wide along Slauson Avenue. As such, there is insufficient width for both a bikeway/multi-purpose lane and a fixed guideway facility. The construction of an interim bike/multi-purpose path could preclude future construction of a fixed guideway facility without the purchase of additional ROW.

Prior studies and efforts have not yielded any specific plans, nor has funding been identified to implement a major transit project within this corridor. While Metro will continue to study a variety of longer term transit uses, recent actions by the Metro Board have prompted an analysis to determine whether an intermediate use of the ROW as an active transportation corridor would be a viable option.

In September 2012, a Board motion requested staff to conduct a preliminary assessment of the feasibility of an intermediate use of the ROW as an active transportation corridor. The motion emphasized that the ROW presents major blight in the community, and directed Metro staff to look at intermediate uses for the ROW that would not preclude future transit use; as such preclusion would be in conflict with the 2000 MTA Rights-of-Way Preservation Guidelines, which seek to balance community need with Metro's need to preserve corridors for future transportation uses.

With respect to these important priorities, the preliminary assessment of current policy and the proposed ATC revealed the following:

The existing ROW preservation policy requires the preservation of rights-of-way for future transportation projects while encouraging utilization on an interim basis

- The ROW is constrained in many sections, eliminating the ability of light rail and the ATC to coexist.
- Policy has not been updated since 2000 and current language does not take into consideration Metro's October 2013 policy indicating bicycles are a formal mode of transportation.
- Guideline language requires updating to better align with current policy and future potential funding opportunities.

It can be extremely difficult to remove extensive landscaping, park like areas, and/or community uses that have been in place for many years. **Construction of a bikeway and/or pedestrian path is prohibited under the current policy unless the bikeway or pedestrian path is designed so that the sponsor (in this case Metro itself in partnership with local jurisdictions through appropriate use agreements) can demonstrate that it will not have to be relocated or removed to allow for construction or operation of a future transportation project. This cannot be demonstrated in the current case.**

- The community, both present and future may not be aware that major transit alternatives have been considered for the ROW, thus perceiving the ATC as a permanent use.
- It could be difficult to eliminate the interim use of the ROW as an exclusive active transportation corridor in the future if the public demands that such use continues.

Full use of available ROW may have landscaping design constraints

- Security consideration in landscape design should be a priority.
- Placement of bicycle and pedestrian path or any transit facility on a ROW may be restricted if design is such that the remaining area of the ROW is converted to a temporary landscaped linear park like use; as such use could potentially create future 4(f) challenges[1].

THE STUDY

Given the potential opportunities and constraints identified as part of the preliminary assessment conducted by Metro staff, including the need for more comprehensive analysis, a more in-depth feasibility study was authorized as a next step to fully investigate the viability of an intermediate ATC on the identified ROW.

[1]The Department of Transportation Act (DOT Act) of 1966 included a special provision - Section 4(f) - which stipulated that the Federal Highway Administration (FHWA) and other DOT agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless there is no feasible and prudent alternative to the use of land or the action includes all possible planning to minimize harm to the property resulting from use.

The Rail to River Intermediate ATC Feasibility Study, the subject of this report, further assesses the viability of an off-street facility for pedestrians and bicyclists as an interim use of the Metro owned rail ROW. The primary goals of the Rail to River Intermediate ATC study are to:

- Assess existing conditions along the corridor
- Assess potential use of the ATC for utilitarian purposes
- Evaluate and document preliminary potential environmental impacts
- Discuss key design and constructability related issues
- Estimate costs of developing and maintaining the corridor
- Determine project development action plan

STUDY CORRIDOR SEGMENTATION

Due in part to unique land use characteristics of certain segments of the ROW, to reflect the changes in the direction of the 8.3 mile alignment, and to better facilitate the geographic organization of the study, the corridor has been divided into the following three segments (See **Figure 1**):

- **Western Segment (Off Slauson Avenue):** 1.9 mile segment on the alignment between Western Avenue and West Boulevard. The segment travels in a southwest-northeast direction. It is located behind industrial, commercial, and some residential land uses. The Metro Crenshaw/LAX transit line station at the West Boulevard/Florence Avenue intersection currently provides the western terminus of the Metro owned ROW.
- **Central Segment (Slauson Avenue Corridor)**: 3.6 mile east-west portion between Long Beach Avenue (Metro Blue Line) and Western Avenue where the ROW is visible and directly adjacent to Slauson Avenue on the north.
- **Eastern Segment (Primarily North/South Section):** 2.8 mile north-south segment between Washington Boulevard and Long Beach Avenue (Metro Blue Line) generally referred to as the Malabar Yards. The ROW travels through the Malabar rail facility where multiple tracks are provided to accommodate rail switching activity. Land use for the eastern segment is currently characterized primarily by industrial use.

***Figure 1** - 8.3 mile study area segment*

FEASIBILITY REVIEW

The demographic and socioeconomic indicators for the study area reveal a significant transit dependent market (See **Figure 2**). The current bicycle/pedestrian commute trips to work, as well as those trips being taken for other utilitarian purposes, indicate that an ATC would be a benefit to the residents and to business owners in proximity to the study area. The ATC supports the 2014 First Last Mile Strategic Plan by expanding the reach of transit through infrastructure improvements and maximizing multi-modal benefits and efficiencies.

Assuming implementation of the three segments along the entire study corridor, an ATC is forecast to attract between 1.6 million and 3.2 million bicycle trips annually, while annual pedestrian trips are forecast at between 2 million and 4 million.

Performance criteria (qualitative and quantitative) were developed for evaluating, comparing, and ranking features of the planned ATC. These features include the following:

- Pedestrian Environment
- Bicycle Environment
- Linkages to Destinations
- Linkages to LA River
- Linkages to Major Transit
- Cost
- Pedestrian Trip Demand
- Bicycle Trip Demand
- Commercial Interface
- Public Support
- Ease of Implementation
- User Security

CENTRAL SEGMENT	7,054 (18%)
EASTERN SEGMENT	2,252 (19.6%
WESTERN SEGMENT	3,629 (17.0%)
ALL SEGMENTS	12,935 (18.4%)
LA COUNTY	312,487 (9.7%)
USA	10,405,375 (9%)

* American Community Survey 2012 5-year estimates. Census tracts within 1/2 mile of each study segment.

***Figure 2** - Zero-Vehicle Households*

PUBLIC PARTICIPATION

In addition to technical analysis, the feasibility study efforts included a robust public participation process consisting of meetings, workshops, and presentations. The goal of the outreach effort was to conduct a public engagement campaign that ensured involvement from a wide and varied group of interested stakeholders. Targeted stakeholders included elected officials, county and city agencies, community based organizations, community health advocates, business organizations, representatives from key destinations, and other key stakeholder groups within the general project area. Stakeholders were categorized as Elected Official and/or designated Staff (EO), Technical Advisory Committee (TAC), and an Interested Party (IP) group.

A Public Participation Plan (PPP) was developed to provide a framework for the public/stakeholder engagement activities and was designed to inform, educate, and engage stakeholders in assessing the feasibility of the Rail to River Intermediate ATC.

***Photo 1** - Recent bus stop improvements along Slauson Corridor – less than adequate pedestrian amenities*

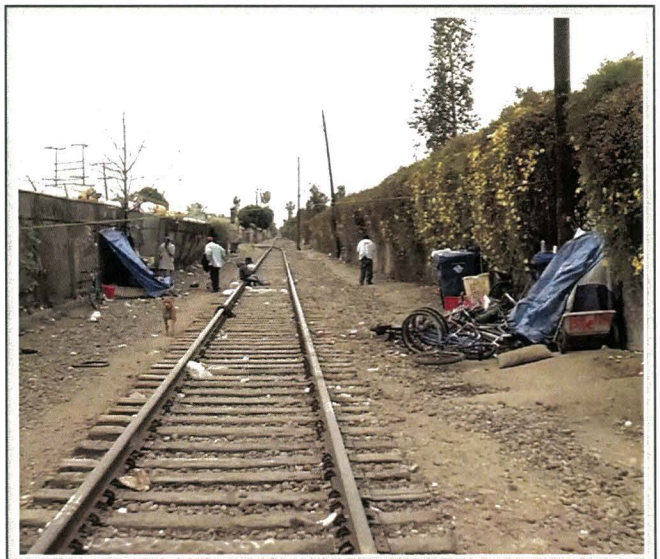


***Photo 2** - Improved safety enhancement needed*

FINDINGS: Opportunities and Challenges

Although potential development challenges exist for implementation of an ATC, this corridor concept offers significant opportunities for community improvement. Current conditions are depicted in **Photo 1 and Photo 2**.

POTENTIAL ATC DEVELOPMENT OPPORTUNITIES:

- Connectivity to transit
- Improved safety enhancements
- Reduce blighted conditions
- Healthier and safer transportation alternatives, including improved ADA accessibility
- Intermediate public utility
- Multiple street crossing improvement opportunities by local jurisdictions
- Leverage proposed improvements (Army Corps of Engineers Plan) and connections to LA River by building additional connections to neighborhoods

POLICY EXCEPTIONS CREATE OPPORTUNITY

- Although the 2000 policy document provided guidance for staff and the community as to allowable interim uses, opportunity currently exists to update language to be more inclusive of active transportation related facility uses.
- Opportunity exists to better align Metro policy with federal and state mandates for active transportation programming and funding opportunities.
- It is within the Board's purview to make exceptions.

POTENTIAL ATC DEVELOPMENT CHALLENGES:

- Negotiation with BNSF for the abandonment of freight rail operating on the ROW required
  - A rail line is determined to be abandoned when the railroad has applied to the Surface Transportation Board (STB) for abandonment authorization and the STB issues an order authorizing the abandonment of the line and the railroad has notified the STB that it has consummated the abandonment authorization.
  - This action will be required for any type of transportation project development on this ROW, regardless of whether it is an intermediate/interim or permanent project implementation. Any action taken in this regard would benefit both intermediate and potential long-term use of the corridor.
- Inconsistent ROW width poses design challenges and precludes the ability to accommodate the rail and the ATC . While existing ROW widths limit the opportunity to have both an ATC and LRT operate on the corridor at the same time, other options could be considered through subsequent study efforts. For example, if in the future Metro identifies funding for an LRT on the ROW, the Class I intermediate active transportation facility would have to be relocated or reconfigured in cooperation with the local jurisdictions to utilize on-street implementation strategies. Such changes might include Class I bicycle facilities remaining on the limited portions of the ROW where width allows, and reducing bicycle facilities from Class I to Class II or III where needed to accommodate major transit.
- Funding has not been secured
- Environmental considerations
- High number of street crossings
- Need to update the 2000 MTA ROW Preservation Guidelines to better accommodate intermediate active transportation uses and other similar, future, potential projects

Table ES-1 - Cost Summary Sheet by Segment

Summary of Cost by Segment	Length (mile)	Capital Cost (2014 $)	Cost Per Mile	Annual O & M Cost (2014 $)
West Options				
Slauson Avenue to Crenshaw/Slauson (Class III)	1.4	$480,394	$343,138.57	$6,884
59th Street to Crenshaw/Slauson (Class I & III)	1.6	$2,443,958	$1,527,473.70	$13,490
67th Street: West Boulevard to Florence/West (Class I & III)	2.0	$6,600,019	$3,300,009.50	$25,443
Central Segment				
Slauson Avenue/Western to Long Beach Avenues (Class I)	3.6	$12,205,805	$3,390,501.30	$54,318
East Options/ Proposed Infrastructure				
Malabar Corridor to River (Class I)	2.8	$10,483,690	$3,744,175.00	$42,315
Utility Corridor to River (Class I & III)	3.3	$7,138,555	$2,163,198.40	$34,441
Slauson Avenue to River (Class I & III)	4.1	$3,219,306	$785,196.58	$26,657
Randolph Street to River (Class I or II)	4.3	$15,367,640	$3,573,869.70	$65,114

As shown in **Table ES-1,** the lowest cost option for the intermediate ATC is to follow Slauson Avenue the entire way from Crenshaw Boulevard to the LA River. The lowest cost option would cost approximately $15.9 million to build, and $88,000 a year to maintain.

The most expensive option for the intermediate ATC is to use 67th Street on the west end, and the Union Pacific railroad ROW along Randolph Street on the east end. The highest cost option would be approximately $34.2 million to build, and $145,000 a year to maintain.

ALTERNATIVES AND RECOMMENDATIONS

Project development options could include preserving the ROW for future major transit by taking no intermediate actions at this time. Metro would continue to maintain the ROW at considerable current and future costs. Local stakeholders have indicated a strong interest in having Metro enhance current maintenance and safety efforts along the alignment, as existing conditions are often blighted at best; and the need for coordination with local law enforcement regarding safety issues has increased. Metro's facility maintenance efforts for the Local North section of the Harbor Subdivision have doubled in the past year from one scheduled monthly visit to a minimum of two scheduled visits each month. As-needed visits are anticipated to increase as well. Prior to 2013, the ROW was maintained on a quarterly basis.

Implementation of an intermediate active transportation corridor facility on the ROW is feasible. However, there is not sufficient right-of-way in many sections to accommodate a future rail project with the bicycle facility. As outlined in this feasibility report, a phased approach to interim project development on the corridor is complicated but technically feasible. Agreements with local jurisdictions for operation and maintenance of an active transportation facility would be part of the next steps in a phased approach to project development.

The following alternatives were evaluated based on analysis of existing conditions, opportunities and constraints, unique ROW segment characteristics were identified, and review of performance criteria for the preferred segment, if implementation is directed by the Board, a phased approach to project development is recommended.

Phase 1 – Rail to Rail ATC Connector Recommendations

Begin Final Design and Environmental Analysis of the Western (67th Street) and Central Segments combined (Metro Crenshaw/LAX LRT at West Boulevard and Florence Avenue to Metro Blue Line LRT at Slauson Avenue and Long Beach Avenue), for a 5.6 mile Phase 1 intermediate ATC.*

WESTERN SEGMENT ALTERNATIVES:

- Slauson Avenue West (to Crenshaw/Slauson station for Crenshaw/LAX LRT)
  - 1.4 miles – Cost $480,394
- 59th Street (to Crenshaw/Slauson station for Crenshaw/LAX LRT)
  - 1.6 miles – Cost $2,443,958
- 67th Street /West Boulevard (to West Boulevard/ Florence Avenue for Crenshaw/LAX LRT)
  - 2.0 miles – Cost $6,600,019

The Metro owned ROW to 67th Street alternative is recommended for the Western Segment of the Study area.

Deciding factors include:

- *Overall ease of implementation*
- *Lower safety risks for users on 67th Street*
- *Opportunity to fill a significant gap in the Los Angeles County Bicycle Network*

West Boulevard, the proposed western terminus for the Rail to River Intermediate ATC, received bike lanes in May, 2014, supporting the value of this connection.

CENTRAL SEGMENT ALIGNMENT:

- Slauson Avenue East-West (Denker Avenue to Long Beach Avenue)
  - 3.6 miles – Cost $12,205,805

Only one potential alignment was identified for the Central Segment.

Phase 1 – Rail to Rail ATC Connector is an approximate 5.6 mile corridor project with an estimated capital cost* of $18,805, 824.

Cost associated with BNSF easement abandonment of rail freight operations on the ROW are not included in capital cost estimations provided in this report.

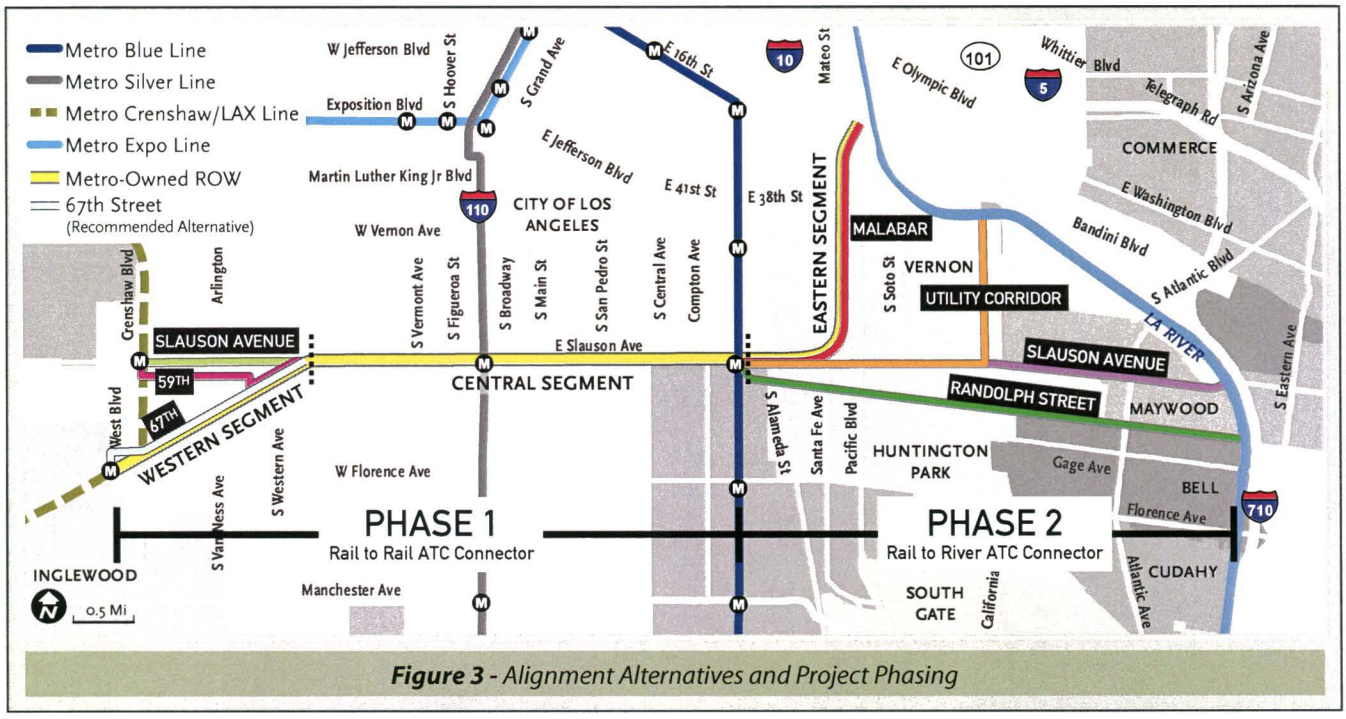


***Figure 3** - Alignment Alternatives and Project Phasing*

Phase 2 - Rail to River ATC Connector Recommendations

Due to multi-jurisdictional collaboration and coordination needs, current and planned land uses, Los Angeles River master planning, and advanced design considerations, further Alternatives Analysis of the Eastern Segment alignment options from the Metro Blue Line LRT to the Los Angeles River is recommended (See **Figure 3**). **Preliminary estimates do not include BNSF easement abandonment costs.** Capital cost estimates are provided below.

EASTERN SEGMENT ALTERNATIVE:

- Randolph Street (Union Pacific owned Rail ROW)
  - 4.3 miles – Cost $15,367,640
- Malabar Segment (Metro owned Rail ROW from Metro Blue Line north to 25th Street)
  - 2.8 miles – Cost $10,483,690
- Utility Corridor (Southern California Edison owned ROW)
  - 3.3 miles – Cost $7,138,555
- Slauson Avenue East (from Metro Blue Line to Los Angeles River)
  - 4.1 miles – Cost $3,219,306

Phase 1 costs for construction of the identified alignment options range between $480,000 and $12.2 million, assuming Western Segment 67th Street Alternative is approved and both the Western and Central Segments move forward. Phase 2 costs for construction of the alternative alignments range between $3 million and $15 million. Actual cost depends on the alternative selected as the locally preferred option. **These estimates do not include costs associated with the BNSF easement abandonment of freight operation on the ROW.**

Although a recommendation for a phased approach to project development is provided, it is the Metro Board who will decide whether the study area is considered for project development at this time. The Metro Board could determine that the study area warrants project development consideration and take board action authorizing allocation of local funding for project development.

PROJECT IMPLEMENTATION STEPS

ADOPT AS A PROJECT:

- Identify Harbor Subdivision (Crenshaw Blvd to downtown Los Angeles), Metro owned ROW for intermediate ATC project development consideration. This corridor was previously identified in the 2009 Long Range Transportation Plan (LRTP), Strategic Unfunded Plan, as a promising, regionally significant transit project area that could be implemented if additional funding becomes available. Consider inclusion of Rail to River Intermediate ATC in future LRTP as an identified active transportation demonstration project.

IMPLEMENT EXISTING POLICIES:

- Implementation of this ATC would expand Metro's roster of projects that provide alternatives to solo driving and sustainable strategies to maximize transportation efficiency, access, safety, and performance while minimizing energy use, pollution, and waste generation.
- Additionally, Metro is actively pursuing the development of active transportation strategies (e.g., First Last Mile Strategic Plan, Safe Routes to Schools and Complete Streets Policy) that will improve regional accessibility, while also meeting mandated greenhouse gas reduction and public health goals. As part of Metro's plan to build a "Complete and Integrated Transportation System" for Los Angeles County, implementation of an active transportation corridor as an interim measure would provide beneficial use of an otherwise underutilized ROW.

DEVELOP MULTI-AGENCY COORDINATION AGREEMENTS:

- Development of appropriate easement, and/or general land-use agreements for intermediate use of the Metro owned ROW would be required to ensure Metro's ability to retain all rights associated with land-use decisions in both the near and long-term. Should the Board grant authorization for interim use of the Local North Segment of the Harbor Subdivision for the development of an intermediate active transportation corridor project, multi-agency, jurisdictional coordination, and necessary agreements will be required. Additionally life-of-project timelines, roles, responsibilities, maintenance, liability and funding should be considered.

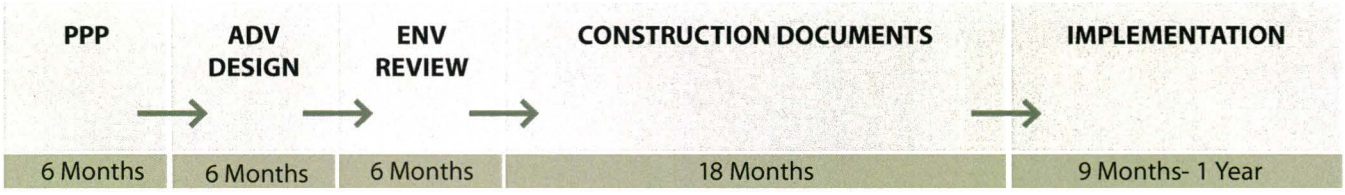
IDENTIFY FUNDING:

- The study is not a plan reflecting commitment to any project at this time. The study identifies possible funding sources for consideration in the event a commitment to project development is made. Should the Board decide to move forward, funding for the next stage project development plan would be needed to address design, environmental review, and alternatives analysis.

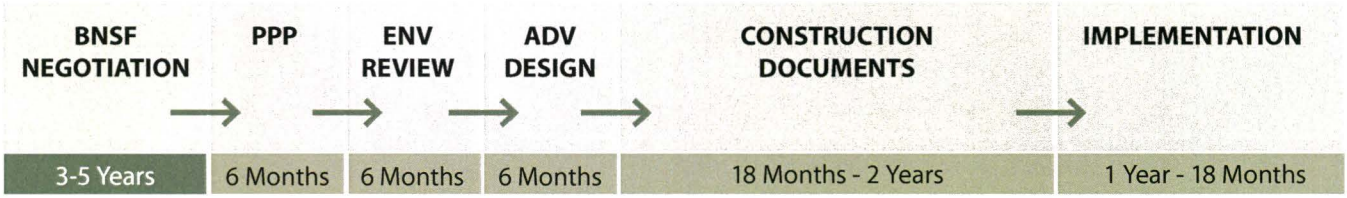
REVIEW AND REFINE THE 2000 MTA ROW PRESERVATION GUIDELINES:

- The current guideline, adopted March 23, 2000, as guidance in the review and approval of requests for interim uses of Metro ROW, was reviewed by the Rail to River Intermediate ATC Feasibility Study TAC. The TAC recommended updating the guidelines to reflect more current federal, state, and local land-use principles including active transportation design integration.

PHASE 1



PHASE 2



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1 INTRODUCTION

1.1 HARBOR SUBDIVISION TRANSIT CORRIDOR HISTORY

The Harbor Subdivision Transit Corridor is approximately 35 miles in length, 26.4 miles of which is owned by Metro, running between Los Angeles Union Station (LAUS) and the Port communities of Long Beach and San Pedro. Metro initiated an Alternatives Analysis (AA) study in 2009 for the Harbor Subdivision Transit Corridor aimed at further studying potential transit modes along the corridor.

The 2009 AA study area covered 85 square miles and included portions of 13 jurisdictions. It included the following cities:

- Huntington Park
- Vernon
- Los Angeles
- Hawthorne
- Inglewood
- El Segundo
- Lawndale
- Torrance
- Manhattan Beach
- Redondo Beach
- Carson
- Long Beach
- The unincorporated County of Los Angeles

Metro purchased the ROW in the early 1990's from the predecessor of the BNSF Railway. At the time the Harbor Subdivision was purchased, it served as the main BNSF access into the Ports of Los Angeles and Long Beach, and carried a substantial number of freight trains. BNSF conveyed all of its rights, title and interest in subject real property, structures, and improvements to Metro, but reserved a permanent and exclusive rail freight service easement over the property. Currently, BNSF retains an operating easement on the ROW. With the opening of the Alameda Corridor in 2002, through freight traffic shifted off the Harbor Subdivision, carrying very limited local trains, in only certain segments of the corridor. The Harbor Subdivision was once considered a back-up for the Alameda Corridor in the event that rail freight would need rerouting. This is no longer the case, as the San Pedro Subdivision serves this purpose.

In November 2009, Metro completed an Alternatives Analysis/Conceptual Engineering report for the Metro Harbor Subdivision Transit Corridor. At that time, the Board approved the Harbor Subdivision Alternatives Analysis including the Phased Implementation Strategy for rail transit on the corridor. The adopted Strategy included as a first priority segment, the South Bay Metro Green Line Extension which is currently in the draft environmental process. Subsequent project phases include providing rail service using the Subdivision from Union Station to LAX and ultimately extending the Green Line further south to San Pedro. Although a specific project on the Metro owned Local North segment was not identified in the 2009 Long Range Transportation Plan (LRTP), the project area was subsequently included in the supplemental portion of the LRTP in 2010 as an unfunded, strategic project. As of the publication of this report, no funding has been identified to implement a major transit project on the remaining 8.3 mile section of the ROW.

The Crenshaw/LAX Light Rail Project, currently under construction, serves as the most recent major transit development activity within the Harbor Subdivision. Tracks between Crenshaw Boulevard and Imperial Highway were removed as part of construction for the Crenshaw/LAX Light Rail Station at West Boulevard in the city of Inglewood.

1.1.1 Freight Activity

Although freight rail has not been operating south of the Malabar Yard for an extended period of time, the Slauson Corridor has had no rail activity for at least 10 years (See **Photo 3**). In all, less than a two mile segment has active freight operations. Negotiations between BNSF to abandon rail freight operations in the more heavily active segment could take significantly more time than that of the Slauson Corridor[1]. The cost associated with BNSF's abandonment of rail freight services is estimated to be in the millions. Therefore, project phasing beginning with the Slauson Corridor initially may be one option to consider.

***Photo 3** - Freight activity at the Malabar Yard*

[1] A rail line is determined to be abandoned when the railroad has applied to the Surface Transportation Board (STB) for abandonment authorization and the STB issues an order authorizing the abandonment of the line and the railroad has notified the STB that is has consummated the abandonment authorization.

1.2 THE CORRIDOR STUDY AREA

The Metro owned ROW on the Local North section of the Harbor Subdivision is located primarily within the City of Los Angeles. It begins just north of Washington Boulevard near the City of Vernon and the LA River and initially extends north-south between industrial land uses. Near Santa Fe Avenue, the ROW transitions to an east-west alignment along the north side of Slauson Avenue.

The Harbor Subdivision ROW is approximately 40' wide along Slauson Avenue. As such, there is insufficient width for both a bikeway/multi-purpose lane and a fixed guideway facility. The construction of an interim bike/multi-purpose path could preclude future construction of a fixed guideway facility without the purchase of additional ROW.

Due in part to unique land use character and to facilitate the geographic organization of the study, and reflect changes in the direction of the 8.3 mile alignment, the study corridor has been divided into three segments as described below and shown on **Figure 4.**

Western Segment (off Slauson Avenue):
a 1.9 mile segment provides a "diagonal" alignment between Western Avenue and West Boulevard where the segment travels in a southwest-northeast direction and is behind industrial, commercial, and some residential land uses. The Metro Crenshaw/LAX Transit Line station at the West Boulevard/Florence Avenue intersection marks the western terminus of the Metro owned ROW.

Central Segment (Slauson Corridor):
a 3.6 mile east-west portion between Long Beach Avenue (Metro Blue Line) and Western Avenue where the ROW is visible from and directly adjacent to Slauson Avenue.

Eastern Segment (North/South Section):
a 2.8 mile north-south segment between Washington Boulevard and Long Beach Avenue (Metro Blue Line) is also referred to as the Malabar segment as the ROW travels through the Malabar rail facility where multiple tracks are provided to accommodate rail switching activity.

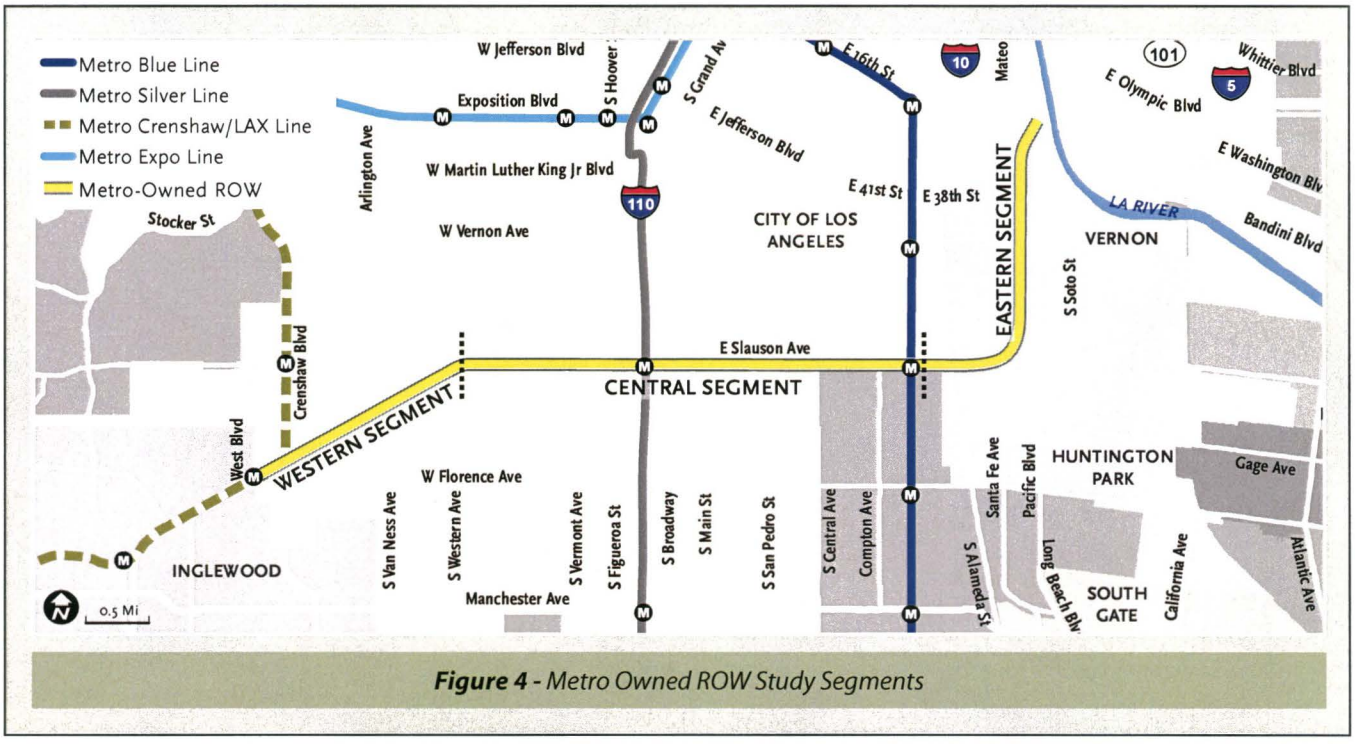


Figure 4 *- Metro Owned ROW Study Segments*

1.3 BACKGROUND AND PURPOSE

THE FOLLOWING PRIOR STUDIES HAVE BEEN CONDUCTED AND ACTIONS HAVE BEEN TAKEN ALONG THE HARBOR SUBDIVISION ROW:

2006

METRO HARBOR SUBDIVISION ROW:
Considered the potential deployment of various transit modes along the corridor. The study resulted in the evaluation of six transit service alternatives.

2009

METRO HARBOR SUBDIVISION TRANSIT CORRIDOR ALTERNATIVES ANALYSIS REPORT (AA):
Initiated in 2008, the AA study analyzed both existing and forecasted transportation conditions within the 85-square mile study area detailing a range of study objectives designed to address specific mobility challenges. These challenges were developed and refined in two stages. In Stage 1, many initial options were eliminated due to factors including limited ridership potential, operational constraints, physical/ ROW constraints, and community impact. Four build alternatives, including the Local North Alternative (Metro Blue Line to Crenshaw Blvd of the Harbor Subdivision), were carried forward to Stage 2 for further consideration. The Local North segment is the project area to be studied through the current active transportation feasibility study effort.

2010

SUPPLEMENT 1 OF THE 2009 LONG RANGE TRANSPORTATION PLAN (LRTP)
On May 27, 2010, the Metro Board approved the Subregion's recommendation to include the ROW as a promising, regionally significant transit project that could be implemented if additional funding becomes available.

2012

RAIL TO RIVER BIKEWAY MOTION:
In response to a September 2012 Metro Board motion by Directors Mark Ridley-Thomas and Gloria Molina regarding the Rail to River Bikeway, it was acknowledged that Metro continues to study a variety of future transit uses for the corridor yet no immediate major investment in the corridor is planned. The motion directed Metro to study intermediate uses for this segment of ROW that would not preclude future transit use.

2013

METRO STAFF REPORT:
Metro planning staff conducted a preliminary assessment of the ROW and recommended preparation of a feasibility study to investigate the viability of an active transportation corridor (ATC) as an intermediate project on the identified ROW.

STUDY PURPOSE:
The Rail to River Intermediate ATC Feasibility Study seeks to identify alternatives for the successful integration of an intermediate active transportation corridor in South Los Angeles, an area characterized by high transit use, as well as explore options for greater connectivity to the Los Angeles River and improved linkages between the Metro Blue, Silver and Crenshaw/LAX transit lines. The Study offers a unique opportunity to further assess the viability of an off-street facility to provide dedicated walking and cycling options to promote heathy neighborhoods and linkages between communities and key destinations. Developing the ROW to an interim use that provides multi-modal transit connections through the heart of South Los Angeles, this study furthers the goals outlined in the 2014 First Last Mile Strategic Plan by investigating opportunities to improve safe connections to the surrounding neighborhood, expand the reach of transit through infrastructure improvements and maximize multi-modal benefits.

1.4 DOCUMENT REVIEW

An extensive list of policy documents pertinent to the study corridor was reviewed during the existing conditions survey. Key findings from that review are summarized below:

- Metro Board recognition that bicycle use is a formal transportation mode[1].
- Metro's previous study indicate that the Harbor Subdivision Local North Section (evaluated in this study) is not required for bus rapid transit or light rail facility based on recent analyses[2].
- Metro has adopted a Sustainability Planning Policy & Implementation Plan that prioritizes reduction of transportation costs for residents, promotes clean mobility options, and improves public health through active transportation[3].
- Communities along and adjacent to the Metro owned ROW have continued to advance active transportation planning, including adoption of bicycle master plans that include implementation of low-cost solutions such as "Bike Friendly Streets."
- New transit choices are being created through the construction of the Metro Crenshaw/LAX transit line located on the western edge of the Metro owned ROW evaluated in this study.
- Metro adopted first last mile strategies which have been created to facilitate easy, safe, and efficient access to the Metro System[4].

Comprehensive policy document review is provided in **Appendix C. Table 1-1** lists the policy documents reviewed. A copy of the MTA ROW Preservation Guidelines can be found in **Appendix B.**

Table 1-1 *- Relevant Policy Documents*

Agency	Policy Document
Metro	2000 MTA ROW Preservation Guidelines – 2000 (See Section 1.5)
	Metro Bicycle Transportation Strategic Plan – 2006
	Metro Harbor Subdivision Transit Corridor Alternatives Analysis Report-Final Report – 2009
	Metro Long Range Transportation Plan – 2009
	Metro Crenshaw/LAX Transit Corridor Final EIS/EIR – 2011
	Rail to River Bikeway Motion by Supervisors Mark Ridley-Thomas and Gloria Molina (September 19, 2012)
	Metro Countywide Sustainability Planning Policy & Implementation Plan – 2012
	Metro Active Transportation Alternative Preliminary Assessment: Rail to River Commuter Path – 2013
	Bicycle Share Implementation Plan Motion (January 16, 2014)
	Metro First Last Mile Strategic Plan & Planning Guidelines - 2014
	Metro Complete Streets - Expected 2014
County of Los Angeles	Los Angeles River Master Plan – 1996
	LA River: LA River Revitalization Master Plan – 2005
	County of Los Angeles Bicycle Master Plan – 2012
	Los Angeles County General Plan 2035-Public Review Draft – 2012
City of Los Angeles	Crenshaw Corridor Specific Plan – 2004
	Los Angeles River Revitalization Master Plan – 2007
	South Los Angeles Transportation Master Plan – 2009
	City of Los Angeles 2010 Bicycle Plan: Five-Year Implementation Strategy – 2011

[1]Metro Board Action, October 2013 (See Appendix A)
[2]Metro Harbor Subdivision Transit Corridor Alternatives Analysis Report-Final Report – 2009
[3]Metro Countywide Sustainability Planning Policy & Implementation Plan – 2012
[4]Metro First Last Mile Strategic Plan & Planning Guidelines - 2014

Agency	Policy Document
City of Los Angeles	South Los Angeles Community Plan-Draft – 2012
	Southeast Los Angeles Community Plan-Draft – 2012
	West Adams-Baldwin Hills-Leimert New Community Plan-Draft EIR – 2012
	Los Angeles Mobility Element Update (LA2B)-Draft – 2013
	Health Atlas for the City of Los Angeles – 2013
	City of Los Angeles 2010 Bicycle Plan: First Year of the First Five-Year Implementation Strategy and Figueroa Streetscape Project-Draft EIR – 2013
	Draft Health and Wellness Element of the General Plan for the City of Los Angeles-2014
Other	City of Huntington Park General Plan – 1991 (Amended 1996)
	City of Inglewood General Plan Update Technical Background Report – 2006
	City of Vernon General Plan – 2007 (amended 2009)
	SCAG Regional Transportation Plan/Sustainable Communities Strategy – 2012
	Army Corps ARBOR EIR Report (2014)
	City of Huntington Park Bicycle Transportation Master Plan – 2014
	AB-1922 (in progress)

1.5 2000 MTA ROW PRESERVATION GUIDELINES

The following section provides further discussion on the current guidelines and supports recommendations for updating the guidelines to be more inclusive of projects and infrastructure promoting people power transportation modes such as walking and bicycling. The 2000 MTA ROW Preservation Guidelines (approved by LACMTA Metro Board March 2000) state that the guidelines seek to balance community needs to beautify and improve Metro's property with Metro's need to reserve the corridors for future transportation uses. Rail removal or covering is not permitted except for the following purposes:

- A transportation project, including a Class I bike path
- Intersection improvements needed for vehicular and/or pedestrian/bicycle safety and flow

With respect to these important priorities, the preliminary assessment of current policy revealed the following:

The existing ROW preservation policy requires the preservation of rights-of-way for future transportation projects while encouraging utilization on an interim basis.

- Policy has not been updated since 2000 and current language does not take into consideration Metro's October 2013 policy indicating bicycles are a formal mode of transportation.
- Infrastructure designed to accommodate bicycle ridership would be an appropriate transportation use for Metro owned ROW.
- Guideline language requires updating to better align with current policy and future potential funding opportunities

It can be extremely difficult to remove extensive landscaping, park like areas, and/or community uses that have been in place for many years. **Construction of a bikeway and/or pedestrian path is prohibited unless the bikeway or pedestrian path is designed so that the sponsor (in this case Metro itself in partnership with local jurisdictions through appropriate use agreements) can demonstrate that it will not have to be relocated or removed to allow for construction or operation of a future transportation project.**

- Community, both present and future may not be aware that major transit alternatives have been considered for the ROW, thus perceiving the ATC as a permanent use.
- It could be difficult to disallow interim use of the ROW as an exclusive active transportation corridor if the public demands that such use continues.

Full use of available ROW may have landscaping design constraints

- Security consideration in landscape design should be a priority.
- Placement of bicycle and pedestrian path on a ROW may be restricted if design is such that the remaining area of the ROW can be converted to a landscaped linear park like use; as such use could potentially create future 4 (f) challenges[1].

Policy Exceptions Create Opportunity

- Although the 2000 policy document provided more sufficient guidance for staff and the community as to allowable interim uses, opportunity currently exists to update language to be more inclusive of active transportation related facility uses.
- Opportunity exists to better align Metro policy with Federal and state mandates for active transportation programming and funding opportunities.
- It is within the Board's purview to make exceptions.

1.5.1 Supporting Policies

CALTRANS PRESERVATION POLICY

In 2001, Caltrans was directed by the Governor to "identify the status of all the rail corridors in the state and evaluate their relative importance and potential for future rail passenger service." California has a formal policy to preserve rail rights-of-way and to "acquire abandoned railroad lines when the right-of-way for such lines has a potential public transportation use, including but not limited to, a use for highways, bus ways, bicycles, pedestrians, or guide ways" (California Streets and Highway Code, Section 2540).

NCHRP SYNTHESIS 374

The National Cooperative Highway Research Program (NCHRP) Synthesis 374 provides detailed discussion on the topic of "Preserving Freight and Passenger Rail Corridors and Service." NCHRP 374 discusses rail banking creating a federally sanctioned mechanism to preserve rail corridors to those seeking to keep alignments intact through interim conversion to trail use. Under rail banking, the corridor remains available for future restoration of rail service and is not, therefore, technically abandoned. Rail banked rights-of-way present a potentially valuable resource for communities engaged in the development of new or expanded transit links or other dedicated transportation interests.

NCHRP 374 notes that preservation of facilities such as an intermediate ATC may serve to solidify support from advocate groups whose natural affinities to future transit usage along the ROW might be compromised if forced to choose between active transportation and transit. The report language indicates the rails-to-trails interim-use designation under consideration in this study might help preserve the Metro owned ROW for future transit usage. The report identifies key provisions that might be considered given any refinement of language in the 2000 MTA ROW Preservation Guidelines:

- The public agency or qualified organization that is seeking to control the rights-of-way must be willing to assume financial and legal responsibility for the corridor.
- The abandoning railroad can decide to donate, lease, or sell their property to the prospective trail manager.
- The trail manager, once in control of the property, may remove railroad track and ties, but may not disturb other long-term structures required for future rail service restoration.
- The trail agency may build no permanent structures on the trail alignment.
- The corridor remains under federal jurisdiction, and any state laws that might extinguish the trail manager's right to use the corridor are preempted.
- A rail banked line is subject to possible future restoration of rail service by any qualified service provider. Trail users must surrender their interim rights of use if they are unable to reach alternative accommodations with the prospective (new) rail service provider.

1 The Department of Transportation Act (DOT Act) of 1966 included a special provision - Section 4(f) - which stipulated that the Federal Highway Administration (FHWA) and other DOT agencies cannot approve the use of land from publicly owned parks, recreational areas, wildlife and waterfowl refuges, or public and private historical sites unless there is no feasible and prudent alternative to the use of land or the action includes all possible planning to minimize harm to the property resulting from use.

2 Existing Conditions

The 2006 Harbor Subdivision Transit Corridor Report and the 2009 Harbor Subdivision Transit Corridor Alternatives Analysis Report both indicate that the Local North section of the Harbor Subdivision is characterized as being a high volume public transit dependent and bicycle/pedestrian activity epicenter. Data indicates that residents without access to a vehicle within this corridor as well as those relying on transit are more than double the average for LA County. Potential development challenges do exist for implementing an ATC, including many deemed hazardous. Existing reliance on public transit, walking/cycling, however, reveal a community which can greatly benefit from the proposed ATC.

POTENTIAL ATC DEVELOPMENT OPPORTUNITIES:

- Connecting to transit
- Improving safety enhancements
- Reducing blighted conditions
- Connection to the LA River Bikeway
- Creating healthier and safer transportation alternatives, including improved ADA accessibility
- Providing intermediate public utility
- Street crossing improvements opportunities

POTENTIAL ATC DEVELOPMENT CHALLENGES:

- Inconsistent ROW width poses design challenges and precludes the ability to accommodate both rail and the ATC
- Funding has not been secured
- Negotiation with BNSF for the abandonment of freight rail operating on the ROW required
  - A rail line is determined to be abandoned when the railroad has applied to the Surface Transportation Board (STB) for abandonment authorization and the STB issues an order authorizing the abandonment of the line and the railroad has notified the STB that is has consummated the abandonment authorization.
  - This action will be required for any type of transportation project development on this ROW, regardless of whether it is an intermediate/interim or permanent project implementation. Any action taken in this regard would benefit both intermediate and potential long-term use of the corridor.
- High number of street crossings
- Need to update the 2000 MTA ROW Preservation Guidelines to better accommodate intermediate active transportation uses and other similar future projects

2.1 SOCIO-ECONOMIC INDICATORS

For the purposes of this analysis, all cities, council districts, and block groups within ½ mile of the Metro owned ROW were investigated. Demographics, travel behavior, health and other socioeconomic factors for the communities in proximity to the Metro owned ROW were analyzed.

During stakeholder meetings for the study, it was reported that many residents and workers in the communities along the ROW use transit out of necessity, as they do not have other means of transportation. Transit dependency is closely correlated with household income, with the rate of automobile ownership and automobile travel generally increasing with household income.

The volume of public transit dependency and bicycle and pedestrian activity through this corridor is high, as indicated in the 2006 Harbor Subdivision Transit Corridor Report and the Final 2009 Harbor Subdivision Transit Corridor Alternative Analysis Report, as well as 2012 American Census Survey (ACS) data. ACS data indicates over double the LA County average for transit use (15.8% versus 7.1%), and above-average percentages of commuters walking (3.5%) and cycling (1.0%) to work. Homes in the study area without access to a vehicle (zero-vehicle households) were also nearly double the county average (18.4% versus 9.7%). Median household income throughout the area was only 60% of the countywide average, and 31.3% of families within the study area were living below the poverty level in 2012, compared to 13.7% for the county and 10.9% for the nation.

Health data indicates an area with higher incidences of obesity for both children and adults, with correspondingly higher rates of obesity-related diseases including diabetes, heart disease, and stroke. While Los Angeles County is considered to have high rates of obesity overall, adults and children within the study area suffer from 9% and 6% higher rates than the county average respectively (see **Table 2-1**).

***Table 2-1** - Select Demographic Statistics*

Geographical Area	Population Density (per square mile)	Bicycle Commuters	Pedestrian Commuters	Transit Commuters	Driving Commuters	Families Below Poverty Line	Median Household Income
American Community Survey 5-year Estimates 2008-2012							
1/2 Mile Metro ROW	9,370	1.0%	3.5%	15.8%	75.4%	31.3%	$33,395
Los Angeles County	2,071	0.8%	2.9%	7.1%	83.1%	13.7%	$56,241
United States	99	0.6%	2.8%	5.0%	86.2%	10.9%	$53,046

Geographical Area	Adult Obesity Prevalence	Childhood Obesity Prevalence	Chronic Heart Disease Death Rate Per 100,000	Diabetes Death Rate per 100,000	Stroke Death Rate per 100,000
Los Angeles County Department of Public Health, 2011					
1/2 Mile Metro ROW	32.2%	29.0%	180.2	39.3	42.7
Los Angeles County	23.9%	23.0%	161	25	40

Overall, the study area shows a population density of 9,370 people per square mile (**Figure 5**), 4.5 times higher than the county average. Neighborhoods within and adjacent to the study area, such as Vermont-Slauson, Vermont Square, and Maywood, contain some of the highest population densities in the county.[1]

While density alone may not necessitate the development of active transportation corridors, when combined with high existing non-vehicular travel and high rates of obesity and related diseases, it greatly increases the number of potential users of an ATC and benefits of such potential projects. Combined analysis of transportation modes, public health, and income reveal a study area that will benefit greatly from safe and well-connected active transportation options. See **Appendix D** for additional figures containing demographic analysis.

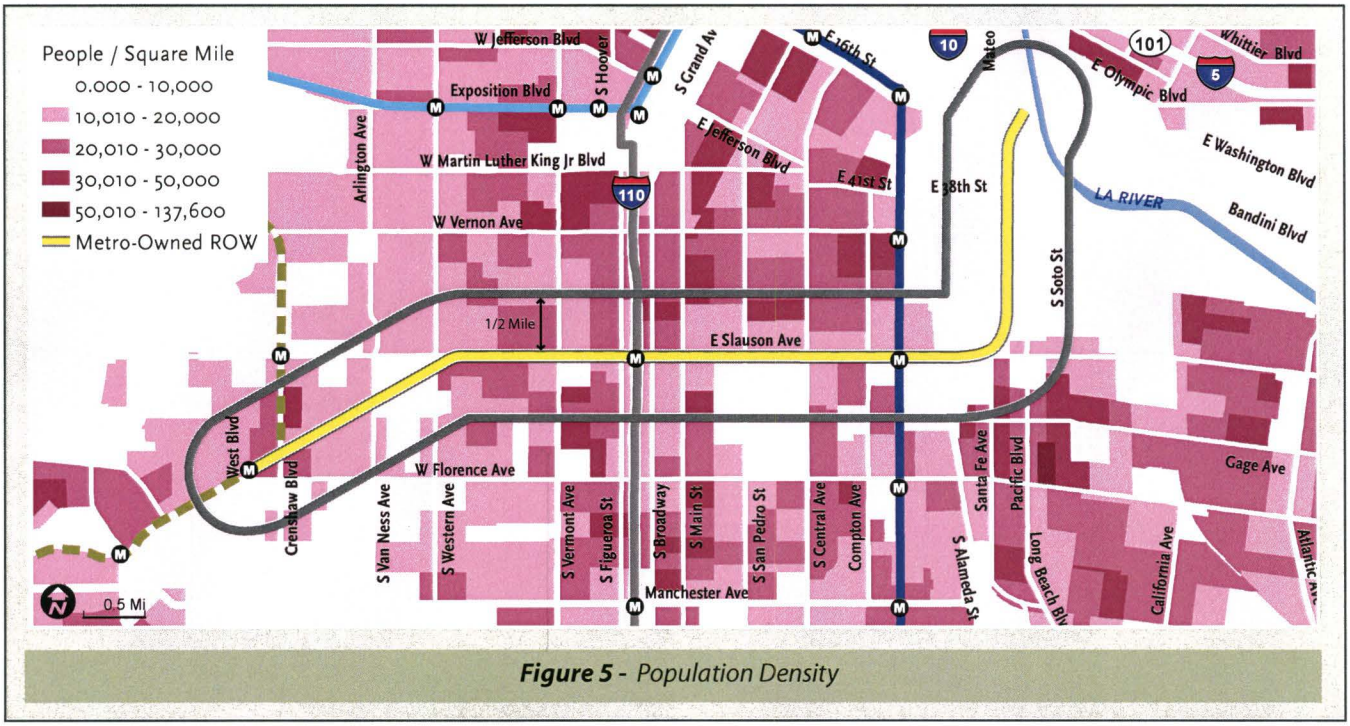


***Figure 5** - Population Density*

1 http://maps.latimes.com/neighborhoods/population/density/neighborhood/list/

2.2 STREET AND TRANSIT CROSSINGS

2.2.1 Street Crossings

The Study Team evaluated the 49 cross-streets, rail lines, and other public and private facilities along the 8.3-mile length, categorizing the cross streets into four typical at-grade street crossing conditions, as shown in **Figure 6 - Figure 9** and listed in **Appendix D**. Also analyzed were the existing conditions at the Metro Blue and Silver Line stations and adjacent bus facilities that run along or span the ATC.

The 49 arterial street crossings can be separated into 4 categories based on ROW width and signalization treatment. 20 arterial crossings vary from 60'-110' (only the crossing at Alameda Avenue is 110 feet) and there are 29 crossings of 40'. 13 of the crossings of 60'-110' bisect the existing Metro owned right of way and run through Slauson Avenue from north to south. The other 7 are mid-block crossings without signals. Railroad infrastructure (advanced stop lines, crossing gates and signage) exist at each of these 20 crossings. Out of the 29 crossings of 40', 3 are signalized at Slauson Avenue and the remaining 26 are a mix of unsignalized crossings at stop sign intersections or unregulated mid-block crossings.

The HSTC-AA 2009 report states that while many of these streets (especially in Vernon, Huntington Park, and the Slauson Corridor) carry low volumes of traffic and, like southbound Long Beach Avenue, could potentially be closed at Slauson; there are likely crossings among the 49 arterial crossings that present hazardous conditions for pedestrians and bicyclists and would need to be upgraded. Many of these low use crossings like South 2nd Street are in need of asphalt repair and currently consist of bundled railway ties to achieve a smooth vehicular transition across the tracks. The uneven surface and existing material changes present safety concerns for pedestrians and bicyclists. Similar crossings exist at East 56th Street and several other streets north throughout the City of Vernon. These street crossing constraints present opportunities for pedestrian and bicycle safety improvements as well as improved ADA accessibility through removal of the rail and crossing railroad tie patches and repaving and striping the street crossings where these conditions exist.

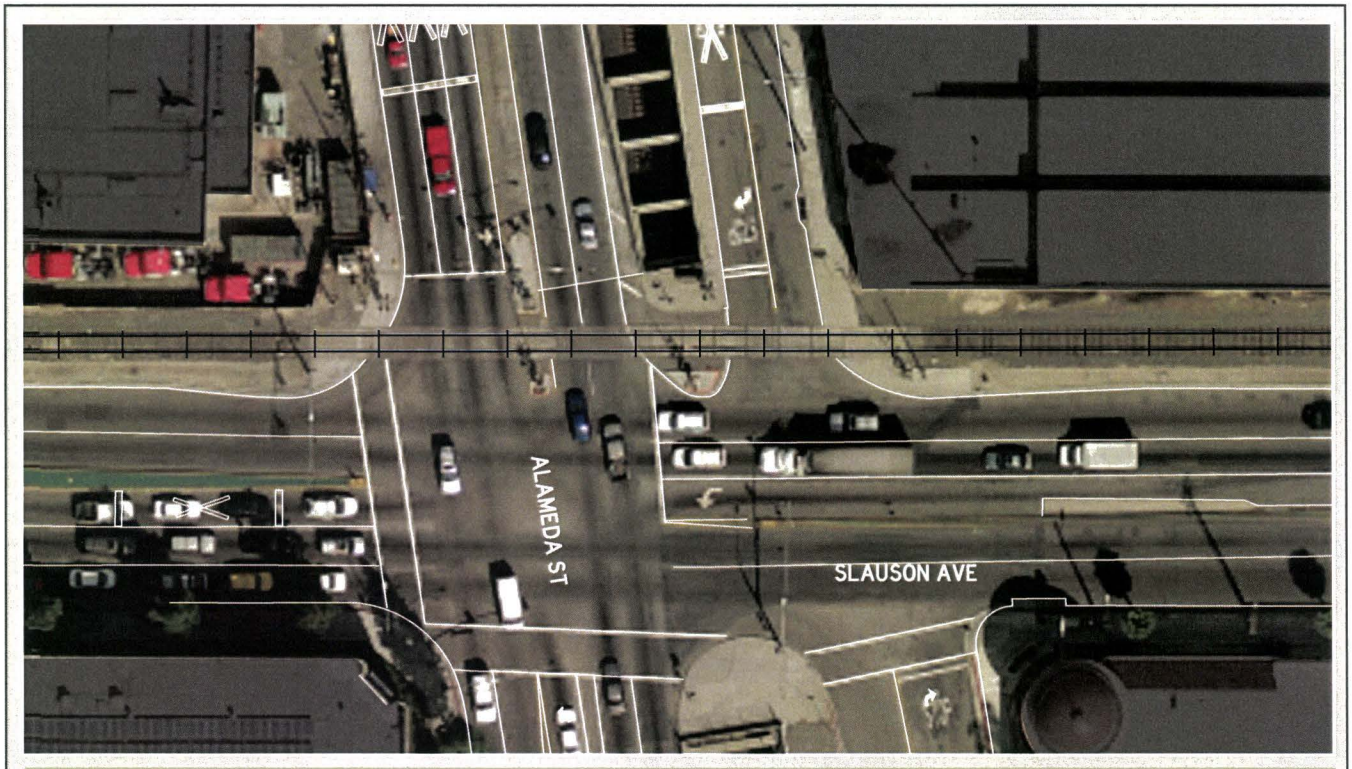


***Figure 6** - Roadway Width: Signalized 60'-110' Crossing*

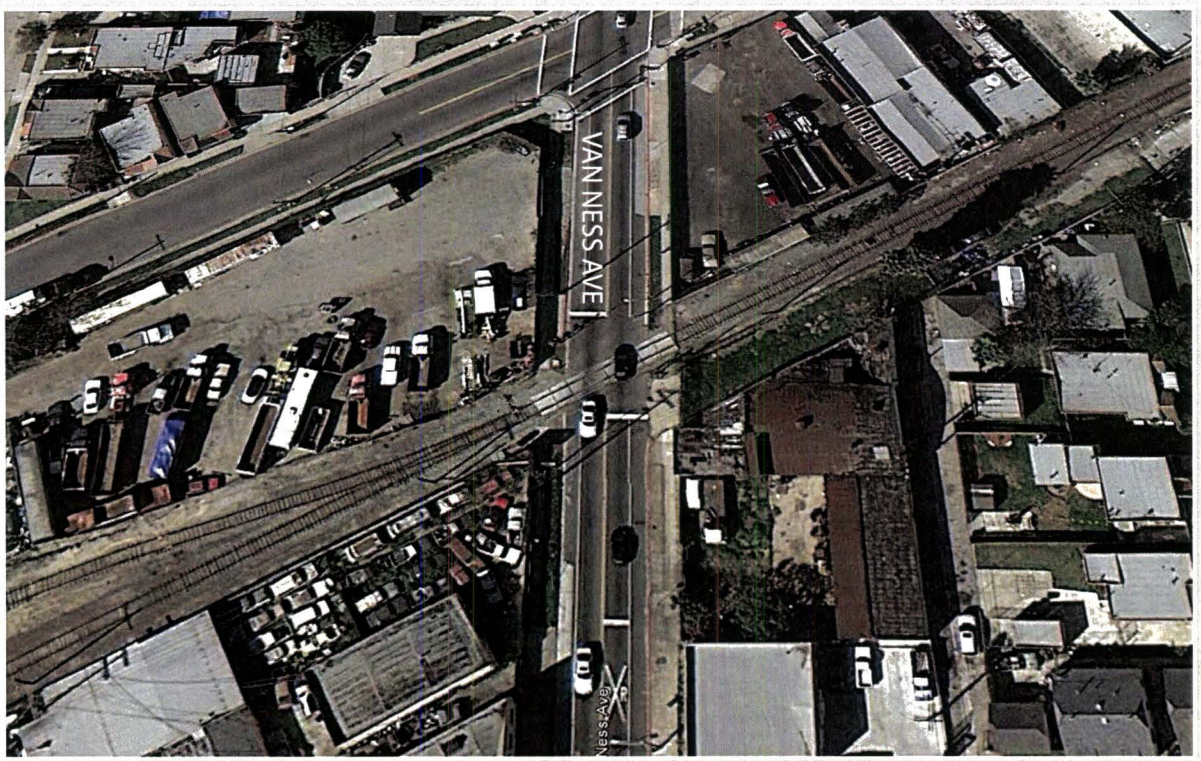


Figure 7 *- Roadway Width: 40' Mid-Block Crossing*

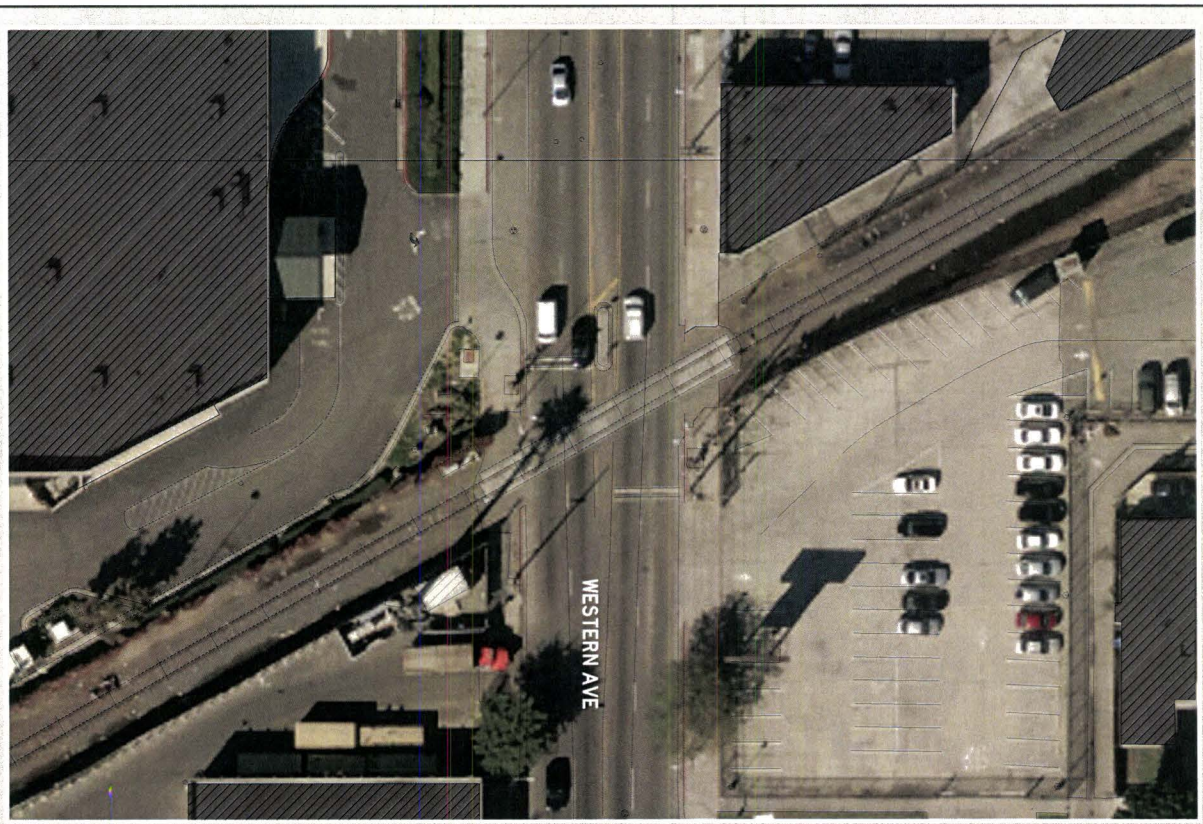


Figure 8 *- - Roadway Width: Unsignalized 60'-110' Mid-Block Crossing*

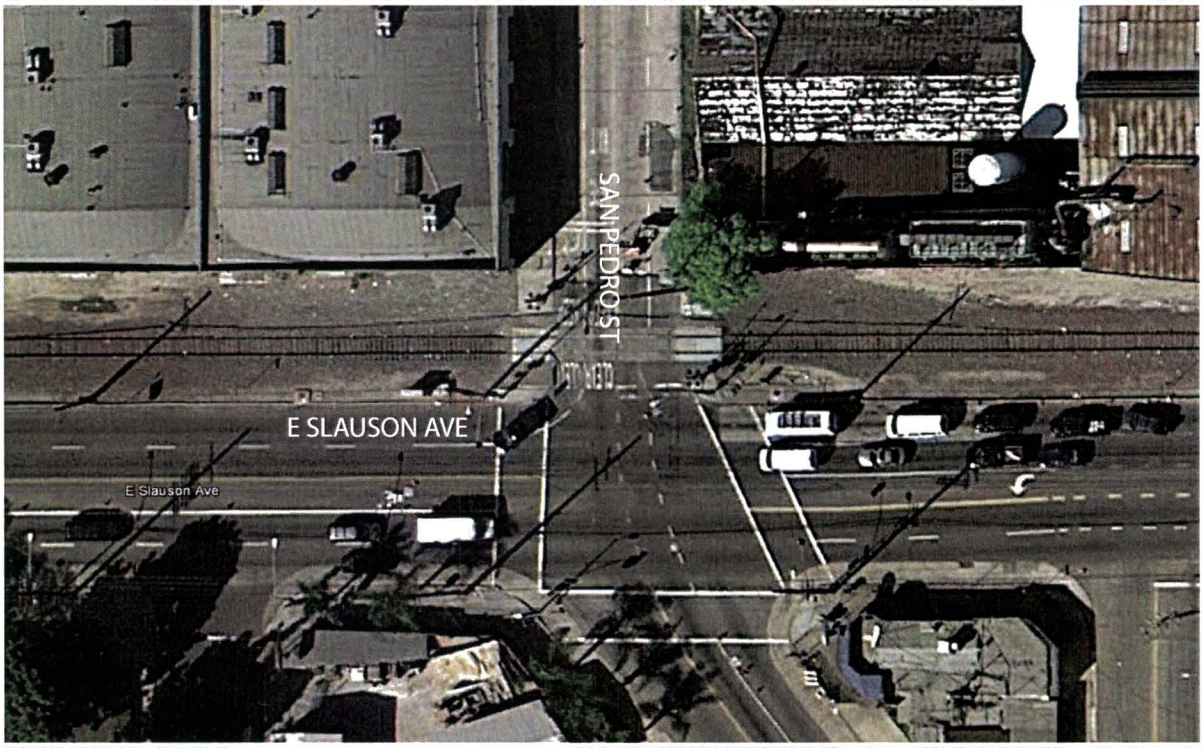


Figure 9 - *Roadway Width: Signalized/Unsignalized 40' Crossing*

2.2.2 Transit Crossings

The Study Team also investigated potential ways to integrate the Metro Silver and Blue Lines into the proposed active transportation path while gathering data on existing conditions to develop analysis pertaining to opportunities and constraints for the stations. **Figure 10 and Figure 11** show current conditions for access to the Metro Silver and Blue Line Stations. Both the Metro Silver and Metro Blue Line Stations are elevated over Slauson Avenue and, on exiting the station, leave passengers on the south side of Slauson Avenue. The Metro Silver Line Station is adjacent to signals for the vehicle ramps to the north and southbound I-110 Freeway. Enhancing the crosswalks in both locations and supplying push button signaling would provide passengers who wished to use the intermediate ATC with the ability to safely cross Slauson Avenue. The Metro Blue Line Station is mid-block and would require construction of a new crosswalk, signage and pedestrian signals in order allow safe crossing passengers to the intermediate ATC.

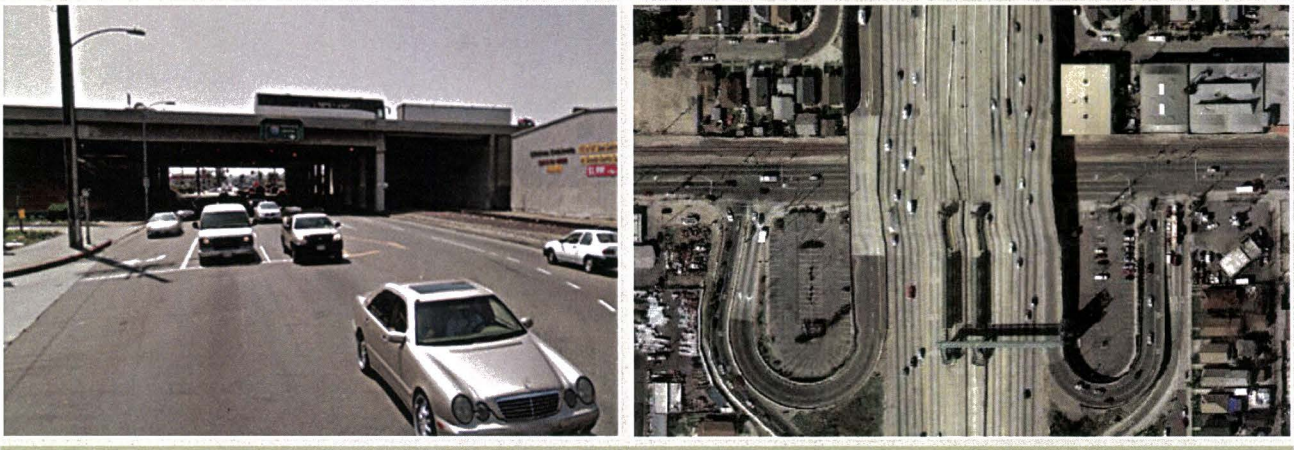


Figure 10 - *Metro Silver Line Connections to Slauson Avenue*

***Figure 11** - Metro Blue Line Connections to Slauson Avenue*

2.3 COLLISION ANALYSIS

Figure 12 and Figure 13 identify the number of bicycle and pedestrian collisions within ½ mile of the Metro owned ROW as well as the supplemental segments on the western and the eastern end. Collision data includes figures from 2003 to 2011 (9 years of data). Where the segment is off-street, the parallel or adjacent roadway is reviewed to identify collisions. As shown in **Figure 12**, pedestrian collisions per mile ranged from 4 to 24, and bicycle collisions per mile ranged from 4 to 11. **Figure 13** maps the bicycle and pedestrian collision data within ½ mile of the Metro owned ROW. Full collision data can be found in **Appendix D.**

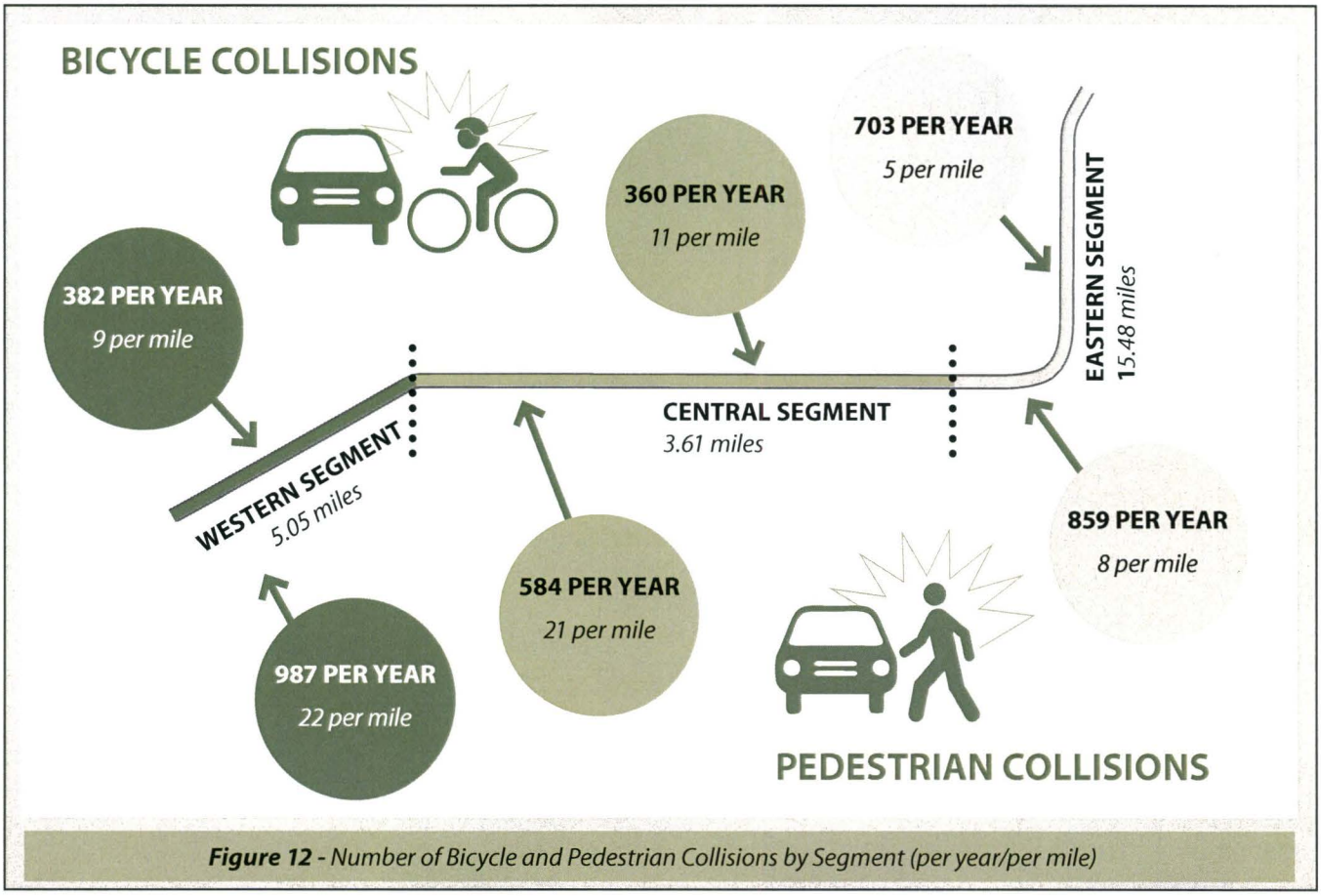


***Figure 12** - Number of Bicycle and Pedestrian Collisions by Segment (per year/per mile)*

Within the study area, sidewalks are generally provided along the edges of the roadways. Sidewalks are not provided along the north side of Slauson Avenue within the Metro owned ROW but do occur on Slauson east and west of the ROW directly adjacent to the street. Because there are no sidewalks within the Metro owned ROW along the north side of Slauson, pedestrians are using the railway tracks as a pedestrian path despite the safety concerns. Passengers disembarking from the Metro Silver and Blue Line Stations are making unsafe crossings at unauthorized locations.

There are no bicycle facilities currently on or connecting directly to Slauson Avenue. Those cyclists using Slauson are cycling in constrained, unsafe on-street conditions, and competing with heavy and fast moving vehicular traffic. Reducing the high rate of both pedestrian and bicycle collisions and improving pedestrian crossings are key goals and benefits of the construction of the ATC.

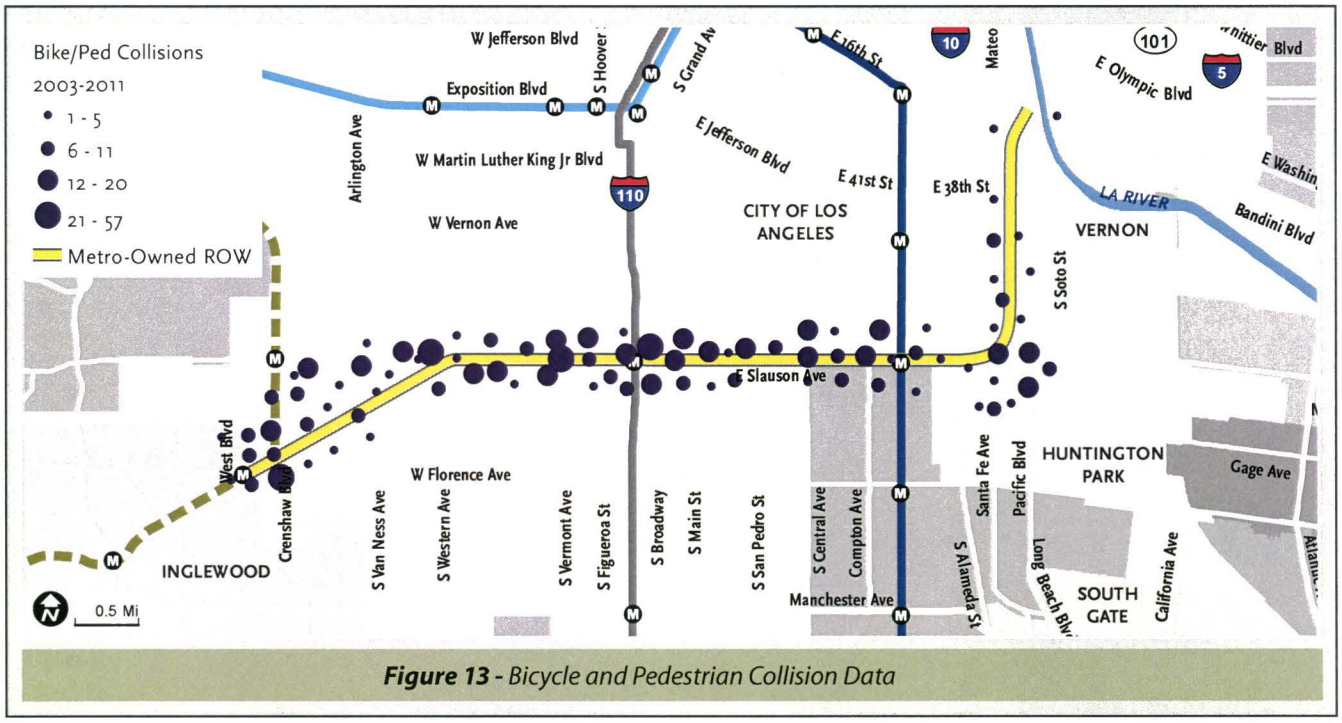


***Figure 13** - Bicycle and Pedestrian Collision Data*

2.4 CIRCULATION SYSTEM

The roadway circulation system in the study area is generally a grid and includes many north-south roadways such as Crenshaw Boulevard, Vermont Avenue, Central Avenue, Alameda Street, and Pacific Boulevard. East-west roadways in the study area include Slauson Avenue (adjacent to Metro owned ROW), Gage Avenue, and 54th Street; while Vernon Avenue and Florence Avenue are one mile to the north and south of Slauson Avenue, respectively and run parallel to Slauson.

Crossing the Study Area, Interstate 110 (I-110) is a major north-south freeway with eight general purpose lanes and four High Occupancy Toll (HOT) lanes. The I-110 HOT lanes are currently being utilized as part of the Metro ExpressLanes project where solo drivers pay to use the travel lanes and carpools, vanpools, transit buses, and motorcycles travel toll-free.

High traffic volumes on I-110 and roadways in the project vicinity illustrate the potential to shift more trips to transit and active transportation modes of travel:

- The Metro 2010 Congestion Management Program (CMP) noted that half of the LA County freeway system operates at the most congested levels in the morning and afternoon rush hours.[1]
- Caltrans published data indicates the I-110 serves 300,000 trips daily as it crosses Slauson Avenue.[2]

1 http://www.metro.net/projects/congestion_mgmt_pgm/
2 http://traffic-counts.dot.ca.gov/

2.4.1 Slauson Avenue

Slauson Avenue is a major four lane east-west thoroughfare for southern Los Angeles County, named for the land developer and Los Angeles Board of Education member J. S. Slauson. It passes through Culver City, Ladera Heights, View Park-Windsor Hills, Baldwin Hills, Inglewood, South Los Angeles, Huntington Park, Maywood, Commerce, Montebello, Pico Rivera, Whittier, and Santa Fe Springs.

The western terminus of Slauson Avenue is located near Interstate 405 near the Fox Hills Mall in Culver City and the eastern terminus is located at Santa Fe Springs Road, where it changes names to Mulberry Drive in the City of Whittier. At one time Slauson Avenue was a center for urban heavy industry in Los Angeles; the ATSF Harbor Subdivision once ran along Slauson Avenue and a former Bethlehem Steel mill was located on the 3300 block (between State Street and Downey Road).

2.4.2 Traffic Volumes

Daily traffic volumes on Slauson Avenue range between 27,000 and 33,000 vehicles daily. Current heavy vehicle (truck) traffic along the corridor is higher than most due to the regional nature of the roadway (connection to I-110 and crossing of LA River), and due to access to industrial, manufacturing, and commercial uses in the project vicinity.

The following parallel roadways are also highly impacted by east-west traffic volumes:

- 4-lane Vernon Avenue near Central Avenue currently serves approximately 24,000 vehicles daily; and
- 6-lane Florence Avenue near Central Avenue currently serves approximately 36,000 vehicles daily.

Figure 14 summarizes daily traffic volumes based on data available with the jurisdictions in the study area and from data collected as part of this report.

CITY OF LOS ANGELES: 6,200 - 36,200

8th Ave (south of Hyde Park Blvd): 6,200
Slauson Ave (west of Van Ness Ave): 27,500
Slauson Ave (east of Western Ave): 30,000
Van Ness Ave (south of Hyde Park Blvd): 18,100
Washington Blvd (east of 23rd Street):24,800
West Blvd (between BNSF crossing and Florence Ave): 9,200
Western Ave (north of 59th St): 36,200

COUNTY OF LOS ANGELES: 29,100 - 33,200

Slauson Ave (east of Rimpau Blvd): 33,200
Slauson Ave (east of Central Ave: 29,100
Slauson Ave (east of Hooper Ave): 33,200
Slauson Ave (east of Compton Ave): 33,100
Slauson Ave (west of Wilmington Ave): 31,700

CITY OF BELL: 4,200-6,300

Randolph St (west of Clarkson Ave): 6,300
Randolph St (west of Palm Ave): 4,200

CITY OF VERNON: 13,900 - 31,100

37th St (east of BNSF railroad crossing): 13,900
Pacific Blvd (east of Santa Fe Ave): 16,100
Santa Fe Ave (north of Slauson Ave): 24,400
Slauson Ave (east of Miles Ave-Soto St): 31,000
Vernon Ave (east of Santa Fe Ave): 7,000

***Figure 14** - Daily Vehicle Traffic Volume by Jurisdiction*

2.4.3 Transit Service

The study area is served by multiple transit operators, with networks connecting different communities within and outside of the City of Los Angeles. Metro is the primary transit operator providing bus, light rail and heavy rail services within the study area. LADOT operates DASH service that crosses or travel along Slauson Avenue.

There are three major north-south transit facilities that cross through Slauson Avenue. Local bus service provides east-west travel along Slauson Avenue parallel to the Metro owned ROW.

THE FOLLOWING FIXED-RAIL TRANSIT SERVICE IS PROVIDED WITHIN THE STUDY AREA:

- Metro Silver Line Bus Rapid Transit with a station on the I-110 center median at Slauson Avenue operates either in an exclusive ROW or along High Occupancy Vehicle (HOV) or High Occupancy Toll (HOT) lanes. During the weekday PM peak period, headways are generally 5 to 10 minutes
- Metro Blue Line Light Rail Line with an elevated station crosses over Slauson Avenue
- Future Metro Crenshaw/LAX transit line with ground level station at the West Boulevard/Florence Avenue and Crenshaw Boulevard/Slauson Avenue intersections

On weekdays, over 87,000 people board the Metro Blue Line daily[1] and almost 5,450 people use the Metro Blue Line Slauson Station (Shown in **Photo 4**) daily.[2] 75% of transit riders belong to households earning less than $25,000. Half of all transit riders are transit-dependent, i.e., they belong to households that do not own any vehicles. Transit dependency increases as age increases and/or income decreases. Active transportation modes (walking/biking, etc) are the dominant access and egress models for all riders; representing 85% of system access/egress at Rail/BRT stations and over 95% total system access. Nearly 64% of riders make at least one transfer to complete their one-way trip. (Source: 2014 Metro First Last Mile Strategic Plan) Metro Local, Limited, Rapid, and Express transit routes as well as LADOT DASH transit run along and cross Slauson Avenue as shown in **Figure 15**. **Figure 16** shows Metro provided daily rail and bus boardings along the study corridor.

***Photo 4** - Metro Blue Line Station at Slauson Avenue*

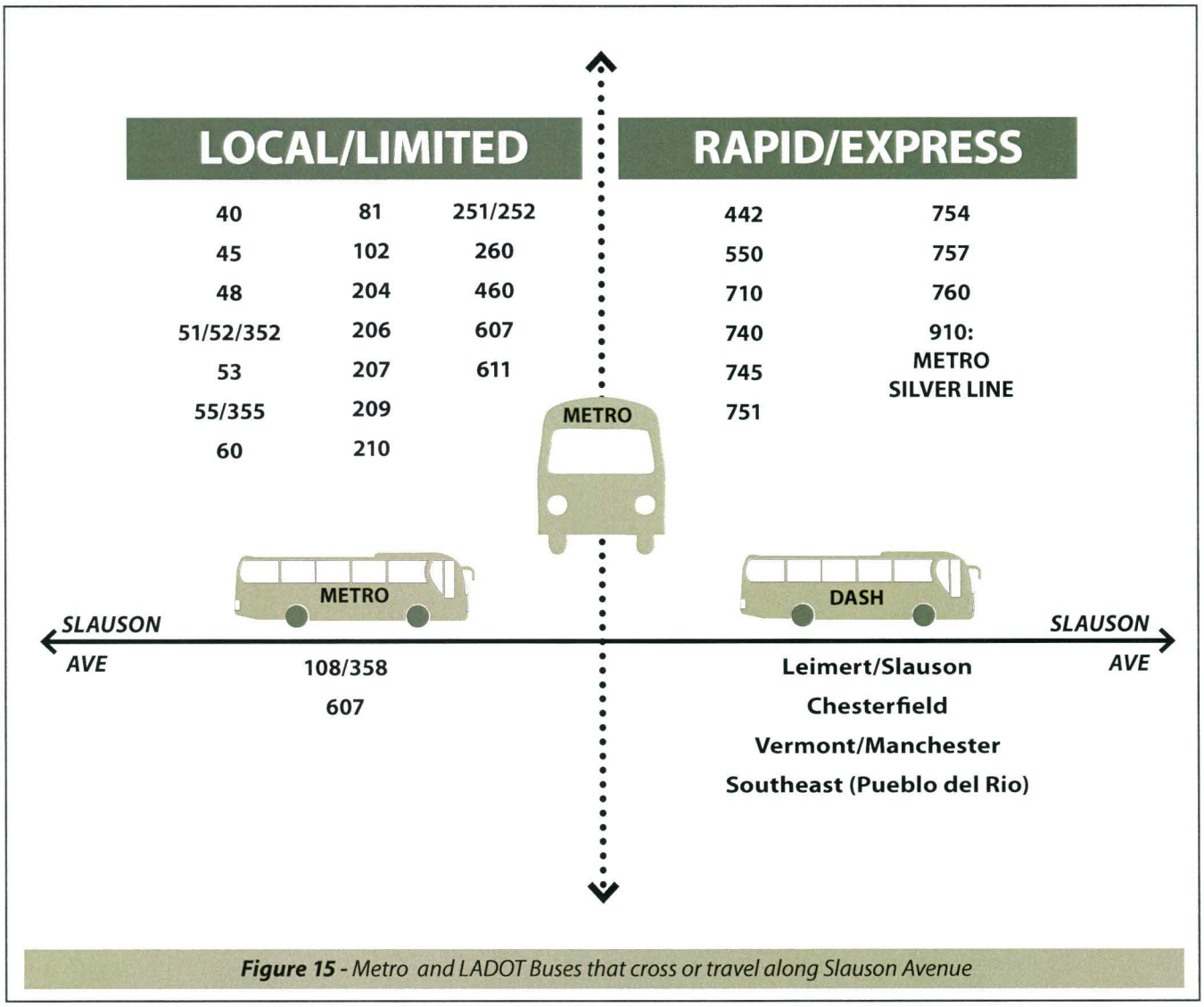


***Figure 15** - Metro and LADOT Buses that cross or travel along Slauson Avenue*

1 http://www.metro.net/news/ridership-statistics/

2 Metro Rail Activity by Station, Fiscal Year 2013, weekday boardings and alightings

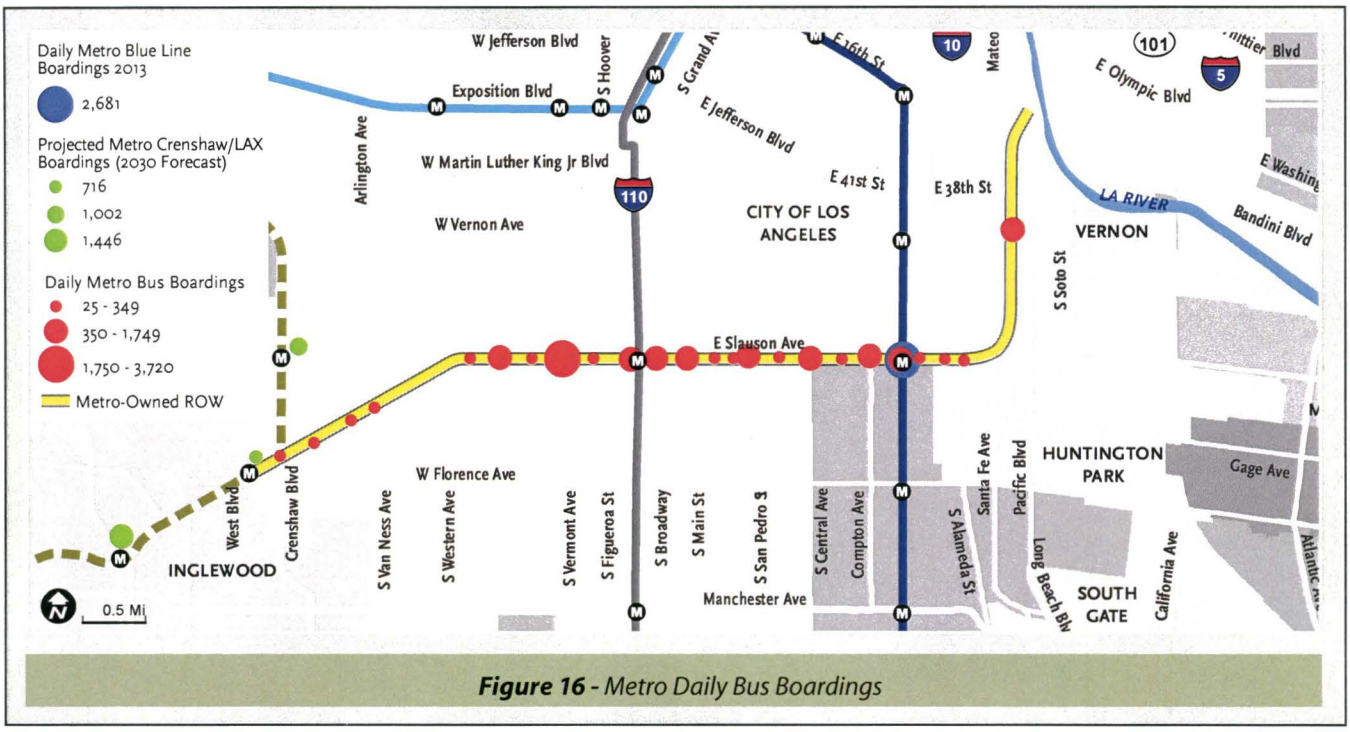


Figure 16 *- Metro Daily Bus Boardings*

Pedestrian Facilities

In Los Angeles County, approximately 23 percent of trips are made by walking and nearly all trips require at least some amount of walking.[1] There are 40,000 intersections in the City of Los Angeles, 4,300 of which are signalized, and approximately 22,000 marked crosswalks.[2] An estimated 42 percent of the City's 10,750 miles of sidewalks are in disrepair.[3] 48% of traffic fatalities are pedestrian and bicyclists.[4]

While nearly the entire City is heavily developed, development patterns and streetscape conditions vary considerably across the City. Parts of Downtown Los Angeles, Koreatown, Hollywood, and Westwood Village, for example, have a variety of pedestrian-oriented uses fronting the sidewalk. Some residential portions of the San Fernando Valley have narrower street widths and less-connected residential streets than other parts of the City, while other areas of the Valley are characterized by long blocks fronted by surface parking lots. Much of the current Study Area is characterized by industrial land uses offering little in the way of pedestrian amenities (See **Photo 5**).

The City of Los Angeles General Plan designates pedestrian-oriented commercial and neighborhood activity centers characterized by ground floor retail and service as Pedestrian Priority Street segments. In general, sidewalks are 10 to 12 feet wide. Pedestrian Priority Street segments are recommended to have sidewalks of 15 to 17 feet in width and other pedestrian-friendly features such as curb side parking, wide crosswalks with a minimum width of 15 feet, and traffic signal modifications to ensure longer pedestrian crossing times, where warranted. The ATC under study would provide the equivalent of many of these pedestrian amenities.

Photo 5 *- Pedestrians walking in dirt adjacent Metro owned ROW*

1 United States Department of Commerce, 2009 American Community Survey, issued September 2011.
2 The City of Los Angeles Transportation Profile, City of Los Angeles Department of Transportation, 2009.
3 "A citizens sidewalk brigade for L.A.," Los Angeles Times, September 11, 2012.
4 Los Angeles Department of City Planning 2035 Draft Mobility Plan

The Los Angeles Department of City Planning 2035 Draft Mobility Plan lays out a foundation for a network of Complete Streets and establishes new Complete Street standards that will provide safe and efficient transportation for pedestrians, bicyclists, transit riders, and car and truck drivers. A key objective of the Mobility Plan is to decrease pedestrian and bicycle collisions with vehicles to 50% of 2010 numbers by 2020 by considering the most vulnerable user first and achieving standards that ensures users safety through prioritizing the implementation of bicycle and pedestrian improvements and promoting awareness on safe driving, walking and bicycling habits. One tangible method of achieving this goal is in the development of Pedestrian Enhanced Destination (PED) areas that are prioritized for pedestrian improvements. The PEDs are locations that have, or have the potential to have, a high number of pedestrians due to their proximity to transit, retail or community services, etc.

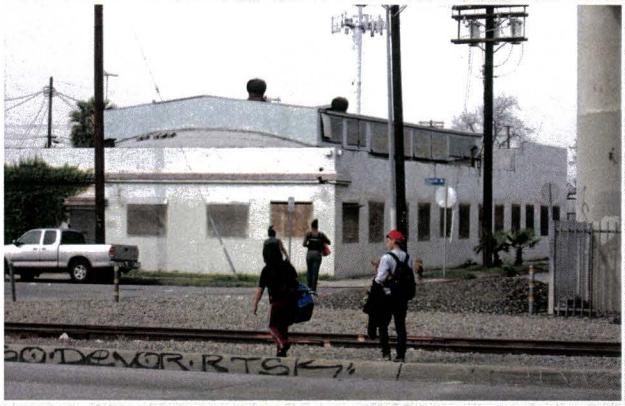


***Photo 6** - Pedestrians crossing Slauson Avenue at the Metro Blue Line Station*

Within the ATC study area, sidewalks are generally provided along the edges of the roadways. No sidewalks exist through the northern side of Slauson within the ROW from Santa Fe Avenue to Denker Avenue and present hazards for pedestrians who use the rail lines as a sidewalk as seen in **Photo 6**.

At-grade crossings along Slauson Avenue, which get the heaviest pedestrian use, are between Avalon Boulevard and Western Avenue. This results in traffic back-ups due to right-turning traffic blocking through traffic while yielding for the pedestrians. Bus stops are provided for westbound Slauson Avenue transit, and bus stops/shelters are generally linked to the cross street sidewalks.

2.4.4 Bicycle Facilities

The existing bicycle network within the City of Los Angeles consists of 503 miles of on- and off-street facilities. The Bikeways Division of Los Angeles Department of Transportation has a robust schedule of planned and in design phase bike facilities throughout the City of Los Angeles and more miles of bicycle facilities are being added each fiscal year. Bicycle facilities are classified based on the typology presented in **Figure 17** and are depicted in **Figure 18.**

CLASS I BIKEWAYS (BIKE PATHS): 58 MILES
Exclusive, car-free facilities that are typically not located within a roadway area. They are located within or adjacent to river corridors (Arroyo Seco, Ballona Creek, Los Angeles River, transit corridors (Orange Line), City parks (Balboa Park), or the coast (Venice Beach/Marvin Braude).

CLASS II BIKEWAYS (BIKE LANES): 324 MILES
Part of the street design that is dedicated only for bicycles and identified by a striped lane separating vehicle lanes from bicycle lanes. Lanes are commonly found on major arterials (Sunset and Venice Boulevard) and on wide collector streets (Chandler Boulevard, Griffith Park Boulevard).

CLASS III BIKEWAYS (BIKE ROUTES AND BIKE FRIENDLY STREETS): 121 MILES
In-road bikeways where bicycles and motor vehicles share the roadway. They are typically intended for streets with low traffic volumes, signalized intersections at crossings or wide outside lanes. A Bicycle-Friendly Street shall be defined as a Local (Residential) and/or Collector Street that includes at least two traffic-calming engineering treatments in addition to signage and share lane markings.

SOURCE: Approximate Length from City of Los Angeles Bikeways, Los Angeles Department of Transportation, accessed http://www.bicyclela.org/maps_main.htm. Description adopted from 2010 Bicycle Plan, Los Angeles Department of City Planning (2011).

***Figure 17** - Bicycle Route Classification System*

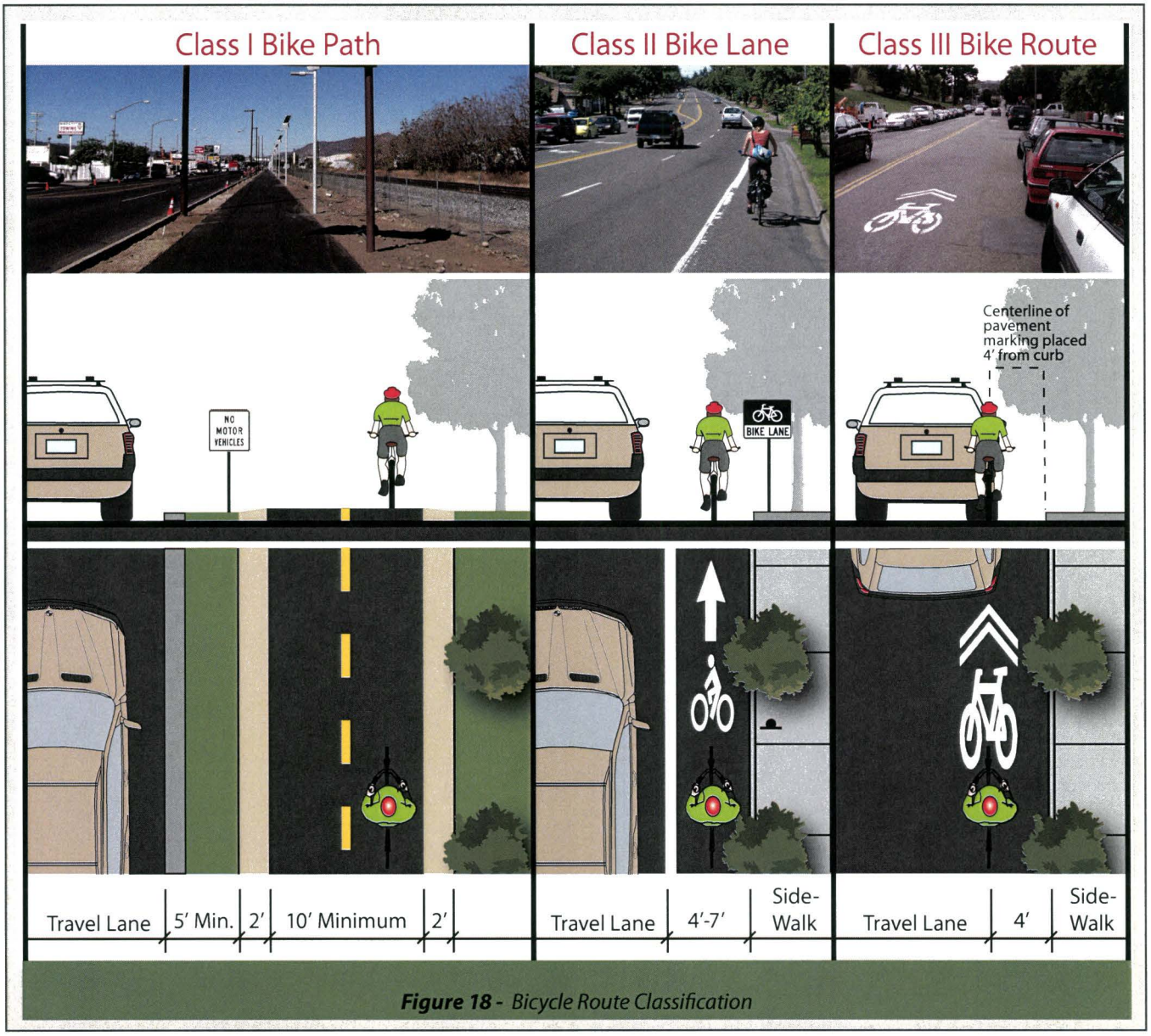


Figure 18 - *Bicycle Route Classification*

Slauson Avenue, due to the constrained ROW, high traffic volumes and speeds does not appear as a future bicycle facility in the latest list of planned bike improvements issued by LADOT. **Figure 19** illustrates the network of existing and proposed bicycle facilities near or crossing the Slauson Avenue corridor.

EXISTING BICYCLE FACILITIES NEAR THE METRO OWNED ROW:

- LA River off-street Class I bike path south of Atlantic Boulevard (near City of Maywood)
- On-street Class II bike lanes on 54th Street between 8th Avenue and Western Avenue, which are planned to extend westward to Crenshaw Boulevard
- On-street Class II bike lanes on West Boulevard between Slauson Avenue and Florence Avenue
- On-street Class II bike lanes on Vermont Avenue West Gage Avenue and West 79th Street
- On-street Class II bike lanes on Holmes Avenue between East 70th Street and East Gage Avenue
- Hoover Street and South Broadway are currently designated as Class III bike routes

PLANNED BICYCLE LANES IN THE VICINITY OF THE METRO OWNED ROW *(The City and County of Los Angeles also have proposed Class III bike routes and "bicycle friendly streets" throughout the study area)*:

- Class II bike lanes on Crenshaw Boulevard
- Class II bike lanes on Van Ness Avenue
- Class II bike lanes on Vermont Avenue
- Class II bike lanes on Broadway
- Class II bike lanes on Main Street
- Class II bike lanes on Central Avenue
- Class II bike lanes on Hooper Avenue
- Class II bike lanes on Compton Avenue
- Class II bike lanes on Long Beach Avenue
- Class II bike lanes on West Boulevard from Slauson Avenue to Florence Avenue

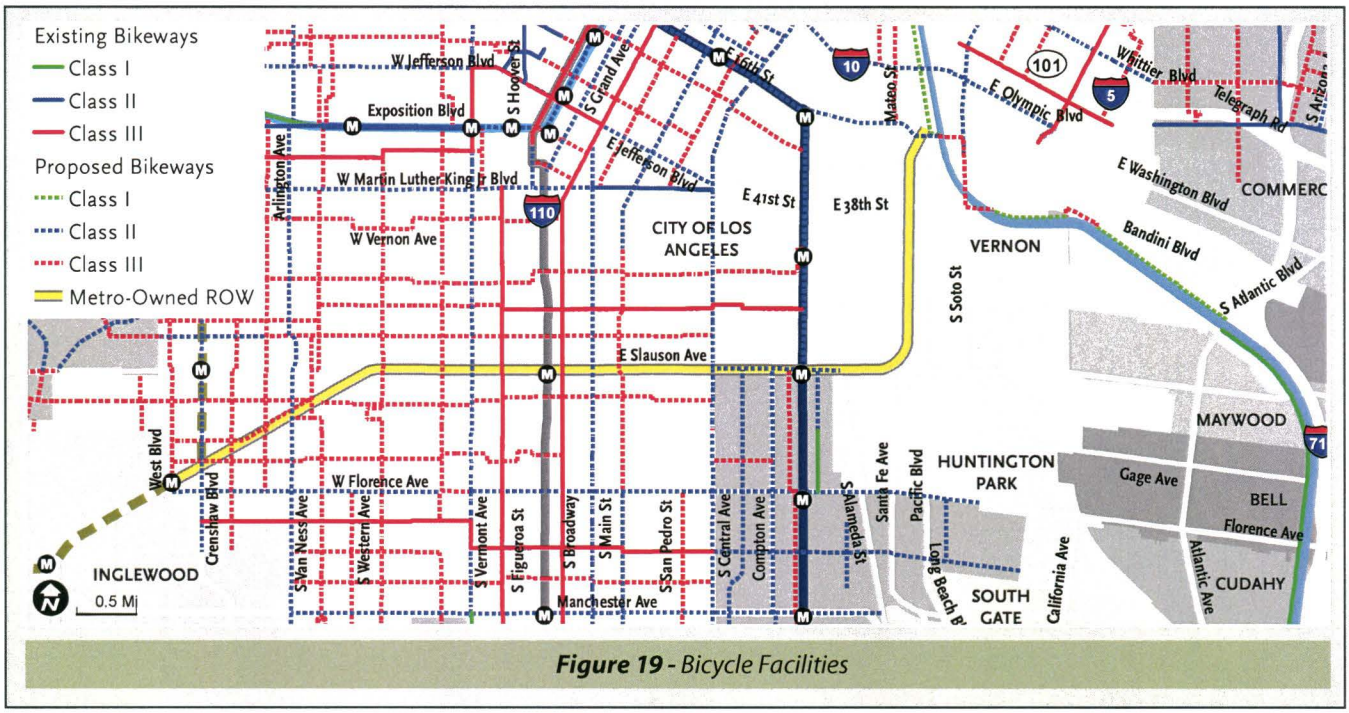


Figure 19 *- Bicycle Facilities*

Cyclists often utilize sidewalks along the Study Area (see **Photo 7 and Photo 8**). Although riding on the sidewalk in the City of Los Angeles is legal as long as activity isn't posing a danger, the sidewalk width in the Study Area is undesirable as a shared space for cyclists and pedestrians. Within the County of Los Angeles, which abuts a southern section of the ATC between Central and Alameda, riding a bicycle on the sidewalk is not allowed.

Inclusion of protected bikeway facilities has been shown to increase safety for cyclists. In New York City, statistics show that the first protected bike lane in Manhattan (8th and 9th Avenue) had a decrease in injuries to all street users on 8th Avenue by 35% and on 9th Avenue by 58%.

Photo 7 *- Bicyclist using sidewalk near Slauson Station (unclear where it is safe to be)*

***Photo 8** - Pedestrians and cyclist on south side of Slauson Avenue (movement restricted)*

When protected bike paths combine with pedestrian plazas and simplified intersections speeding is decreased by 16% and injury/crashes fell by 26%.[1]

In Chicago, 49% of survey respondents felt motorist's behavior improved on Kinzie Street after a separated green bicycle only lane was installed.[2]

The installation of many miles of new bike lanes in New York City did not lead to an increase in bike crashes, despite the increase in the number of cyclists.[3]

A review of 23 studies on bicycling injuries found that bike facilities (e.g. off-road paths, on-road marked bike lanes, and on-road bike routes) are where bicyclists are safest.[4]

Bicycle parking at Metro transit stations creates destinations or transfer points for cyclists, expands catchment areas, increases total (auto + bike) parking capacity, and provides a flexible alternative to feeder buses or taking bikes aboard transit vehicles.

Bike parking is an important first/last mile strategy that enables people to access transit by bicycle without having to drive a car. Metro bike parking includes bike racks which are free to use on a first-come, first-serve basis, so long as a user properly locks their bike with their own lock. Bike lockers are also provided at Metro stations and offer additional security over bike racks by completely enclosing a users' bicycle in a secure container made of steel or durable composite material. As the demand for secure bike parking increases, a "Metro Bike Hub" facility will be considered and implemented at regionally significant Metro stations. A Metro Bike Hub includes bicycle racks to accommodate 50 or more parked bicycles, an access controlled door and security features (cameras, monitors, alarm system) supported by telecommunication and networking systems. Bike Hubs will also provide Metro bike-transit information, resources to support bicycle education and safety, and options for providing bike repair and retail. Metro Bike Hubs allows for greater secure bike parking capacity and allow users seamless access to a network of locations along the Metro system

The Los Angeles County Bicycle Coalition (LACBC) published a report on bicycle and pedestrian counts collected in September 2013 throughout the City of Los Angeles.

KEY FINDINGS PROVIDED BY LACBC:

- At count locations observed in both 2011 and 2013, overall bicycle ridership increased by 7.5%.
- Despite accounting for only 8% of count locations, over 25% of bicyclists counted were on off-street paths.
- People strongly prefer riding on dedicated facilities like bike paths and bike lanes over streets with no bicycle facilities.
- Fewer than 1 in 5 bicyclists are female. Female ridership is highest on bike paths and bike lanes, suggesting that the lack of safe and comfortable facilities is causing a gender disparity among bicyclists.
- Streets without bicycle facilities, cause ½ of cyclists to ride on the sidewalks. When streets have bike lanes, only ¼ of cyclists ride on the sidewalk.
- The busiest time for bicycling is the evening commute period, suggesting that most people are riding for commuting and utilitarian purposes.
- Bicycle count data is recorded and maintained at the Lewis Center for Regional Policy Studies and Institute of Transportation Studies at the University of California, Los Angeles.

1 NYC : Measuring the Street
2 Chicago DOT, 2011 - Initial Findings: Kinzie Street Protected Bike Lane
3 Chen, L., et al., 2011 - Evaluating the safety effects of bicycle lanes in New York City, American Journal of Public Health, November 17, 2011
4 Reynolds, C., et al., 2009 - The impact of transportation infrastructure on bicycling injuries and crashes: a review of the literature, Environmental Health, 8:47

3 Feasibility Study

The Feasibility Study was informed by multiple site visits by the study team and feedback gathered at the EO, TAC and IP meetings. Opportunities and constraints were identified and in-depth research was conducted pertaining to conditions on the ground and planned improvements along the intermediate ATC. The study was guided by the development of the following goals and objectives, which are consistent with Metro's 2013 Active Transportation Alternative Preliminary Assessment.

STUDY GOALS AND OBJECTIVES:

- Identify alternatives and concepts for potential integration of an intermediate active transportation corridor in South Los Angeles, an area characterized by high transit dependency.
- Explore options for providing greater countywide connectivity to the Los Angeles River.
- Improve and enhance linkages between Metro Blue, Silver and Crenshaw/LAX Transit Lines.
- Provide safe first and last mile options.
- Include alternatives and concepts that provide opportunities for multi-modal use and improve safe connectivity to surrounding communities.
- Identify opportunities to create a healthy, aesthetically pleasing and safe active transportation corridor.
- Promote collaboration among stakeholders to identify corridor opportunities and constraints.
- Continue collaboration between Metro and local jurisdictions to assess project development.

3.1 PUBLIC PARTICIPATION

Public participation or "stakeholder" engagement for the study was carefully planned to facilitate input from community representatives, agency technical staff, and elected officials. A Public Participation Plan (PPP) was developed to provide a framework for the public/stakeholder engagement activities that informed the development of the feasibility study. The outreach activities identified in the PPP focused on a targeted set of stakeholders, with strategies to inform and engage them in assessing the feasibility of an intermediate ATC.

3.1.1 Stakeholder Identification

The feasibility study participation database included a wide range of targeted stakeholders. The database included representatives from the following groups: elected officials, local agencies, regional agencies, state agencies, transportation organizations, including staff from Metro, LADOT, LAUSD, LA County Department of Public Works, Caltrans, LA County Department of Regional Planning, City of Los Angeles, Southern California Air Quality Management District, Safe Routes to School National Partnership, Southern California Association of Governments as well as representatives from the Cities of Huntington Park, Bell, Maywood, Vernon and Inglewood. Also in the study database were businesses, chambers of commerce, community organizations, neighborhood councils, environmental organizations, health organizations, and academic organizations. A sampling of community organization representation included T.R.U.S.T. South LA, California Greenworks, LA County Bicycle Coalition, LA River Revitalization Corporation, The Trust for Public Land, Community Health Councils, Park Mesa Heights Community Council, Empowerment Congress Central Area Neighborhood Development Council and Rails to Trails Conservancy.

Stakeholder participants were organized into three groups: Elected Officials (EO), Techincal Advisory Committee (TAC), comprised of the technical staff from the jurisdictions and Interested Parties (IP), comprised of non-profit organization representatives.

This targeted stakeholder outreach approach was determined to be best suited for the current feasibility study phase. A broader public outreach effort is anticipated should the ATC study move to future phases of project development.

3.1.2 Stakeholder Meetings and Briefings

Metro hosted a total of six meetings with EO, TAC and IP stakeholders, organized into three rounds which took place between November 2013 and February 2014. **Table 3-1** lists the three rounds of meetings, target stakeholder group(s) and date of each meeting.

Table 3-1 *Stakeholder Meetings*

Round	Group	Date	Time
One	Elected Officials (EO) Meeting	November 6, 2013	1:30 – 3:30 PM
	Technical Advisory Committee (TAC) Meeting	November 12, 2013	1:30 – 3:30 PM
Two	EO/TAC Combined Meeting	December 4, 2013	1:30 – 3:30 PM
	Interested Parties (IP) Study Briefing	December 11, 2013	6:00 – 8:00 PM
	EO/TAC Combined Meeting	January 22, 2014	9:30 – 11:30 AM
Three	Interested Parties (IP) Study Briefing	February 26, 2014	6:00 – 8:00 PM

The purpose of the first round of meetings was to provide EO and TAC members with a study overview, review corridor opportunities and constraints; and review and comment on study objectives.

The December EO/TAC meeting included group discussion that allowed the Study Team to gather valuable feedback from meeting participants on corridor alignment options, at-grade crossing locations and treatments; transit linkages and access improvements; and corridor security. Feedback from the EO/TAC meeting was utilized by the Study Team to refine the draft feasibility study in advance of the December IP Study Briefing.

The first IP Study Briefing occurred December 11, 2013 and took the form of an open house presentation of background, considerations, and concepts. Spanish language interpretation was made available to participants. Notification for the IP meetings included bilingual English and Spanish study meeting notices for each IP Study Briefing. Notices were distributed electronically and via direct mail to contacts without e-mail addresses.

The January TAC meeting was a working session that included a recap of the community input received during the IP Study Briefing and breaking participants into a small group workshop to garner feedback on the 15% conceptual designs. The input received during the TAC meeting was utilized to refine the draft concepts and materials in advance of the second IP Study Briefing.

The second IP Study Briefing occurred February 26, 2014, and provided an overview of the study progress, review of the input received to date and a presentation of preliminary corridor conceptual designs. Attendees were able to provide comments and input on the material presented. Spanish language interpretation was again made available to participants. Photographs and meeting materials are provided in **Appendix E.**

3.1.3 Meeting Materials

Notification of the meetings was conducted through electronic and hard copy correspondence with the preparation of a bilingual English and Spanish study meeting notices for each IP Study Briefing. Notices were distributed electronically and via direct mail to contacts without e-mail addresses. Presentations guided attendees at the IP Study Briefings through the study overview, current status, stakeholder involvement and next steps. Topic boards were prepared and displayed at the first IP Study Briefing at seven stations addressing the following topics: Context, User Types, Potential Linkages and Outcomes, Socioeconomics and Land Use, Traffic Conditions, Linkages Concepts, and Opportunities and Constraints. Community input was specifically requested at stations with boards displaying multiple options/ concepts. The second IP Study Briefing boards included those from the previous meeting as well as rail and river linkage concepts, transit access and alignment details.

3.1.4 Collateral Materials

The Study Team developed a study fact sheet in English and Spanish. The fact sheets were prepared in advance of the IP study briefings and provided the study background information, the objectives of the feasibility study, a study schedule and ways for stakeholders to remain informed and connected to the study **(Figure 20-Figure 23).**

3.1.5 Media Coverage

The study received attention from local and regional news sources and was tracked throughout the study phase. The electronic media log tracked the date of the publication, type, title, source, and language, and included a direct link to each article and noting if a PDF of an article was available. As of May 2014, 20 articles were published related to the feasibility study and two related articles mentioned the study. (See **Appendix E)**

Rail to River

Intermediate Active Transportation Corridor Feasibility Study

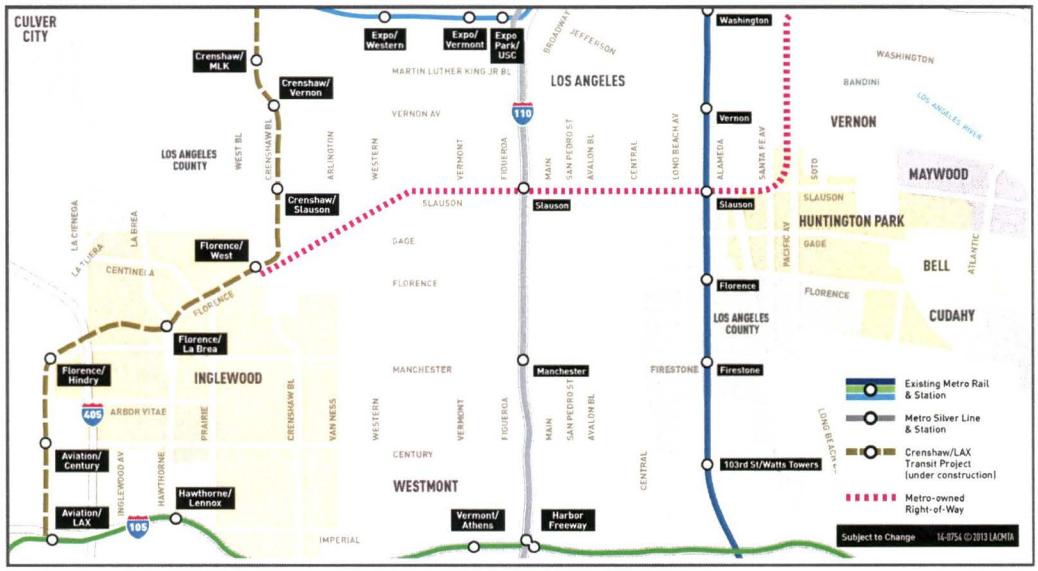
Winter 2014

Overview

Metro is leading a feasibility study for a potential intermediate active transportation corridor along the Metro-owned Harbor Subdivision Right-of-Way (ROW) in South Los Angeles. The 8.3-mile corridor generally parallels Slauson Avenue and can provide connectivity to the Metro Silver Line, Metro Blue Line, future Metro Crenshaw/LAX Line and Los Angeles River. This corridor could provide safe dedicated walking and cycling transportation options to promote healthy neighborhoods and linkages between local communities, schools, shopping, employment centers, transit hubs and other key destinations.

The study will develop key goals and objectives for the active transportation corridor while looking at key issues such as right-of-way access needs, and construction and maintenance costs. Additional factors for consideration include potential use, impacts on streets, adjacent land uses, conceptual design and maintaining adequate space for future transit if desired by Metro. The study will identify potential funding sources and next steps if the Metro Board of Directors seeks to advance the study for environmental review and advanced engineering design.

Study Area Map



Metro

Figure 20 - Meeting Fact Sheet, Winter 2014 (English)

Rail to River Intermediate Active Transportation Corridor Feasibility Study

Study Objectives

The Rail to River Feasibility Study will accomplish the following objectives:

- Identify alternatives for successful integration of an intermediate active transportation corridor in South Los Angeles, an area characterized by higher transit use
- Explore options for providing greater countywide connectivity to the Los Angeles River
- Improve and enhance linkages between Metro Blue, Silver and Crenshaw/LAX transit lines
- Provide safe first and last mile options
- Include alternatives that provide improved and safe connectivity to surrounding communities
- Promote collaboration among stakeholders to identify corridor opportunities and constraints

Potential Features

Study Timeline*

Study Initiation	Stakeholder Involvement	Draft Feasibility Study Report	Final Feasibility Study Report	Report to Metro Board
July 2013	*November 2013 to March 2014*	*Spring 2014*	*Spring 2014*	*September 2014*

* Schedule subject to change

Stakeholder Involvement

Stakeholder involvement is essential to assess the feasibility of implementing an active transportation corridor. With that in mind, the Study Team will hold briefings with elected officials and staff, engage technical professionals from the impacted jurisdictions through a Technical Advisory Committee (TAC), and hold Study Briefings with interested parties. These meetings will be held at key milestones in the next few months.

Contact Us

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Para información en español, por favor llame a Maria Yañez-Forgash al 909.627.2974.

Metro

Updated 2/21/14

Figure 21 - Meeting Fact Sheet, Winter 2014 (English)

Rail to River

Estudio de Viabilidad del Corredor Intermedio de Transporte Activo

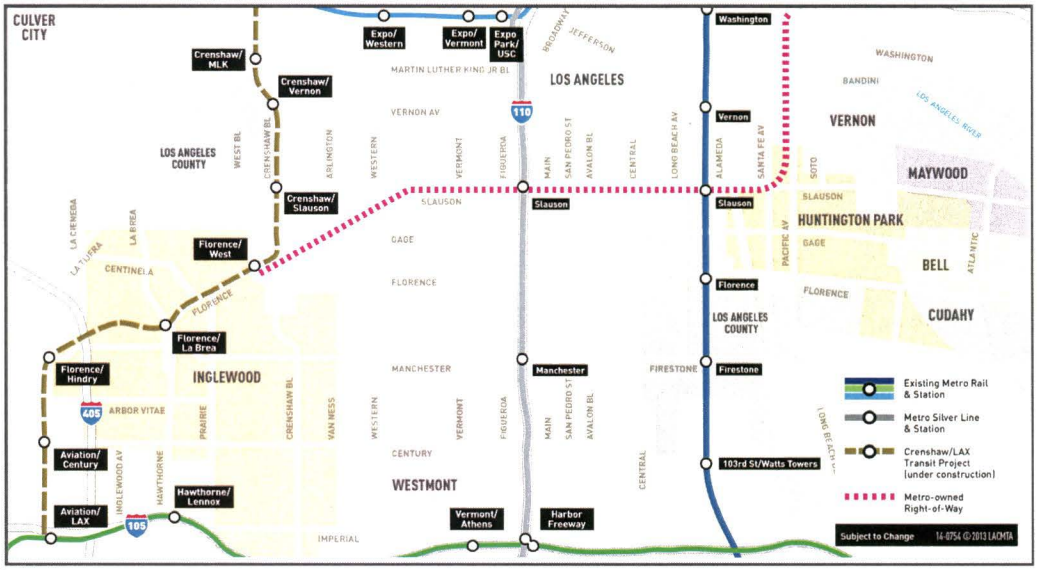
Invierno de 2014

Resumen

Metro está liderando un estudio de viabilidad para la construcción de un corredor intermedio de transporte activo a lo largo del Derecho a la Vía (ROW, por sus siglas en inglés) de la Subdivisión Harbor, propiedad de Metro, en el Sur de Los Ángeles. En general, el corredor de 8.3-millas se encuentra paralelo a Slauson Avenue y puede proporcionar conectividad a la Línea Plateada de Metro, la Línea Azul de Metro, la futura Línea Crenshaw/LAX de Metro y el Río de Los Ángeles. El corredor podría brindar opciones de transporte seguras exclusivas para peatones y ciclistas, con el fin de promover vecindarios saludables y conexiones entre las comunidades locales, escuelas, zonas comerciales, centros de empleo, centros de transporte y otros lugares claves.

El estudio desarrollará metas y objetivos importantes para el corredor de transporte activo, al mismo tiempo que analizará asuntos claves relacionados con la viabilidad del corredor, tales como las necesidades de acceso del derecho a la vía, y costos de construcción y mantenimiento. Los factores adicionales que se considerarán incluyen su uso potencial, impactos en las calles y usos de terrenos cercanos, diseño conceptual y mantenimiento de un espacio adecuado para el tránsito en un futuro, si Metro así lo deseara. El estudio identificará posibles fuentes de financiación y próximos pasos a seguir si la Junta Directiva de Metro desea avanzar con el estudio a la fase de análisis ambiental y el diseño avanzado de ingeniería.

Mapa Del Área De Estudio



Metro

Figure 22 - Meeting Fact Sheet, Winter 2014 (Spanish)

Rail to River Estudio de Viabilidad del Corredor Intermedio de Transporte Activo

Obejetivos Del Estudio

El Estudio de Viabilidad de la Carrilera al Río (Rail to River) logrará los siguientes objetivos:

- Identificar alternativas para la integración exitosa de un corredor intermedio de transporte activo en el Sur de Los Ángeles, un área caracterizada por su alto uso de tránsito
- Explorar opciones para proporcionar mayor conectividad de todo el condado al Río de Los Ángeles
- Mejorar y realzar las conexiones entre las líneas de tránsito de las líneas Azul, Plateada y Crenshaw/ LAX de Metro
- Ofrecer opciones seguras de primera y última millas
- Incluir alternativas que proporcionan conectividad mejorada y segura a las comunidades circundantes
- Promover la colaboración entre las partes interesadas para identificar las limitaciones y oportunidades del corredor

Caracteristicas Potenciales

Cronograma Del Estudio*

Inicio del Estudio	Participación de los Interesados	Borrador del Reporte del Estudio de Viabilidad	Reporte Final del Estudio de Viabilidad	Reporte a la Junta Directiva de Metro
Julio de 2013	*Noviembre de 2013 a marzo de 2014*	*Primavera de 2014*	*Primavera de 2014*	*Septiembre de 2014*

* Cronograma está sujecto a cambios

Participación De Los Interesados

La participación de los interesados es esencial para evaluar la viabilidad de la implementación de un corredor de transporte activo. Con eso en mente, el Equipo del Estudio realizará resúmenes con oficiales electos y empleados; involucrará a profesionales técnicos de las jurisdicciones impactadas a través de un Comité de Asesoramiento Técnico (TAC, por sus siglas en inglés); y organizará Resúmenes del Estudio con las partes interesadas. Estas reuniones se realizarán en momentos claves en los próximos meses.

Metro

Contáctenos

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Last Updated 2/21/14

***Figure 23** - Meeting Fact Sheet, Winter 2014 (Spanish)*

3.2 OPPORTUNITIES

3.2.1 Long Range Plans

The ROW currently serves no utilitarian purpose and no major transit or rail projects are proposed along the ROW, including the significant Slauson Avenue segment. The Harbor Subdivision Transit Corridor as a whole has been studied previously. Although the intermediate ATC area was not specifically identified in the 2009 LRTP, it has subsequently been included in the Supplemental portion of the LRTP as an unfunded, strategic project. No funding has been identified to implement a major transit project within this corridor. Metro staff completed an Alternatives Analysis/Conceptual Engineering report on the Metro Harbor Subdivision Transit Corridor in November 2009 outlining priorities, one of which is described as the Local North Alternative: Metro Blue Transit Line to Crenshaw Boulevard. However, this Priority II project was not recommended for further analysis at that time.

3.2.2 Land Use Integration Opportunities

An objective of the study was to analyze the land use and development context of the corridor and evaluate and conceptually illustrate potential ways that improvement for an intermediate ATC could complement the adjacent land uses and catalyze new and improved development. This included potential use of portions of Metro owned ROW that would not be needed for pathway improvements, as well as other publicly owned lands and under-utilized private land. This section describes the results of the land use integration analysis.

DEPOT SITE

Metro owns an additional parcel adjacent to the ROW between Central Avenue and Hooper Avenue as shown in **Figure 24**. The additional parcel is referred to as the Depot Site, based on a prior use. The Depot Site includes a 11,170 square foot single-level building that is leased to a furniture sales commercial establishment.

The parcel is a former rail depot and could be utilized for community uses such as the following:

- Indoor commercial exhibit space for small format vendors – providing an opportunity for existing non-permitted vendors along the corridor to concentrate in one location as part of transit hub
- Flexible community space for craft fairs, health fairs, farmers market, etc.
- Job training site, community center
- Mobility/Transit hub (enhanced transit waiting area, bike repair, rental and parking)
- Outdoor space for existing vendors and food trucks
- Rest stop/interpretive space for active transportation uses along the Metro owned ROW

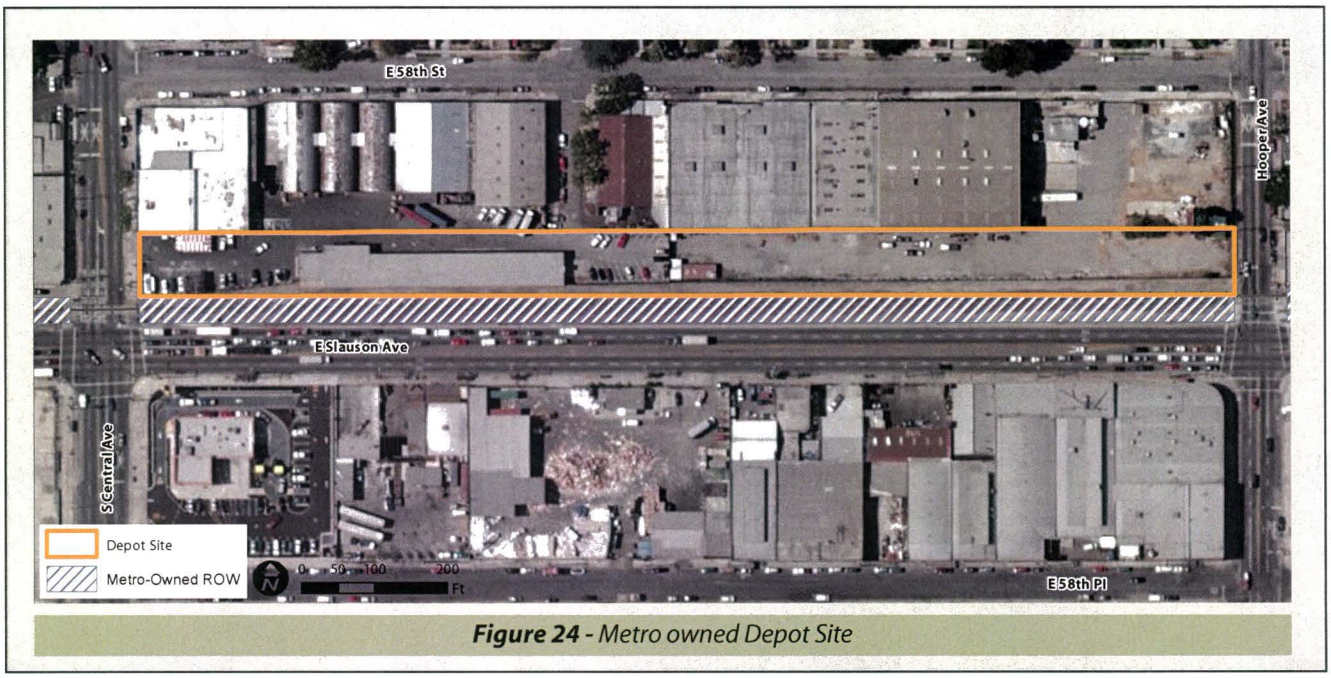

***Figure 24** - Metro owned Depot Site*

1 Allison et al., 1999
2 Wolf and Colditz, 1998; Finkelstein et al., 2003
3 Dannenberg et al., 2003; Leslie et al., 2005; Transportation Research Board, 2005

CONNECTIONS TO CIVIC USES

An intermediate ATC can provide a strong backbone system for connectivity between residential areas and schools within the community. It is recommended that the local jurisdictions provide enhanced access between schools and the potential intermediate ATC to encourage walking and bicycling activity for travel to and from schools. A total of 16 public schools are located within ½ mile of the Metro owned ROW as listed below:

- Hyde Park Boulevard Elementary School
- 61st Street Elementary School
- 52nd Street Elementary School
- Budlong Avenue Elementary School
- Estrella Elementary School
- Holmes Avenue Elementary School
- Vernon City Elementary School
- Lillian Street Elementary School
- Western Avenue Elementary School
- 59th Street Elementary School
- Main Street Elementary School
- Hooper Avenue Elementary School
- Muir Middle School
- New Jefferson Middle School
- Augustus F. Hawkins High School
- Dr. Maya Angelou Community High School

Additionally, the Aspire Slauson Academy, a charter school serving Kindergarten through Grade 6, was recently constructed and opened at the southwest corner of the Main Street/Slauson Avenue intersection. When accounting for public and private schools, a total of 42 educational institutions are located within ½ mile of the Metro owned ROW.

Opportunities for connectivity to additional civic uses include job training centers, health centers, shopping centers and parks. The following list summarizes parks located within approximately ½ mile of the Metro owned ROW:

- Pueblo Del Rio Recreation Center (Alba Street/53rd Street)
- South Los Angeles Wetland Park (Avalon Boulevard/54th Street)
- Mary M. Bethune Park (1244 East 61st Street)
- South Park (345 East 51st Street)
- Slauson Multipurpose Center (5306 South Compton Avenue)
- Augustus F. Hawkins Nature Park (5790 South Compton Avenue)
- Latham Pocket Park (Latham Street/East 53rd Street)
- Hoover-Gage Mini Park (South Hoover Street/West Gage Avenue)
- Jackie Tatum Harvard Recreation Center (1535 West 62nd Street)
- Chesterfield Square Park (1950 West 54th Street)
- Van Ness Recreation Center (5720 2nd Avenue)
- Edward Vincent Junior Park (700 Warren lane)

- Crenshaw Boulevard Shopping District
- Vernon Employment District
- Pacific Center Shopping Center
- Vermont Slauson Shopping Center
- Maywood Village Square Shopping Center
- Bell Palm Shopping Center
- Community Outreach Medical Center
- Dr. Paul Memorial Medical Center
- St. John's Well Child Center
- Kedren Community Mental Health Center
- Community and Mission Hospital
- Kindred Hospital

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3.2.3 Segment Review

The Study Area was inventoried for physical opportunities in the ROW and the surrounding setting that would support use as an intermediate ATC. Specific areas of opportunity are summarized below and noted on **Figure 25** - **Figure 27**.

Western Segment

- Wide ROW and open space adjacent to the rail providing opportunities for amenities, furnishings, and or rest/stops
- Access points from local streets provide opportunities for bicyclists and pedestrians to reach the corridor without using arterial roadways
- There is opportunity to connect Crenshaw High School and Metro Stations using the Home Depot parking lot on West Slauson Avenue
- Opportunity to build a new bus shelter on the corridor at South Normandie Avenue
- There is better bicycle access to Metro Crenshaw/LAX transit line station by using the Metro ROW
- End of the ROW is just 2 blocks from Edward Vincent Jr. Park
- Van Ness Recreation Center is at the corner of Van Ness and Slauson just 3 blocks from the ROW

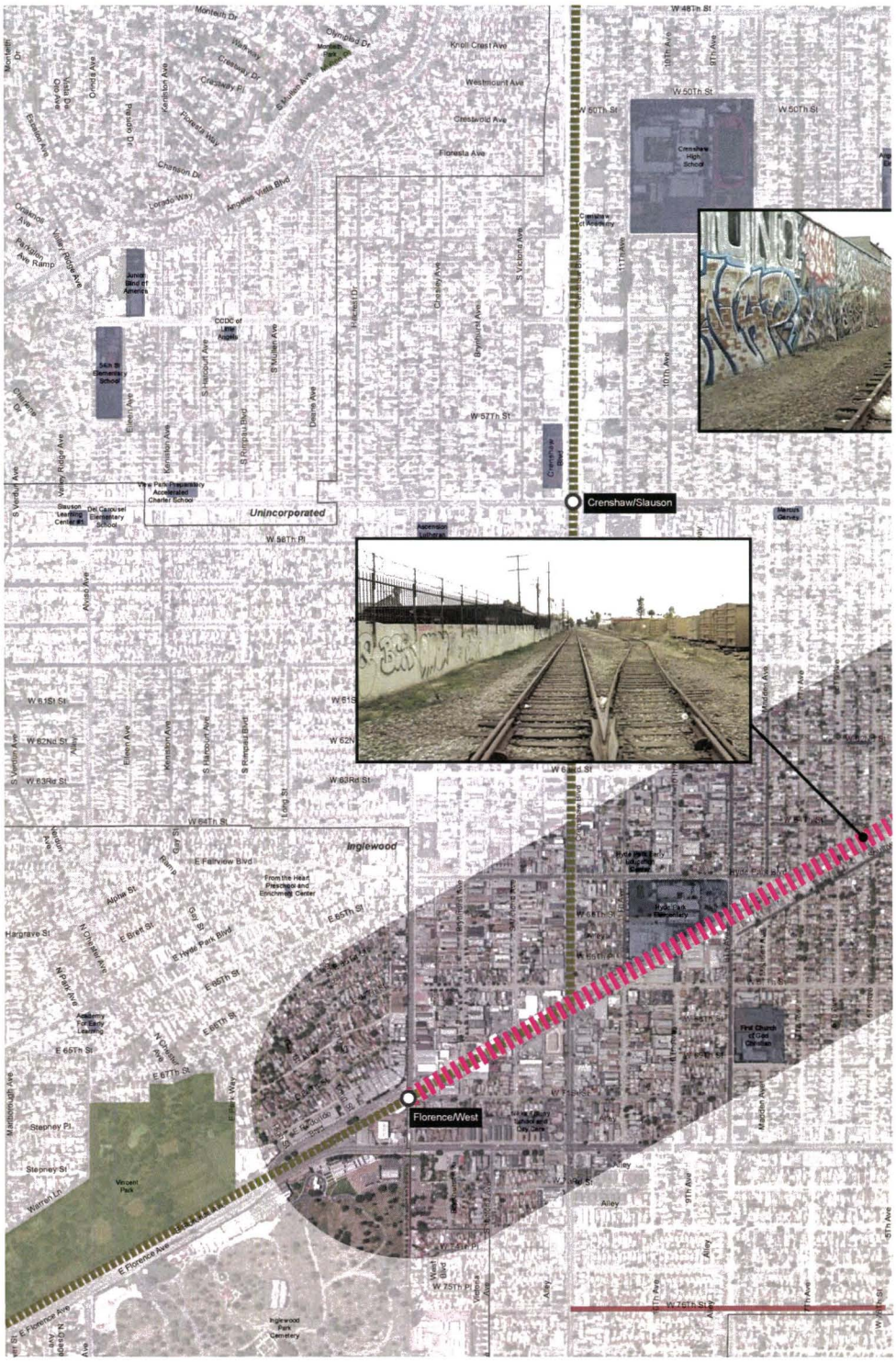
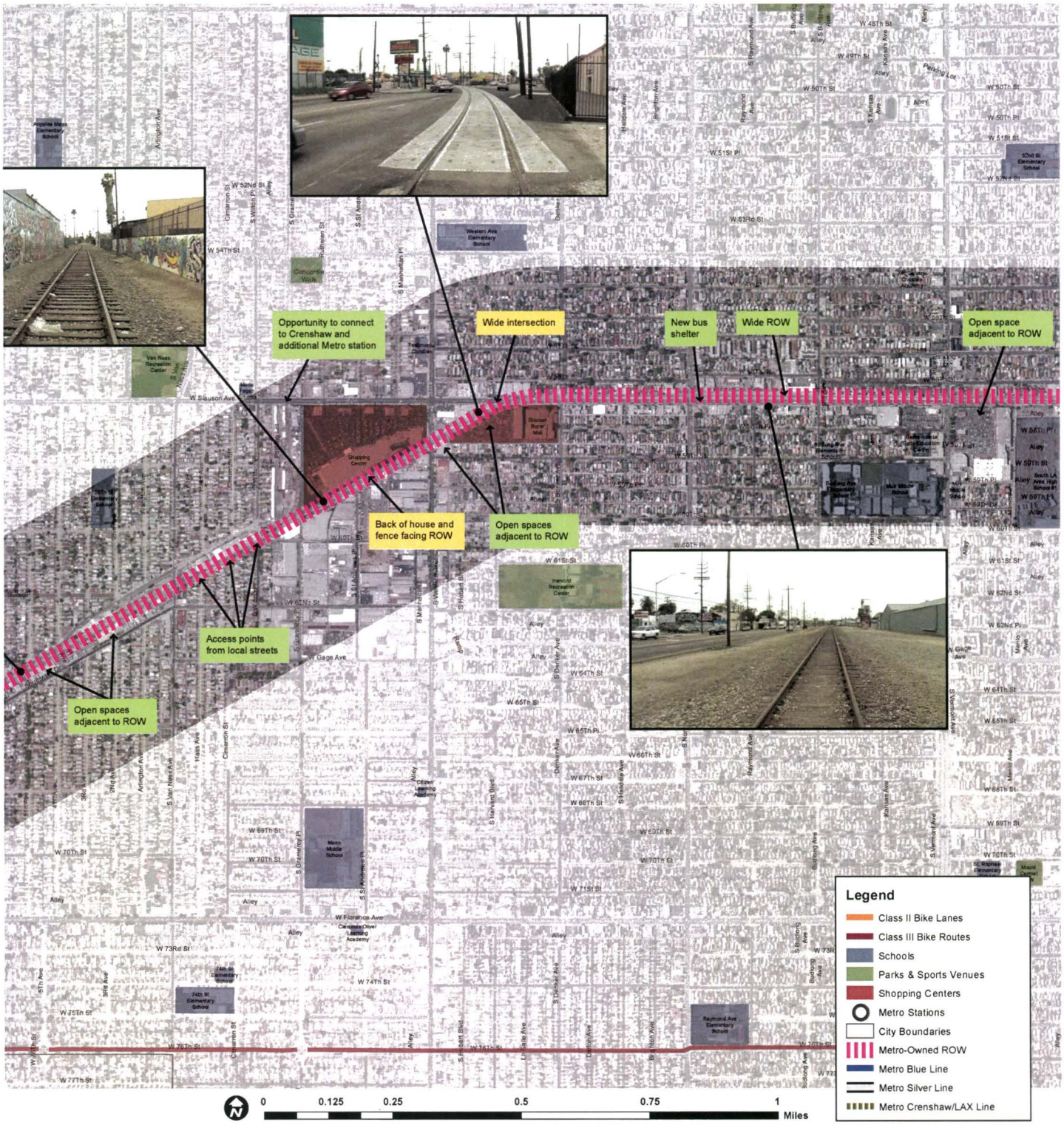


***Figure 25** - Western Segment Opportunities & Constraints*


Opportunity to connect to Crenshaw and additional Metro station
Wide intersection
New bus shelter
Wide ROW
Open space adjacent to ROW
Back of house and fence facing ROW
Open spaces adjacent to ROW
Access points from local streets
Open spaces adjacent to ROW
Legend
Class II Bike Lanes
Class III Bike Routes
Schools
Parks & Sports Venues
Shopping Centers
Metro Stations
City Boundaries
Metro-Owned ROW
Metro Blue Line
Metro Silver Line
Metro Crenshaw/LAX Line
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0.25
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0.75
1
Miles

Central Segment

- Open space is adjacent to the ROW near South Figueroa Street and South Broadway
- Opportunity to build new bus shelters near South Broadway, South Main Street, and San Pedro Place
- There is existing commercial activity facing the ROW on the north side of the corridor between South Central Avenue and McKinley Avenue
- Opportunity to improve connections and entrances to the Augustus F. Hawkins Nature Park
- Budlong Elementary School and Augustus Hawkins High School are both within ½ block to the south of the ROW at Vermont Avenue and Hoover Streets
- Academy Middle School is adjacent to the ROW at Avalon Boulevard
- There is a wide ROW between Long Beach Avenue and South Alameda Street
- South Los Angeles Wetland Park is four blocks north of the ROW on Avalon Boulevard
- There is opportunity to better position vendors and retail to make connections to the community

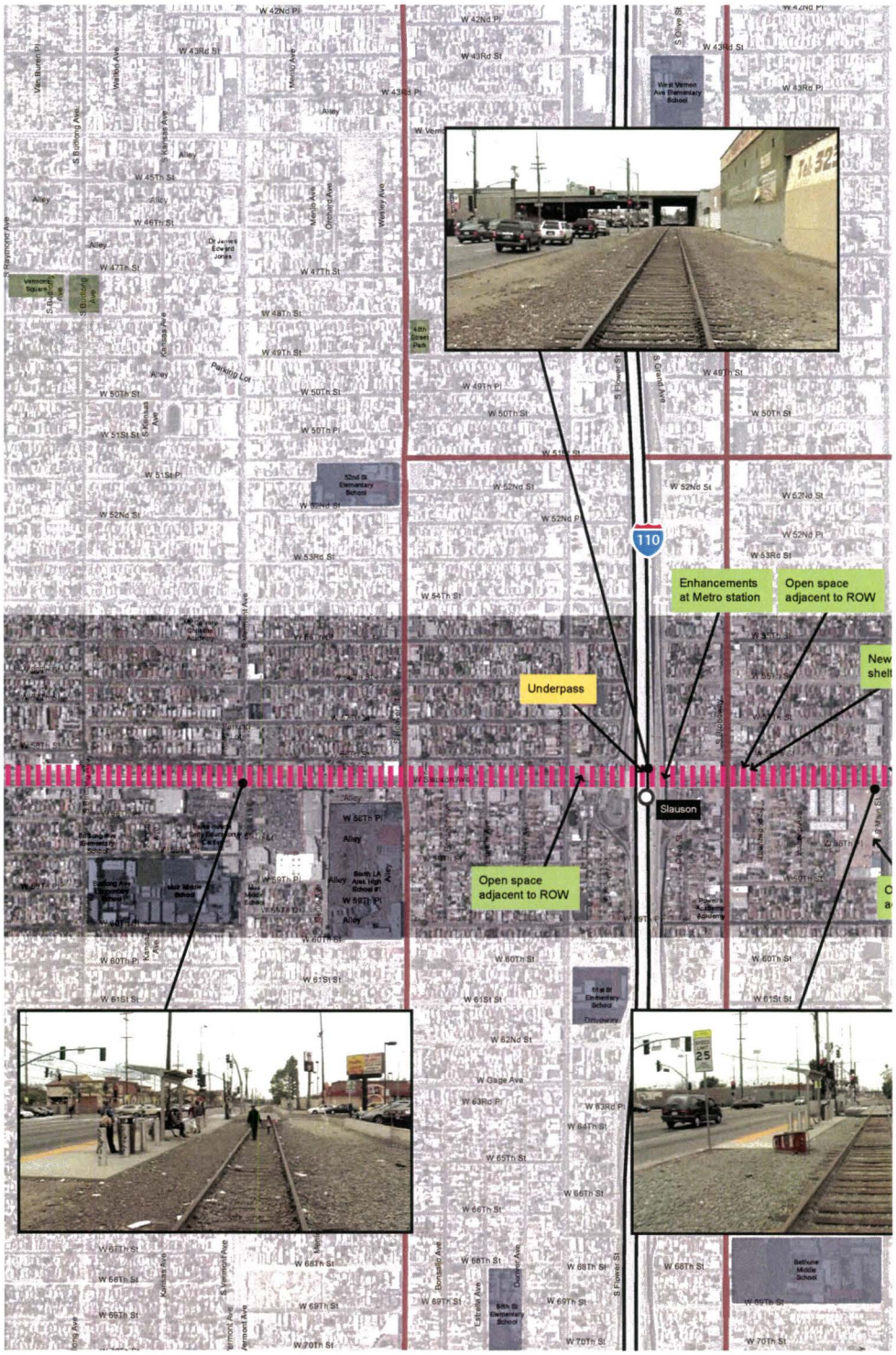
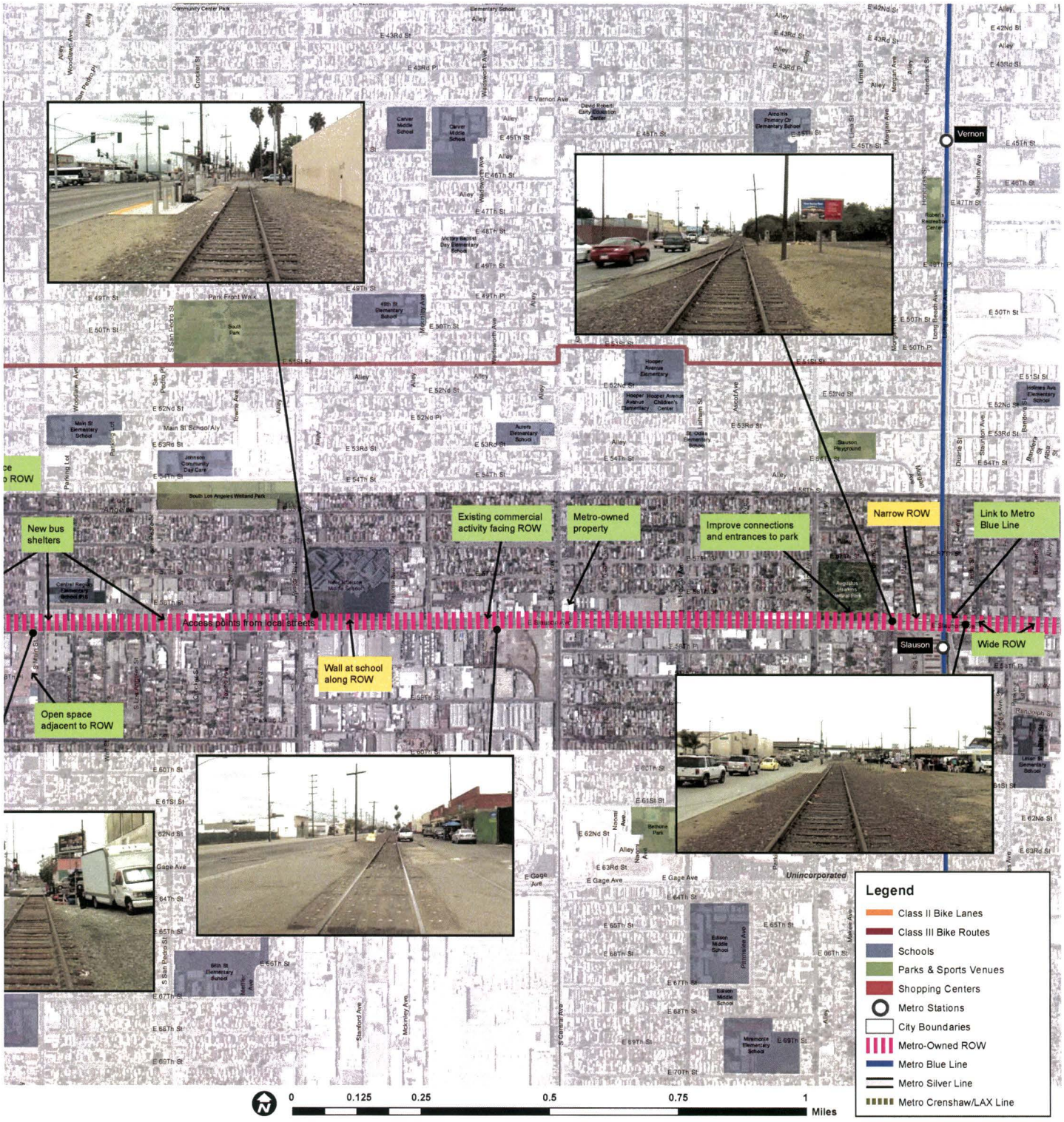


***Figure 26** - Central Segment Opportunities & Constraints*


New bus shelters
Existing commercial activity facing ROW
Metro-owned property
Improve connections and entrances to park
Narrow ROW
Link to Metro Blue Line
Access points from local streets
Wall at school along ROW
Wide ROW
Open space adjacent to ROW
Vernon
Slauson
Unincorporated
Legend
Class II Bike Lanes
Class III Bike Routes
Schools
Parks & Sports Venues
Shopping Centers
Metro Stations
City Boundaries
Metro-Owned ROW
Metro Blue Line
Metro Silver Line
Metro Crenshaw/LAX Line
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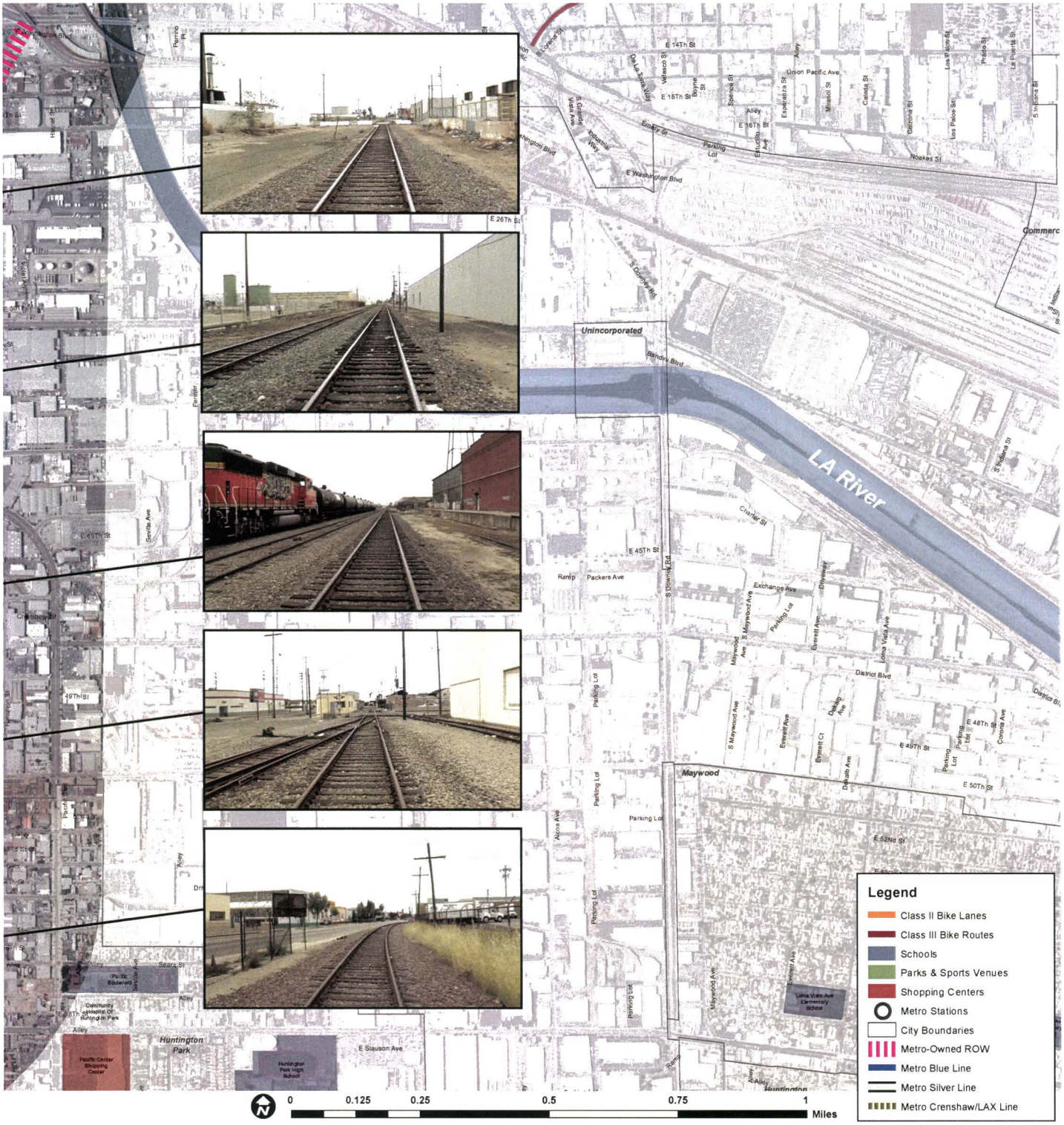
Miles

Eastern Segment

- Opportunity to identify corridor with a cultural monument at the curve at South Santa Fe Avenue
- Connections to residential streets near East 54th Street
- Opportunity to create an off street route into industrial Vernon
- Connection to the LA River Bike Path
- Opportunity to conduct future alternative analysis on the four alignment options:
  - Malabar
  - Utility Corridor
  - Slauson Avenue East
  - Randolph Street

***Figure 27** - Malabar Segment Opportunities & Constraints*


LA River
Unincorporated
Maywood
Huntington Park
Legend
Class II Bike Lanes
Class III Bike Routes
Schools
Parks & Sports Venues
Shopping Centers
Metro Stations
City Boundaries
Metro-Owned ROW
Metro Blue Line
Metro Silver Line
Metro Crenshaw/LAX Line
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3.3 CONSTRAINTS

3.3.1 On-going Freight Activity

The Harbor Subdivision is a single-track main line of the BNSF Railway which stretches between rail yards near downtown Los Angeles and the ports of Los Angeles and Long Beach. It was the primary link between two of the world's busiest harbors and the transcontinental rail network. Mostly displaced with the April 15, 2002 opening of the more direct Alameda Corridor, the Harbor Sub takes a far more circuitous route from origin to destination, owing to its growth in segments over the decades. The subdivision was built in the early 1880s to serve the ports and the various businesses that developed along it.

As noted in the 2002 South Bay Cities Railroad Study, the opening of the Alameda Corridor had an impact on the rail traffic currently moving on the BNSF's Harbor Subdivision. According to the study, "Shippers on the subdivision between Redondo Junction (Milepost 0.0) and milepost 9 in Inglewood will be served by locals originating downtown in Hobart Yard. Most of the traffic on this portion of the Harbor Subdivision will be outside the study area, going between Malabar Yard and Hobart Yard. Once the Alameda Corridor opens, rail traffic between milepost 9 and Malabar Yard will be light and infrequent. There are not likely to be any active shippers between mileposts 9 and 12. As a result, BNSF anticipates no regular service in this segment."

Although no regular train traffic has run on the section of the Metro owned ROW from the proposed Florence/ West Transit Line Station to the turn north at Santa Fe Avenue since 2002, BNSF does continue to service a limited number of customers through the Malabar Yard section north to Redondo Junction and the Hobart Intermodal Facility (See **Figure 28**). Typically, traffic through this area can occur from approximately 6:30 a.m. to 8 a.m. and again from noon to 4 p.m. Monday through Friday.

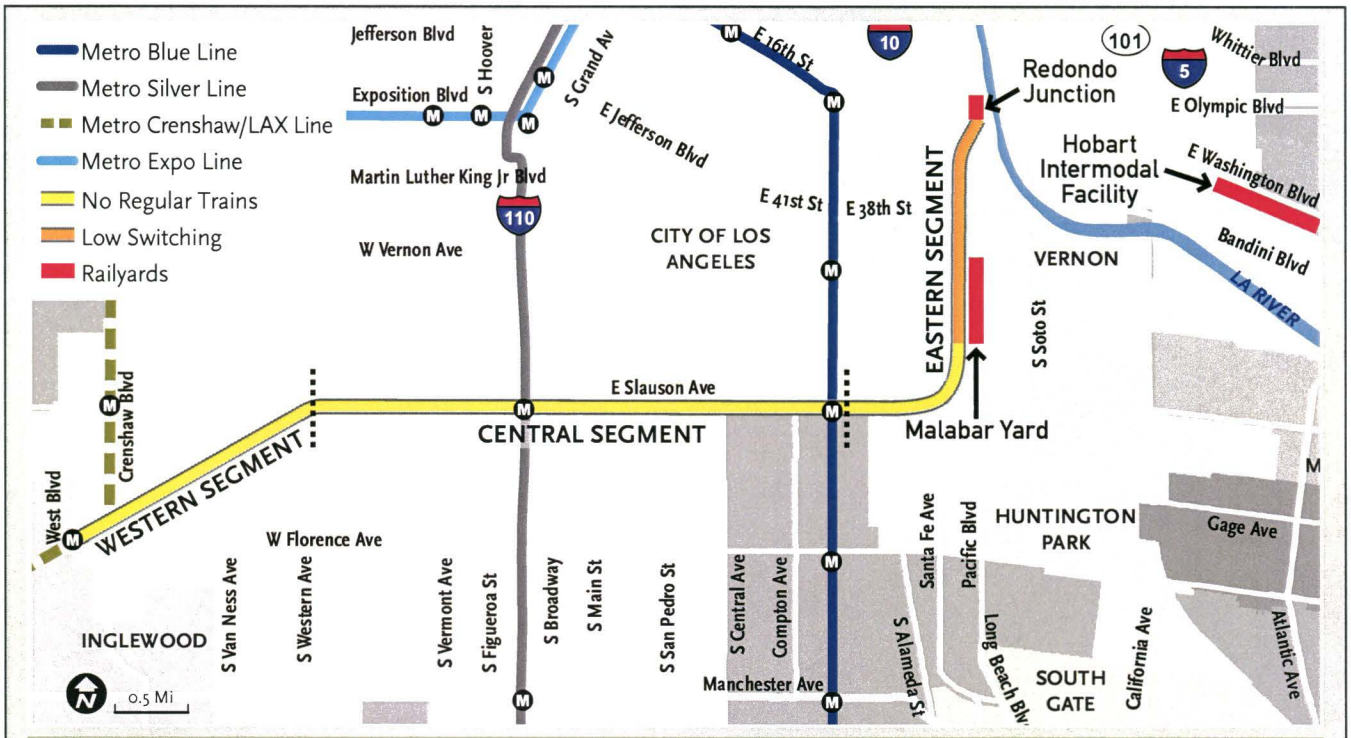


***Figure 28** - Freight Activity along Metro ROW*

3.3.2 Environmental Considerations : CEQA

A number of different, but interrelated and often overlapping environmental laws and regulations apply to the planning, construction, and operation of multi-use bicycle facilities. In the past, standard project-level environmental review requirements included the state California Environmental Quality Act (CEQA) and the federal National Environmental Policy Act (NEPA). In addition to pathway development environmental triggers, the preparation and adoption of an active

transportation corridor plan constitutes a discretionary action undertaken by a governmental agency that requires environmental clearance. It is possible that an ATC project to convert the rail line to a bike path might be categorically exempt from the California Environmental Quality Act (CEQA).

Section 15126 of the CEQA Guidelines and 40 CFR 1508.8 require that all aspects of a project must be considered when evaluating its impact on the environment, including planning, acquisition, development, and operation. In adopting their own Environmental Quality Guidelines (July 31, 2002), the City of Los Angeles adopted the existing State CEQA Guidelines and all future amendments.

Under the existing CEQA and NEPA Regulations, the creation of bicycle lanes on existing rights-of-way is considered a minor alteration of land and is categorically exempt (CEQA Guidelines § 15304). Similarly, under NEPA, construction of bicycle and pedestrian lanes, paths and facilities are categorically excluded (23 CFR § 771.117(c)(3)). Unless the proposed path will have significant environmental impacts due to unusual circumstances, no environmental documents need to be prepared. A California bill signed in 2012 (AB 2245 Bike Lane Statutory Exemption) has exempted all bicycle transportation plans from CEQA. The bill eliminates the requirement for full-scale environmental review and bars lawsuits to stop restriping of streets for bikes whenever that work is consistent with a city's bicycle transportation plan. There must still be traffic and safety analyses, and there must still be public hearings. Another bill passed in 2013, AB 417 CEQA & Bike Plans exemptions, provides that Bike Transportation Plans have statutory exemption from CEQA for an urbanized area for restriping of streets and highways, bicycle parking and storage, signal timing, and related signage. Ultimately, environmental review requirements must be determined on a project specific basis, based on the extent of the physical changes such as paving, drainage and construction.

3.3.3 Environmental Considerations: Contaminants

Multi-use path conversion from rail usage may require dealing with known, potential or perceived contamination along the railroad corridor. Contamination does not prevent the development of the path as long as necessary steps are taken to ensure safety to users. The type and extent of contamination falls into two general categories: residual contamination that may be found along any stretch of corridor and contamination associated with industrial uses along the corridor.

These can be traced back to the following list of contaminants:

- Railroad ties, usually treated with chemicals such as creosote
- Coal ash and cinder containing lead and arsenic
- Spilled or leaked liquids such as oil, gasoline, cleaning solvents, etc.
- Herbicides
- Fossil fuel combustion products (PAHs)
- Roofing shingles (asbestos)
- Air compressors
- Transformers and Capacitors
- Metals

Before developing final plans for the ATC, an inventory of potential hazards along the corridor should be conducted to determine if there are any hazardous substances found on site and what, if any, mitigation steps need to be taken and examine the risks and benefits of remedial alternatives.

3.3.4 Facility Maintenance

Metro staff has indicated the maintenance of current bikeways adjacent to transit lines such as the Orange Line or the Expo Line are the responsibility of the jurisdictions in which the paths are located. Construction of an ATC would require maintenance agreements to ensure the local jurisdiction maintains and operates the facility. Such agreements should include, but not be limited to provision of utilities for lighting and water as well as upkeep of the pathway materials (concrete, asphalt, decomposed granite, dirt, landscape, sanitation, debris removal enforcement etc.) **(Photo 9)**.

Successful and sustainable pathway operation, maintenance, and promotion of responsible usage, can be achieved by a number of techniques available to ensure

Photo 9 - Current conditions along Metro owned ROW "behind" buildings

safety, functionality, protect private property and guard against trespass, vandalism and lawsuits.

Funds and human resources for initial and ongoing operation, management, and maintenance of a pathway and any other public facility tends to be an even greater challenge than finding the means for construction. It is anticipated that local jurisdictions will be responsible for operation and maintenance of the intermediate ATC that are within their respective ROWs. Most city agencies depend on a combination of staff, volunteers, local law enforcement, partnering entities and/or landowners to identify and address operations and maintenance issues.

Prevention of unsafe conditions is the best approach to maintaining public safety. A policy and practice for pathway maintenance and use management is perhaps the best defense a city has to protect public safety and guard against undue injury-related lawsuits. Implementation of a user education program and responsive maintenance and management will be paramount in creating safe trail conditions. Posting user rules and the benefit to all for following them is an effective way to reinforce safe behavior.

POSSIBLE OPERATION AND MAINTENANCE STRATEGIES TO IMPROVE PUBLIC SAFETY AND MITIGATE LIABILITY INCLUDE:

- **Implementation of a Safety Program.** The pathway management partners should implement a safety program that includes systematic risk management assessment, cooperative design review for proposed improvements, and coordinated accident and crime reporting and response. In addition to managers, planners, designers and engineers, LA County Sheriff and Fire/Rescue and field maintenance personnel should be consulted in the design and review process.
- **Implementation of an Emergency Response Protocol**. The management entities should implement an emergency response protocol working with law enforcement, EMS agencies, and fire and rescue departments that includes mapping of access points, an "address system" such as mile markers to identify locations and, where appropriate, 911 emergency phones in remote areas.
- **Operations and Maintenance (O&M) Plan.** Partners responsible for implementation of any specific pathway plan should develop an O&M Plan; a schedule of maintenance and management tasks and responsible parties, along with associated costs. Funds and resources for the O&M plan should be specifically committed, and ideally funded through an endowment that guarantees they will be available in the long term.
- **Implementation of a User Education Program.** The management partners should implement a user education program reaching out to key user groups, such as communities, groups and clubs, to teach safe user behavior and conflict prevention.
- **Conducting Routine Inspections.** The management partners should routinely inspect for safety hazards, defective structures, missing safety signs, etc. A key part of this oversight is maintaining contacts with neighboring property owners, residents and businesses, and being responsive to their concerns. A properly trained and coordinated volunteer patrol/docent staff is used by many regional and local agencies to supplement the work of limited paid staff on inspections and routine contacts.
- **Posting and Enforcing Safe Behavior.** The management partners should post and enforce safe user behavior and pathway speed limits (in congested and high risk areas). Again, trained and coordinated volunteers can be key to success in providing information and enforcement.
- **Regular Patrol and Maintenance.** The pathway will require maintenance to address deterioration due to weather or general use. Patrol and maintenance will be required to prevent and address potential problems such as damage to signs, litter, and graffiti; travel at unsafe speeds; mismanaged pets; or unauthorized motor vehicles on the trail. The management partners should trim trees, bushes, tall grasses, etc. to address clearance, fire safety and sight distance issues. Control of litter and maintenance of the trail surface, signs, fences and gates are regularly required. Maintenance and management activities will require staff, equipment, and the associated funding. Each pathway segment should have a specific operation and maintenance plan that identifies tasks, responsible parties, sources of funding and support. Volunteers can play a big role in monitoring and maintenance, provided there is overall on-going oversight and coordination.

3.3.5 Constrained Right-of-Way

The ROW width for a majority of the Metro owned ROW is between 30 to 40-feet wide, and as narrow as 10-15 feet just south of Pacific Boulevard in the City of Vernon. The ROW fluctuates from 20 feet to 130 feet across the length of the Metro owned portions of the corridor. **Figure 29** shows the range of widths by location.

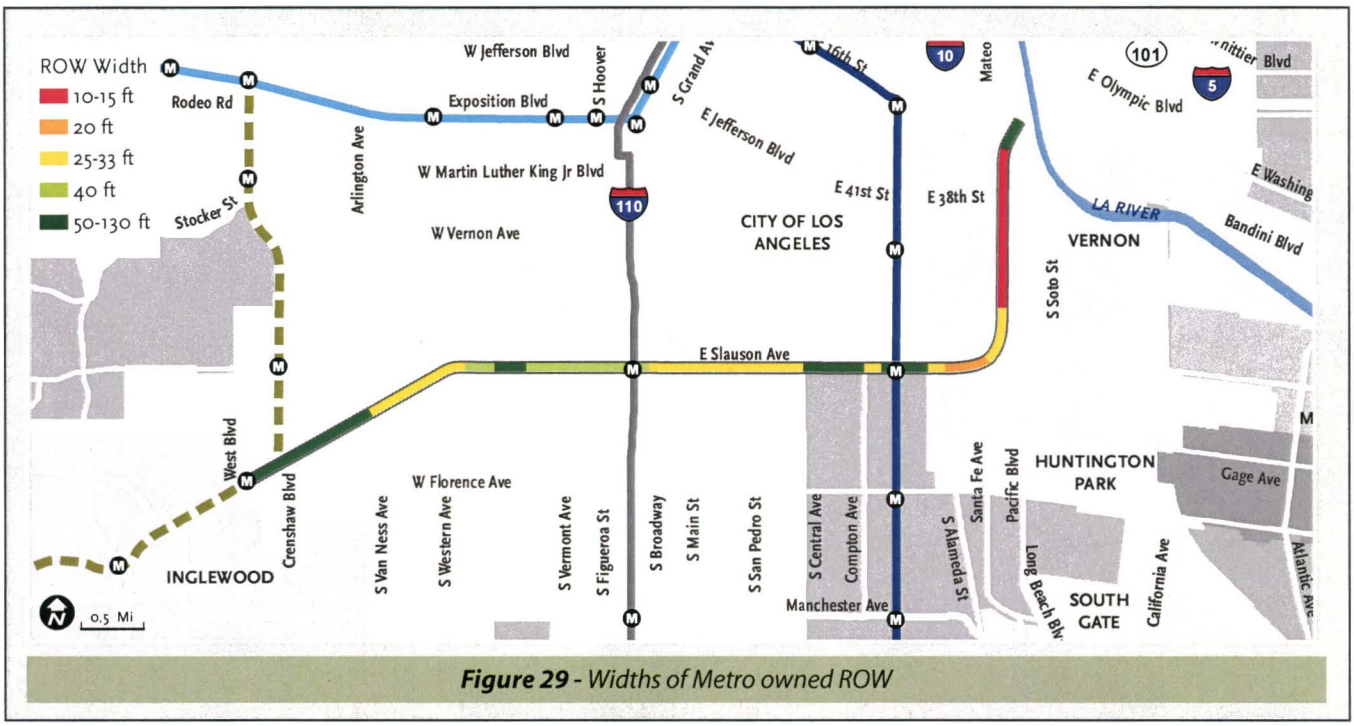


***Figure 29** - Widths of Metro owned ROW*

The HSTC- 2009 AA report states that there is insufficient space for both freight trains and transit vehicles to operate side by side. Where the ROW is only 30 feet in width, room for the ATC, railroad track, physical barrier, and appropriate setback typically cannot be satisfied. Setbacks from an active rail line vary depending on the speed and frequency of trains and available ROW. A 25-feet or greater setback is often needed for higher speed train corridors, and a setback of 10-feet might be used for a low frequency and low speed train.[1]

Rails-with-trails are shared use paths that are located within or immediately adjacent to active railroad rights-of-way. A recently published Rails-to-Trails Conservancy (RTC) study indicated a growing trend of rail-with-trail development alongside local and regional transit corridors. Fifteen percent of the active rails-with-trails identified in the *America's Rails-with-Trails* study are located adjacent to mass transit corridors. The RTC study indicated an increase in total trail length in miles from 299 to 1,397 between 1996 and 2013.[2]

Additionally, incorporating an intermediate ATC into the design for LRT or other agency transit service on the Harbor Subdivision ROW would not be possible through certain segments, given current ROW constraints. Additional detailed study is required to fully assess project design constraints and potential opportunities.

3.3.6 Grade Crossings

The area of the intermediate ATC is crossed by 49 streets, rail lines, and other public and private facilities along the 8.3-mile length. The 49 arterial street crossings can be separated into 4 categories based on ROW width and signalization treatment. 20 arterial crossings vary from 60'-110' (of which one crossing at Alameda Avenue is 110 feet) and there are 29 crossings of 40'. 13 of the crossings of 60'-110' bisect the existing Metro owned right of way and run through Slauson Avenue from north to south. The other 7 are mid-block crossings without signals. Railroad infrastructure (advanced stop lines, crossing gates and signage) exist at each of these 20 crossings. Out of the 29 crossings of 40 feet, 3 are signalized at Slauson Avenue and the remaining 23 are a mix of unsignalized crossings at stop sign intersections or unregulated mid-block crossings.

The HSTC-AA 2009 report states that while many of these streets (especially through Vernon, Huntington Park, and the Slauson Corridor) carry low volumes of traffic, and could potentially be closed; there are likely crossings that would need to be upgraded, as seen in **Photo**

1 Source: "Rails with Trails Lessons Learned" (page 17)
2 Source: RTC *America's Rails-with-Trails* study

10. All crossings must be assessed for ADA accessibility compliance to determine levels of crossing treatments and accommodation. Development of 15% conceptual level treatments of all of these intersection and crossing conditions follows in the Conceptual Designs section of this report.

3.3.7 Security

Buildings along the intermediate ATC turn their backs on the current rail corridor, potentially causing visibility, security and access issues. This could be addressed during detailed planning and design by removing fencing that currently restrict movement from the corridor into retail parking lots, and other enhancement measures that support the bicycle and pedestrian traffic associated with the ATC facility.

As can be seen from **Photo 11,** homeless encampments can be found on the Metro owned ROW. This is an indicator that further supports the need for ROW improvements and greater connectivity to transit and other community resources. The photo represents a low level presence but the number and location shifts with enforcement. BNSF staff reports homeless encampments to be much higher in the segment southwest of Slauson Avenue.

In addition to providing active transportation options a bicycle and pedestrian commuter path along the ROW would serve to minimize some of this activity by providing "eyes on the street."

***Photo 10** - Street Crossing at Metro owned ROW adjacent Slauson Avenue*

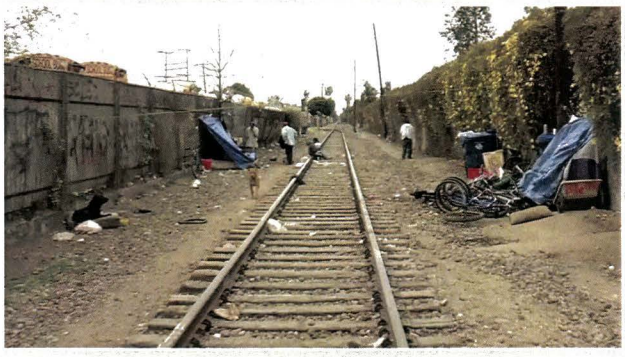


***Photo 11** - Current Conditions along Metro owned ROW adjacent Slauson Avenue*

3.4 ALTERNATIVE CONNECTIONS

Project development options could include preserving the ROW for future major transit by taking no intermediate actions at this time. Metro would continue to maintain the ROW at considerable current and future costs. Local stakeholders have indicated a strong interest in having Metro enhance current maintenance and safety efforts along the alignment, as existing conditions are often blighted at best; and the need for coordination with local law enforcement regarding safety issues has increased. Metro's facility maintenance efforts for the Local North section of the Harbor Subdivision have doubled in the past year from one scheduled monthly visit to a minimum of two scheduled visits each month. As-needed visits are anticipated to increase as well. Prior to 2013, the ROW was maintained on a quarterly basis.

Implementation of an intermediate active transportation corridor facility on the ROW is feasible. However, there is not sufficient right-of-way in many sections to accommodate a future rail project with the bicycle facility. As outlined in this feasibility report, a phased approach to interim project development on the corridor is complicated but technically feasible. Agreements with local jurisdictions for operation and maintenance of an active transportation facility would be part of the next steps in a phased approach to project development.

The following alternatives were evaluated based on analysis of existing conditions, opportunities and constraints, unique ROW segment characteristics were identified, and review of performance criteria for the preferred segment, if implementation is directed by the Board, a phased approach to project development is recommended.

3.4.1 Western Segment Alternatives

On the western end, the Metro owned ROW terminates at the site of the Florence/West Station. Preliminary construction plans indicate a constrained situation for accessing the station platform directly from the Metro owned ROW. Due to the required width of the light rail ROW there is insufficient space to run the ATC alongside the light rail tracks. It was determined that access to the Florence/West Station will need to occur via an alternate alignment.

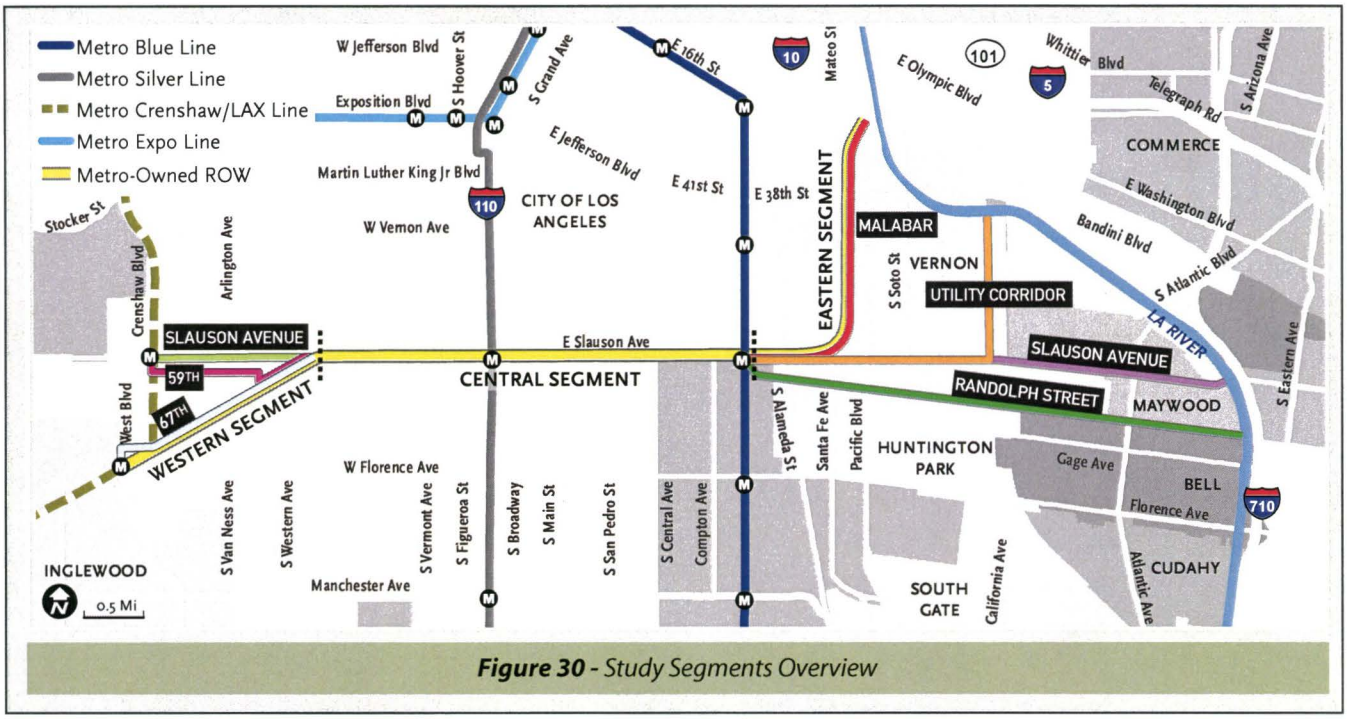


***Figure 30** - Study Segments Overview*

The Study Team, with feedback from the Technical Advisory Committee, has studied and is proposing the following alternative connections to the Metro Crenshaw/LAX Transit Line:

- Slauson Avenue West (Slauson Avenue from Denker Avenue to Metro Crenshaw/LAX LRT Crenshaw/Slauson Station)
- 59th Street (Metro owned ROW to 59th Street to Crenshaw/LAX LRT Metro Crenshaw/Slauson Station)
- 67th Street/West Boulevard (Metro owned ROW to 67th Street to Metro Crenshaw/LAX LRT West/Florence Station).

Figure 31 shows various study segments on the western end linking to the Metro Crenshaw/LAX Transit Line.

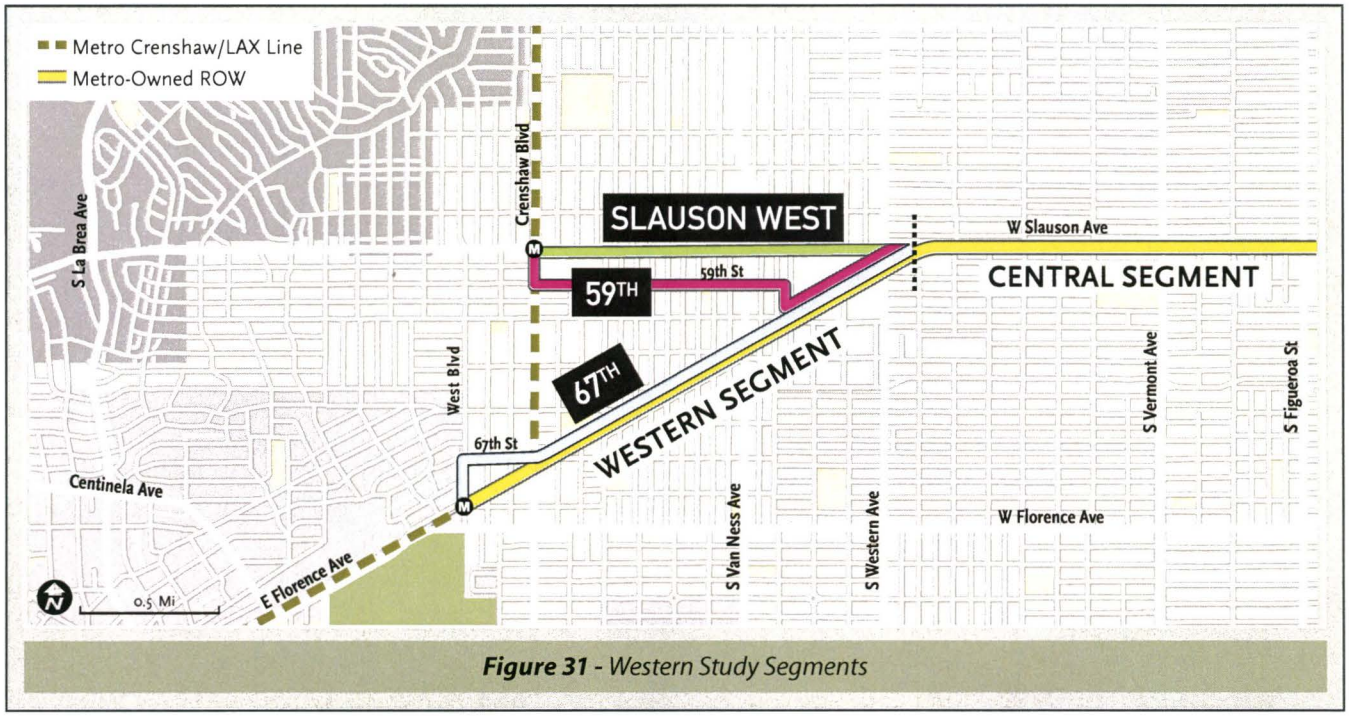


***Figure 31** - Western Study Segments*

3.4.2 Central Segment Alternatives

The Central Segment is a 3.6 mile east-west segment between Long Beach Avenue and Western Avenue. (**Figure 32**) The ROW is directly adjacent to Slauson Avenue. It contains the widest vehicle crossings at Compton Avenue, Avalon Boulevard, Main Street, Hoover Street, Vermont Avenue and Normandie Avenue. Two major transit connections also occur within this segment via the Metro Silver Transit Line, which runs elevated over Slauson on the 110 Freeway, and the Metro Blue Line, which runs elevated over Slauson Avenue at the station location near Long Beach Avenue. Because there are no regular trains that run on this segment and because there are important commercial, school and open space connections present, it was determined that this segment meets the basic objectives of the ATC route and that alternative routes would not be investigated.

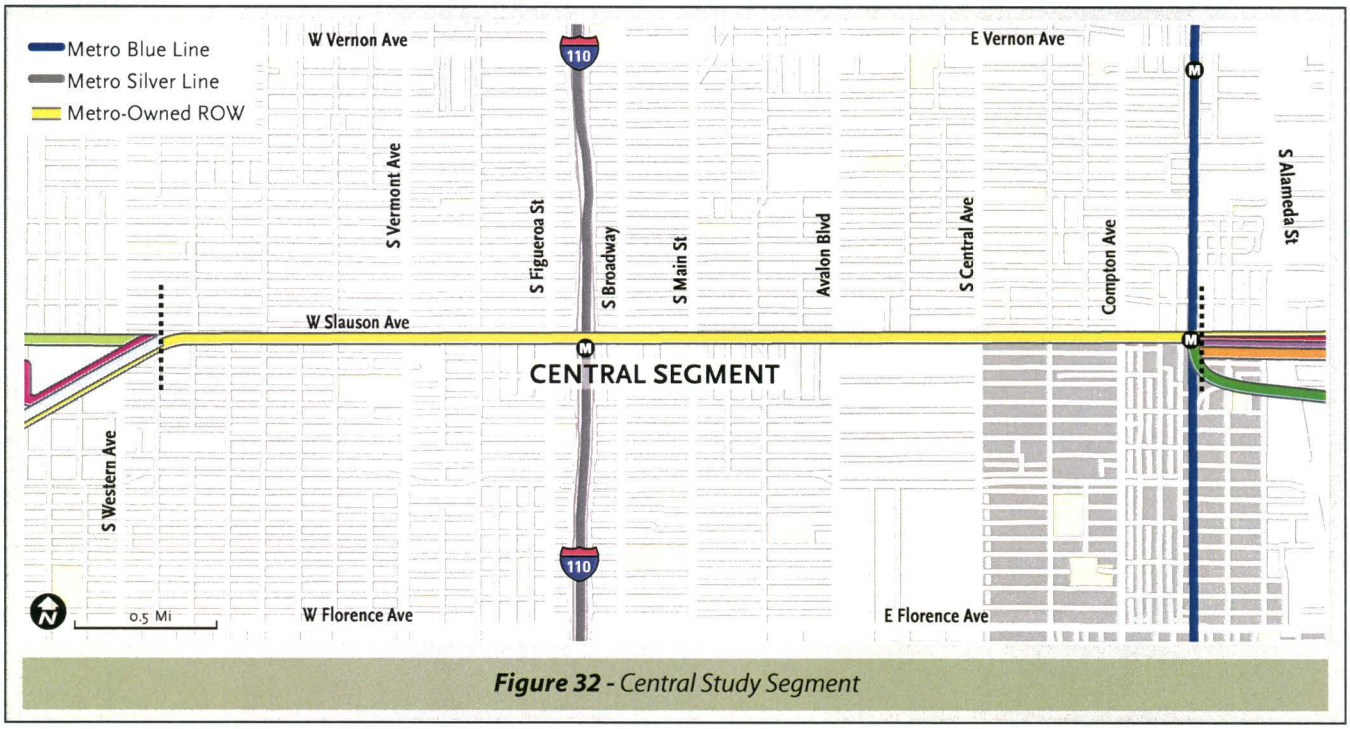


***Figure 32** - Central Study Segment*

3.4.3 Eastern Segment Alternatives

On the eastern end, the Metro owned ROW terminates just north of Washington Boulevard. There is no direct connection to the Los Angeles River. Multiple vehicle rail crossings and the Los Angeles and Redondo Junction Rail Yard are located north of Washington Boulevard and adjacent to the river. Connection to the river could be made via Washington Boulevard, but no bicycle facilities are currently planned for Washington Boulevard per the 2011 Los Angeles City Bicycle Master Plan. Currently, the existing Los Angeles River Bike Path ends to the south at Atlantic Boulevard. Linking the ATC to the Los Angeles River via Washington Boulevard could provide the impetus to extend the river bike path. The 2.7 mile length of the active transportation corridor that would travel through the Malabar Yards with active rail traffic would require negotiations with BNSF to acquire this ROW, involving significant time and money. It was determined that access to the Los Angeles River could occur via alternate means.

The Study Team, with feedback from the Technical Advisory Committee, identified the following alternative connections to the Los Angeles River as shown in **Figure 33**.

- Randolph Street (from Metro Blue Line LRT to Randolph Street Union Pacific owned Rail ROW)
- Malabar Segment (Metro owned ROW from Metro Blue Line LRT north to Washington Boulevard)
- Utility Corridor (Slauson Avenue to Southern California Edison owned ROW)
- Slauson Avenue East (Slauson Avenue from Metro Blue Line LRT to Los Angeles River)

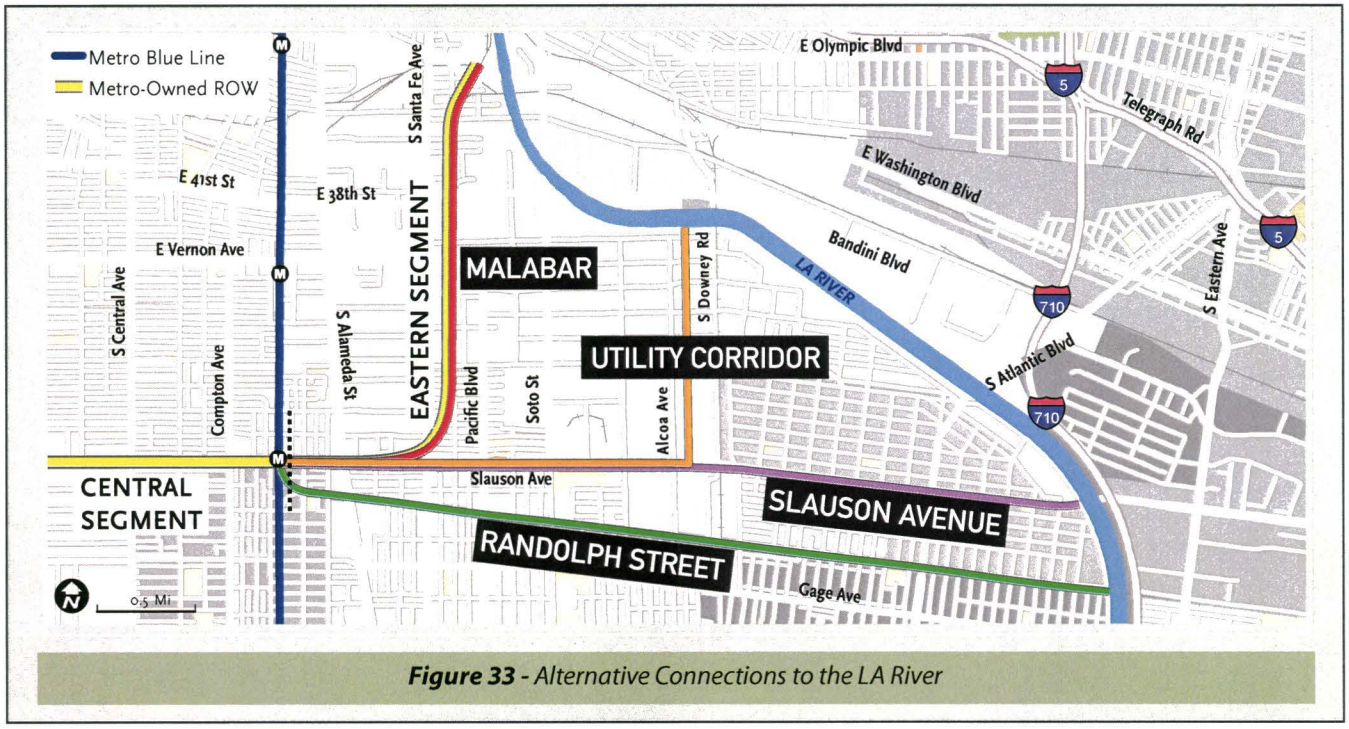


***Figure 33** - Alternative Connections to the LA River*

3.5 CONCEPTUAL DESIGNS

Based on analysis of existing conditions, opportunities and constraints, and input received through the stakeholder process, it was determined that conceptual designs that did not rely exclusively on the Metro owned ROW needed to be developed for the western segments at the Metro Crenshaw/LAX Transit Line and the eastern segment at the Los Angeles River.

Using the information from the Opportunity and Constraints Analysis and the first phase of the Public Outreach Process, the Study Team developed 15% conceptual designs for the intermediate ATC. These concepts integrated design elements that support Metro's current design standards while working with the restrictions imposed by the existing 2000 MTA ROW Preservation Guidelines. Conceptual design elements were selected to enhance the setting and potentially catalyze aesthetic improvements, economic development, and improve pedestrian and bicycle access, including enhanced way finding and place making.

Cross-sections and typical plan graphics show conceptual ATC improvements that have been developed for the varying ROW widths of the corridor (**Figure 34**). Typically throughout the ATC, the conceptual designs maintain a consistent width of 10' for the bicycle path. Where a separated pedestrian zone can be added (on ROWs 20' or greater in width), a 6' pedestrian walkway is separated from the bike lanes by a 1' striped buffer. In cross-sections 30' or greater in width, planted infiltration trenches of 3' – 11' in width are planned to accommodate stormwater run-off.

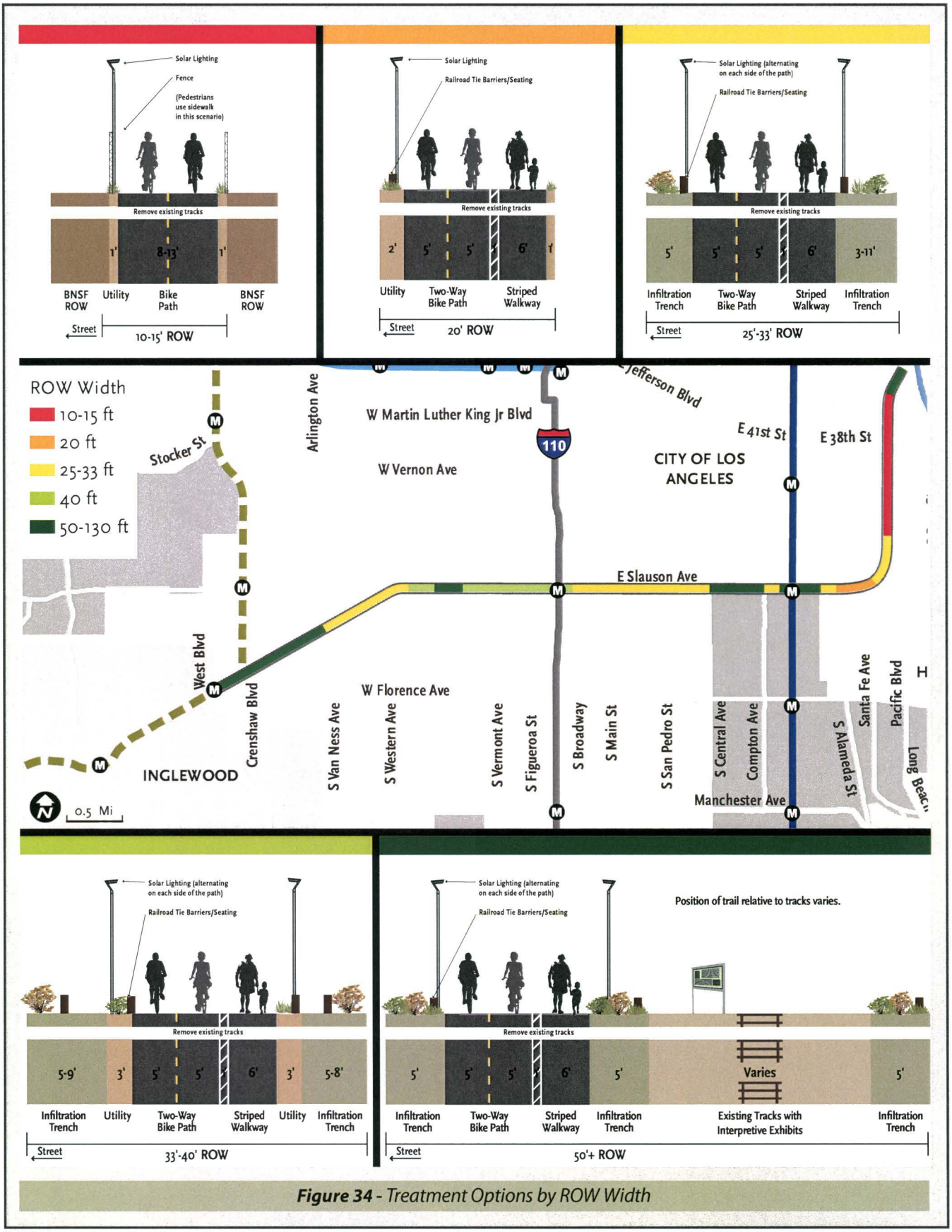


***Figure 34** - Treatment Options by ROW Width*

3.5.1 Conceptual Plan: Western Segment

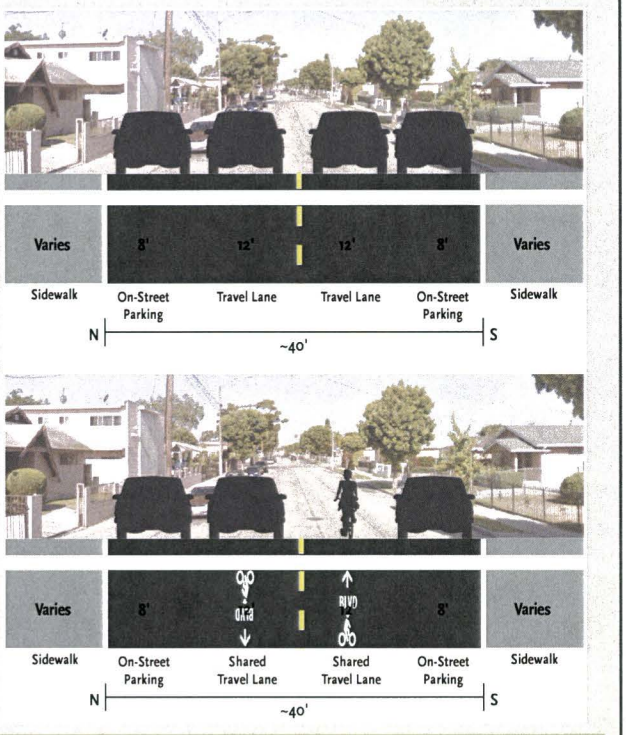


***Figure 35** - Existing and Proposed Sections on 67th Street*

Conceptual plans through the Western Segment for access to the Metro Crenshaw/LAX Transit Line stations at Florence/West and Crenshaw/Slauson were developed looking at three alternatives for access from the ROW.

The Florence/West Station via 67th Street (**Figure 35** and **Figure 36**) alternative utilizes the longest length of the Metro-owned ROW before directing users off at 67th Street, across a signalized intersection at Crenshaw to West Boulevard, which received Class II Bike Lanes in May 2014. Access to the station would be through the parking lot that serves the station. Enhanced crosswalks would be installed at Crenshaw Boulevard. All existing signals and pedestrian crossing equipment would remain in place. Full suites of pedestrian and bicycle signage, particularly along 67th Street indicating its use as a bike boulevard, would also be installed.

The 59th Street alternative (**Figure 37 and Figure 38**) takes users to the southern end of the Crenshaw/Slauson Station via the ROW, directing them off the ROW at Wilton Place and westbound on 59th Street to the station. Crossing to the southern end of the station platform would take place via the existing signalized intersection at 59th Street and Crenshaw Boulevard and enhanced crosswalks would be installed as a part of the improvements. Existing signals and pedestrian crossing equipment are already in place and full pedestrian and bicycle signage would be added to 59th Street.

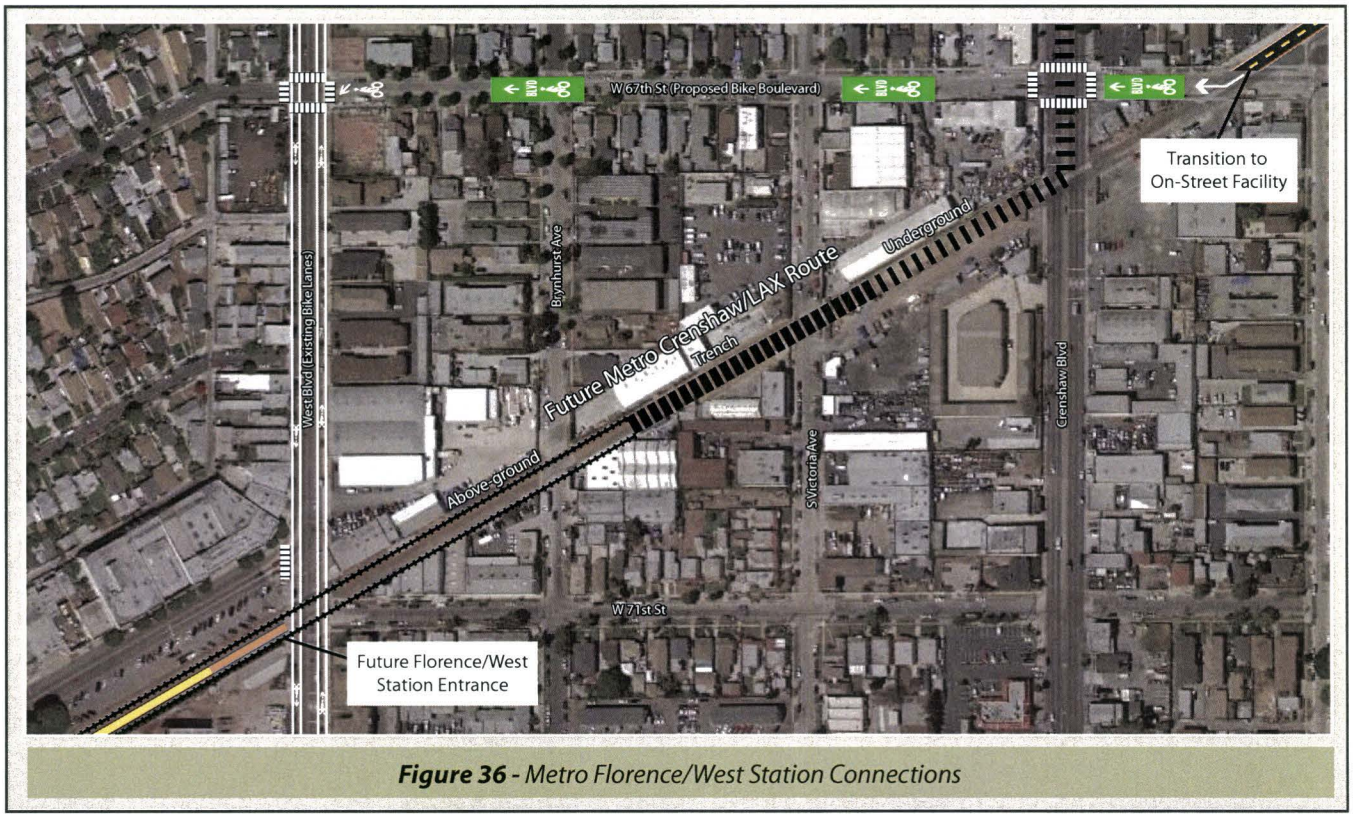


***Figure 36** - Metro Florence/West Station Connections*

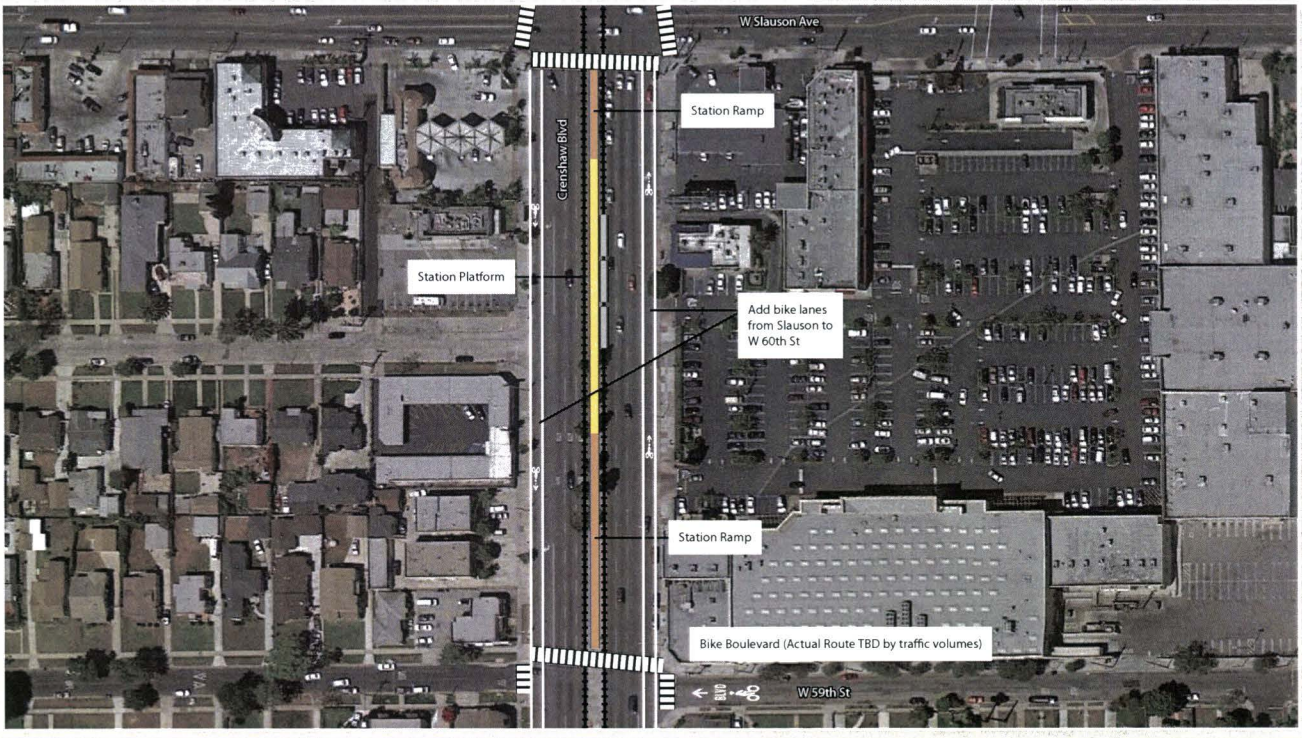


***Figure 37** - Metro Crenshaw/LAX Station Connections*

Bicycle boulevards are recommended for segments on 59th Street (**Figure 37 and Figure 38**). The roadway crossings in the Western Segment at Western Avenue, Van Ness Avenue, 4th Avenue, 8th Avenue, 11th Avenue and 67th Street are all mid-block crossings similar to those shown in **Figure 39**. Improvements would entail repainting and refurbishing striping at the advanced stop bars and the addition of enhanced crosswalk markings as well as a full suite of signage for cyclists, pedestrians and motorists. They may also include raised medians to provide a refuge island for pedestrians and High-Intensity Activated Crosswalk (HAWK) beacons to alert motorists to pedestrians in the crosswalk.

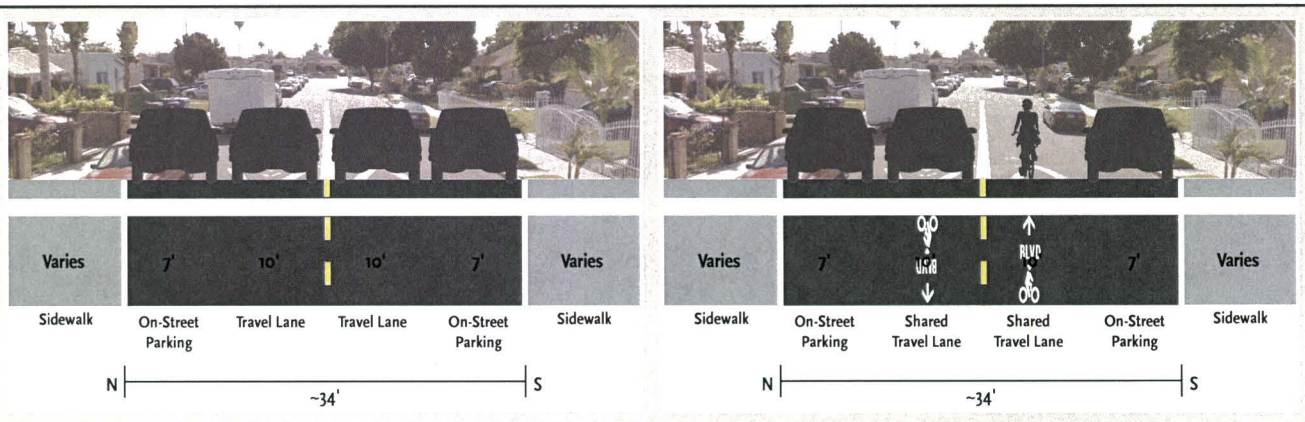


***Figure 38** - Existing and Proposed Sections on 59th Street*

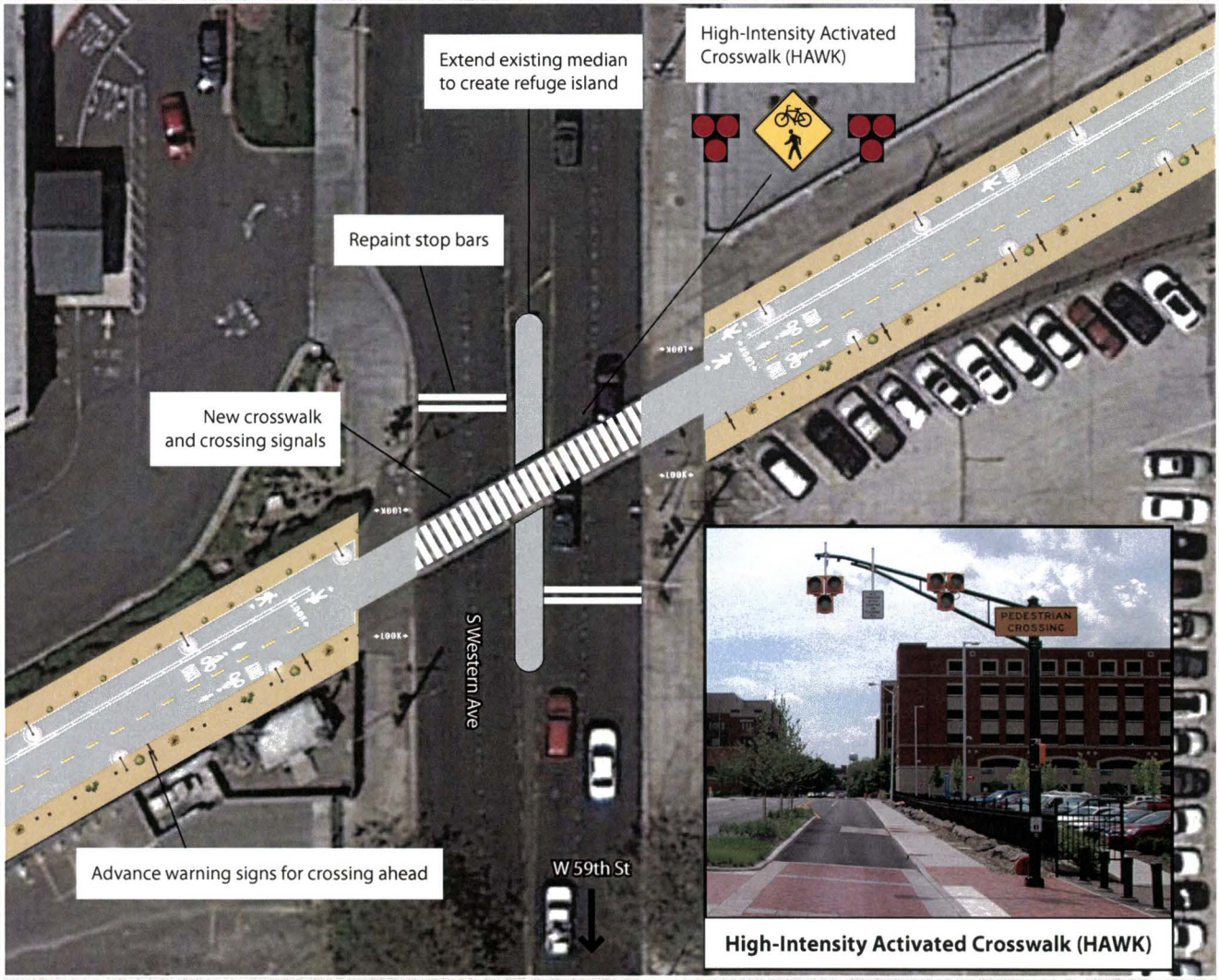


***Figure 39** - 60-110' Mid-Block Crossing*

The Slauson West alternative would access the Crenshaw/ Slauson Station via a transition from the Metro-owned ROW at the bend southwest at Denker Avenue. Pedestrians would continue to use the existing sidewalk along Slauson Avenue, while bicyclists would need to transition to a Class III Bike Route (**Figure 40 and Figure 41**) on the high-traffic street for roughly 1.4 miles before arriving at the Crenshaw/Slauson Station. Access for both modes would be to the northern end of the station via Slauson Avenue. Enhanced crosswalks would be installed at Crenshaw and Slauson and would rely on the existing signaling and pedestrian crossing equipment in place. Signage alerting motorists to the use of the roadway by cyclists would be added along Slauson Avenue.

3.5.2 Conceptual Plan: Central Segment

Improvements through the Central Segment follow the typical 20' or greater cross section design shown in **Figure 42**. Street crossings for the 60'-110' ROW (**Figure 43**) show typical improvements that build on the existing railroad street crossing infrastructure. The conceptual designs call for repainting and refurbishing striping of the advanced stop bars and adding enhanced crosswalk markings and a full suite of signage for cyclists, pedestrians and motorists.

***Figure 40** - Class III Bicycle Route on Slauson Avenue*

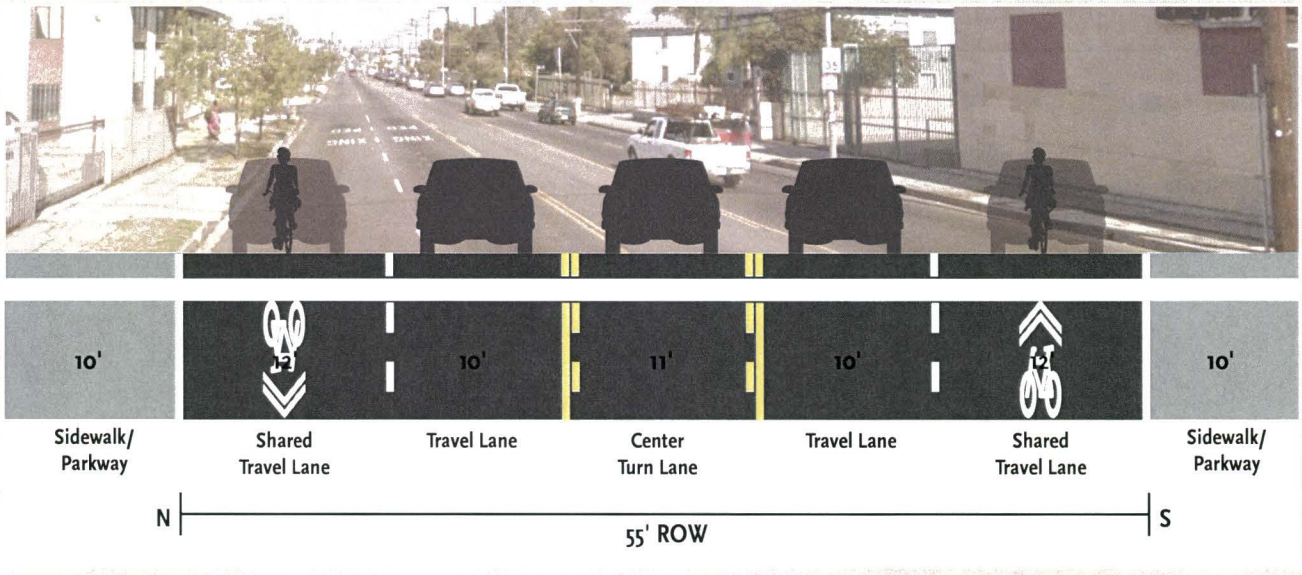


***Figure 41** - Proposed Class III Bicycle Route on Slauson West of the Metro owned ROW*

Figure 44 and Figure 45 show the range of typical improvements for the 40' ROW. Where the Central Segment ATC crosses existing signalized intersections, the conceptual designs call for upgraded crosswalk markings and curb ramps, repainted advanced stop bars and signage both along the ATC for pedestrians and cyclists, as well as crossing signage to alert right-turning drivers to the presence of pedestrian and bicycle traffic on the ATC. Further traffic studies could determine whether right turns could be restricted on red signals for these crossings. The conceptual designs call for new push button or detection

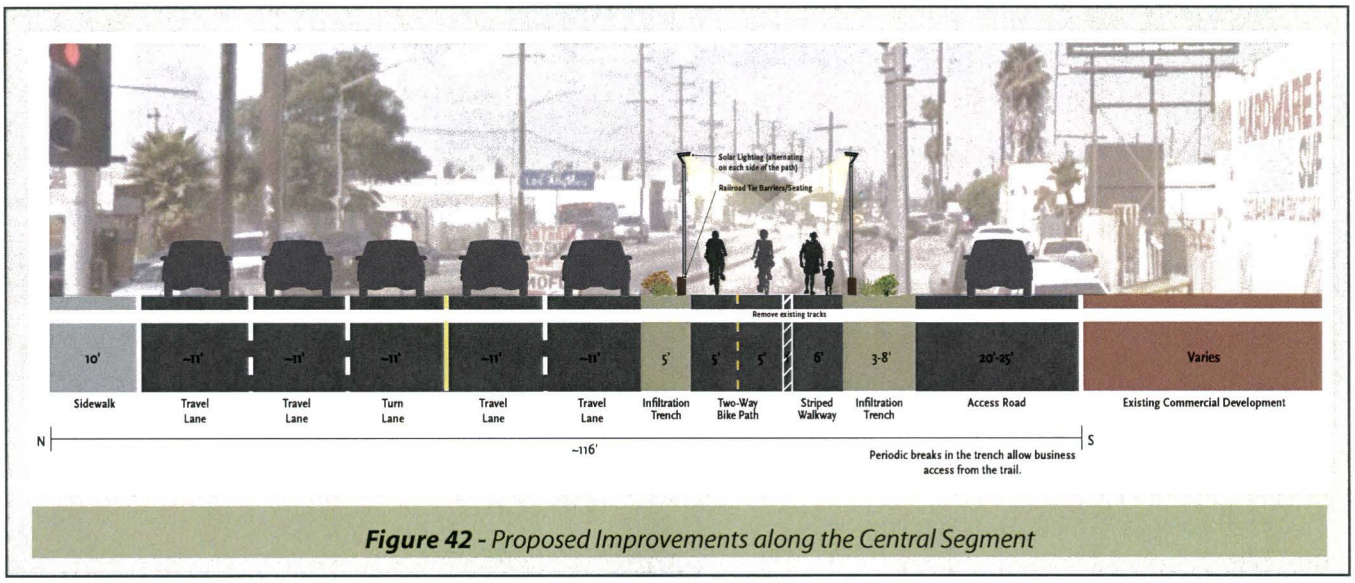


***Figure 42** - Proposed Improvements along the Central Segment*

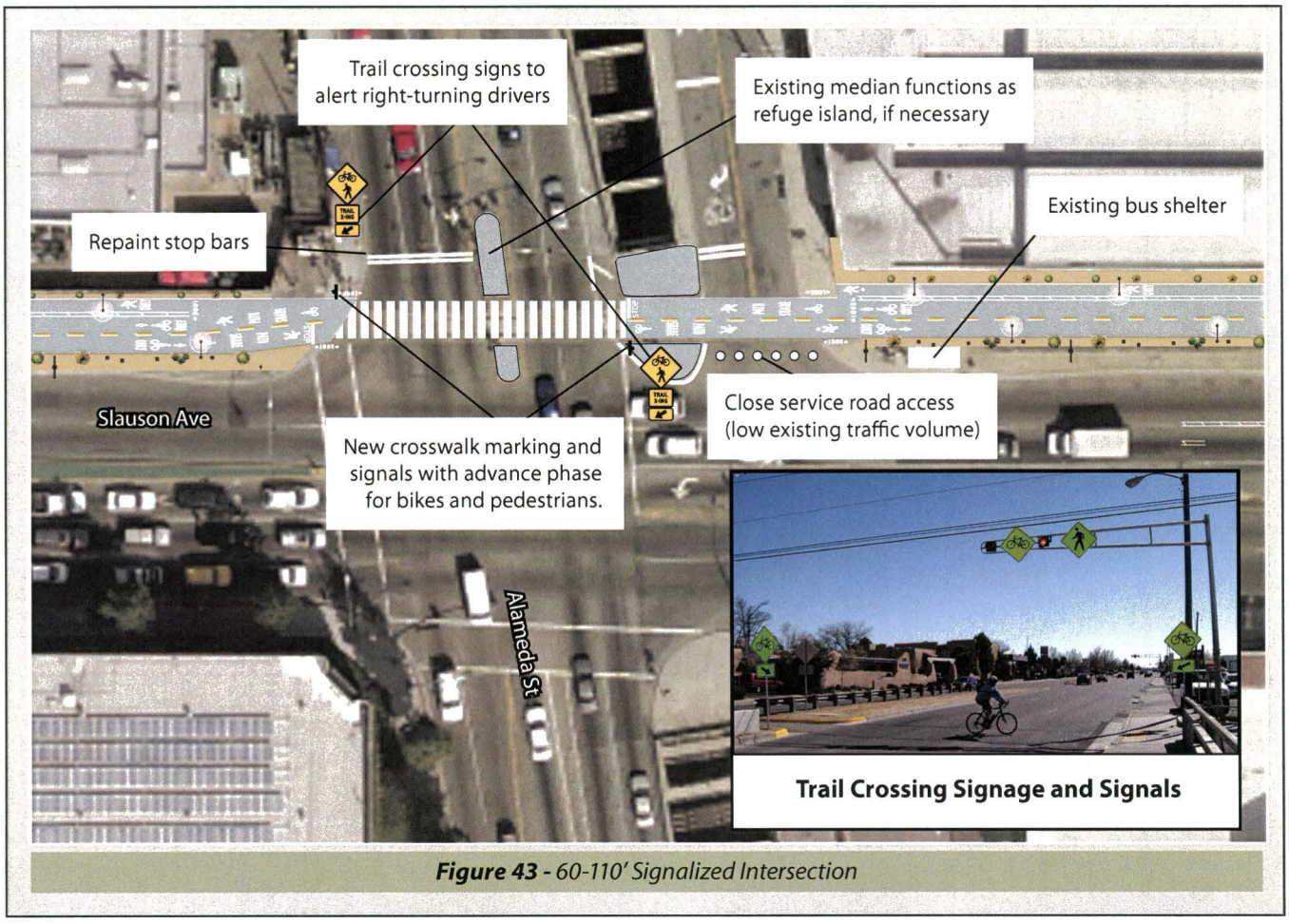


***Figure 43** - 60-110' Signalized Intersection*

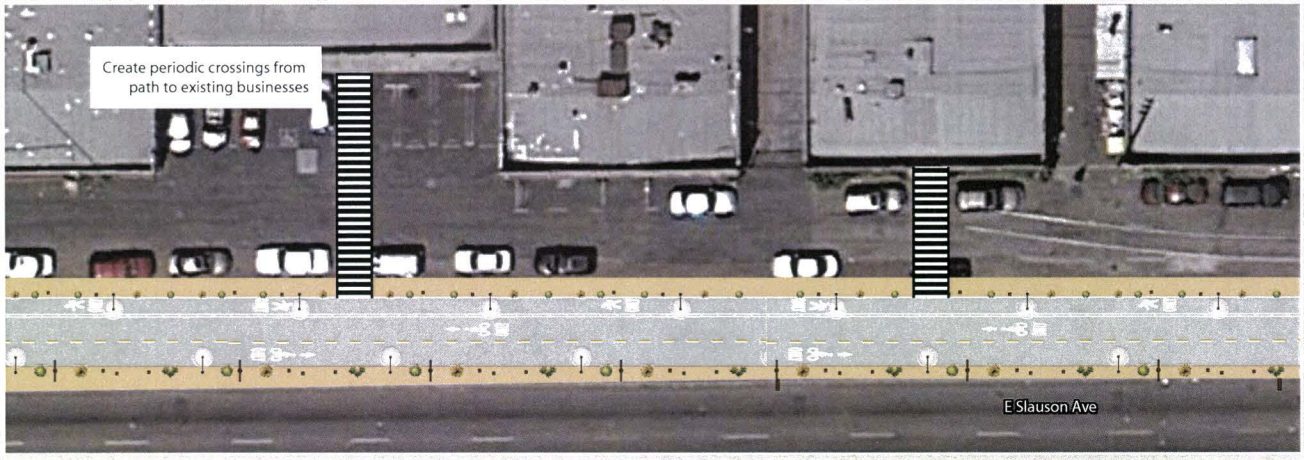


***Figure 44** - Proposed improvements along the Central Segment*

activated advance timing signals at 40' intersections where there are none currently. Another alternative to a full traffic signal would be the addition of push button or advance detection Rectangular Rapid Flash Beacons (RRFB) in order to alert motorists crossing or turning right across the ATC (See **Figure 46**).

3.5.3 Conceptual Plan: Eastern Segment

Conceptual design plans through the Eastern Segment for access to the LA River were developed looking at four alternatives for access from the ROW. Conceptual designs for the Malabar alternative are illustrated in **Figure 47-Figure 49**. This alternative traverses a series of 40' mid-block crossings through the Malabar Yards from 58th Street north to

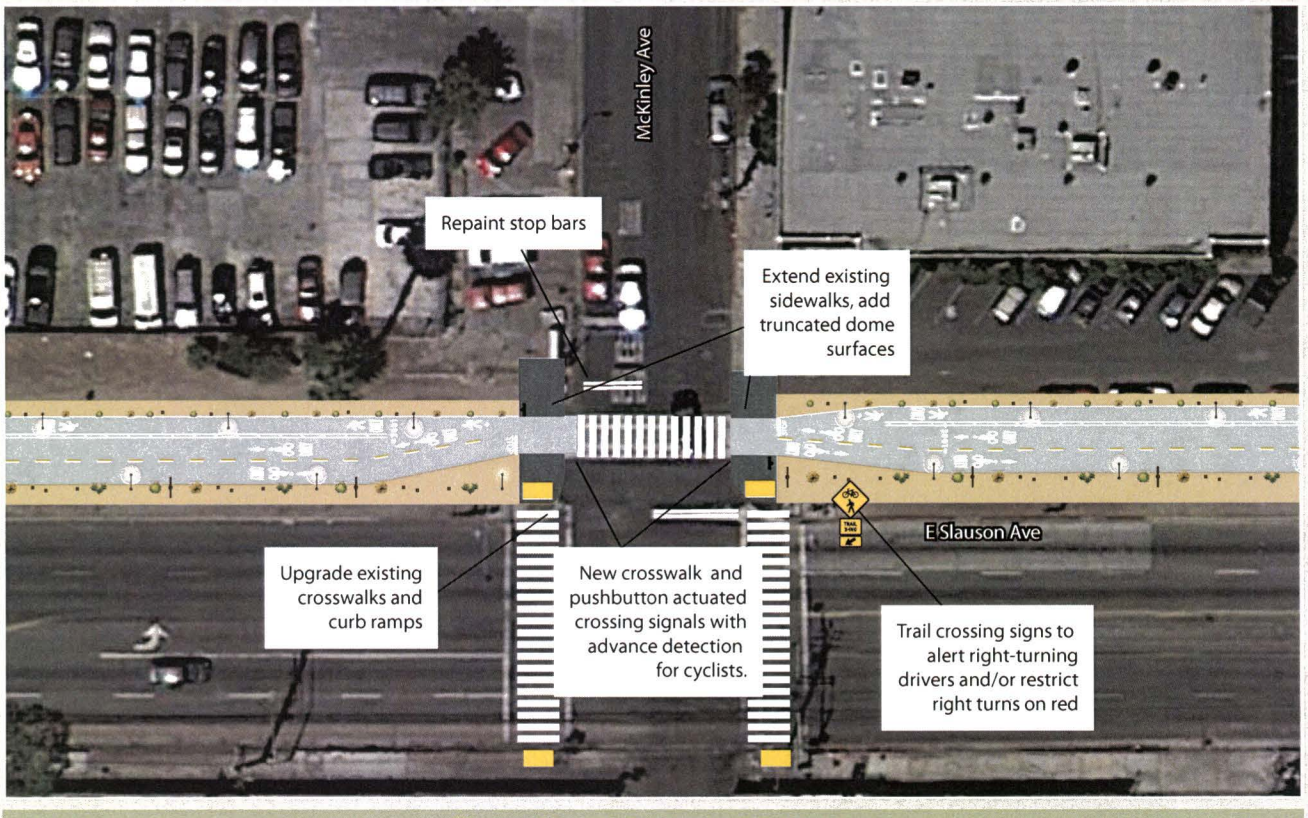


***Figure 45** - 40' Crossing at Existing Signal*

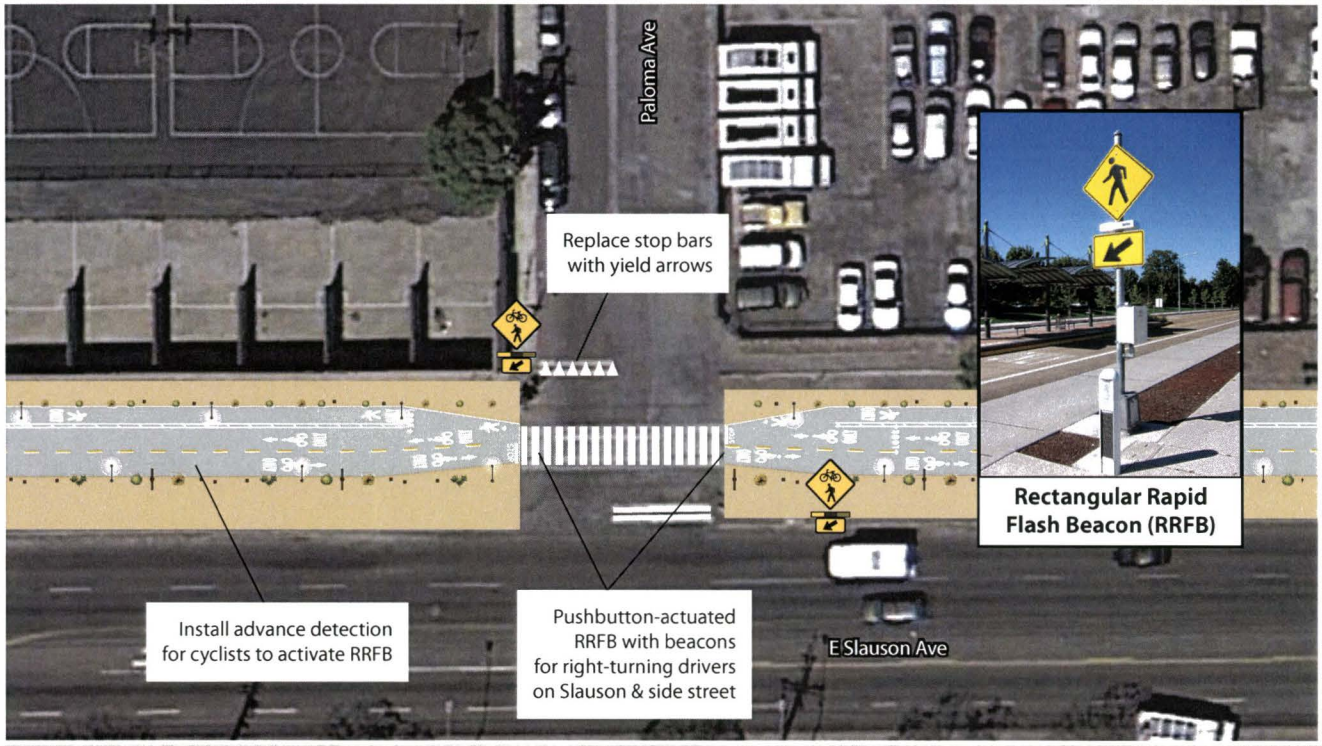


***Figure 46** - 40' Crossing with New Signal*

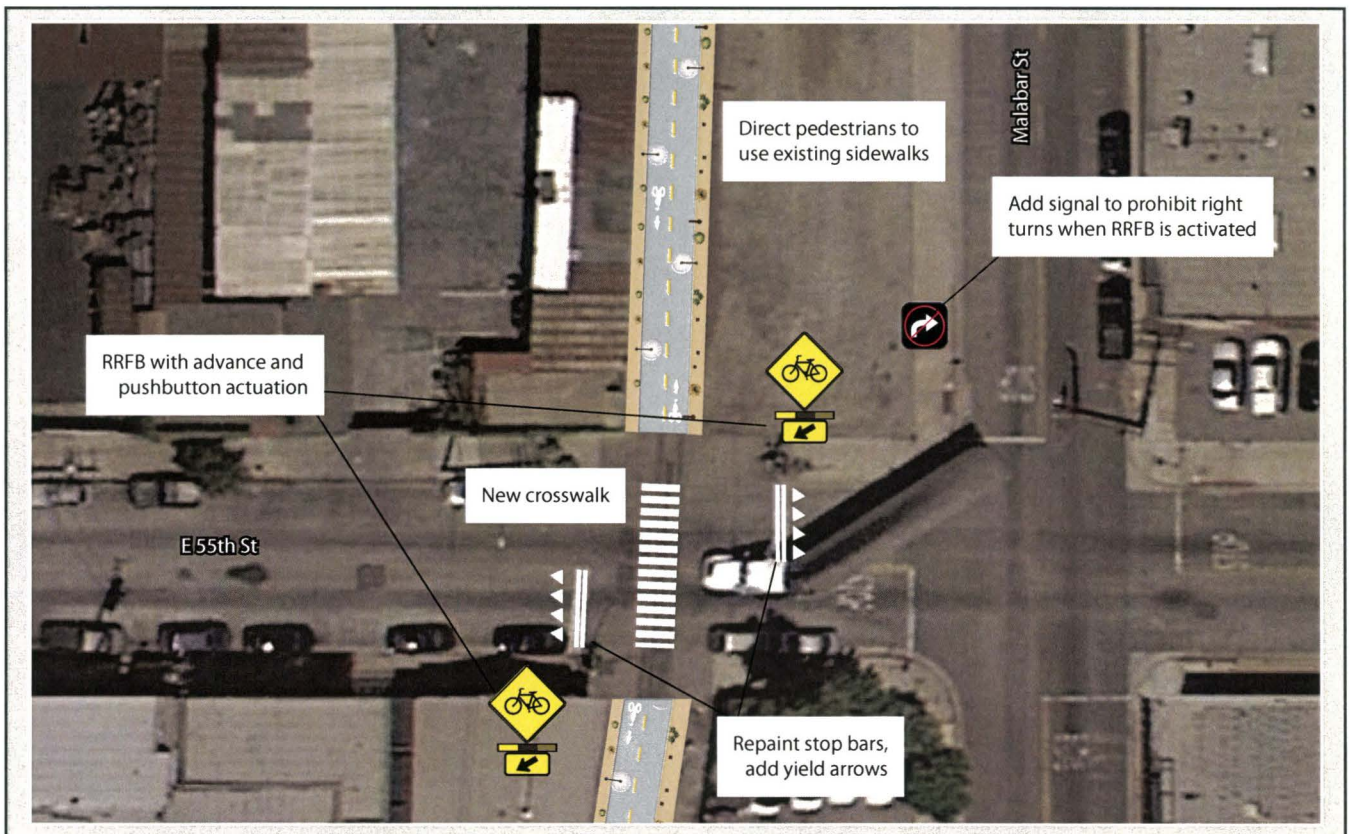


***Figure 47** - Mid-Block Crossing*

Washington Boulevard. These crossings are set back 50 feet from the stop-signed intersections due to the location of the ROW. New enhanced crosswalks will need to be installed along with full signage for motorists, cyclists and pedestrians. Rectangular Rapid Flash Beacons (RRFB) with advance and push button actuation should be installed to alert motorists to pedestrians and cyclists in the crosswalk. Additionally, signage along Malabar Street will prohibit right turns when the RRFB is activated. The ROW is at its most constrained through this area and the ATC will be reserved for the use of cyclists only. Pedestrians will be directed to use the adjacent sidewalk. Because this 2 mile stretch of the ATC is flanked on either side by an active rail line, fencing will line the sides of the path and be placed within a 1 foot buffer along with pedestrian lighting and limited low-scale landscape planting (See **Figure 49**).

Conceptual designs were developed for the Slauson East alternative from where the ROW turns north at Santa Fe Avenue to the Los Angeles River. Due to constrained conditions along Slauson Avenue, once a bicyclist leaves the Metro owned ROW at Santa Fe Avenue, they would need to transition to a Class III Bike Boulevard on a high-traffic street for roughly 4 miles before joining the Bike Path along the Los Angeles River. There is no room to add a Class I or Class II bicycle lanes along this stretch of Slauson Avenue without redesigning the road cross section. Pedestrians could

***Figure 48** - 40' Crossing at New Signal*

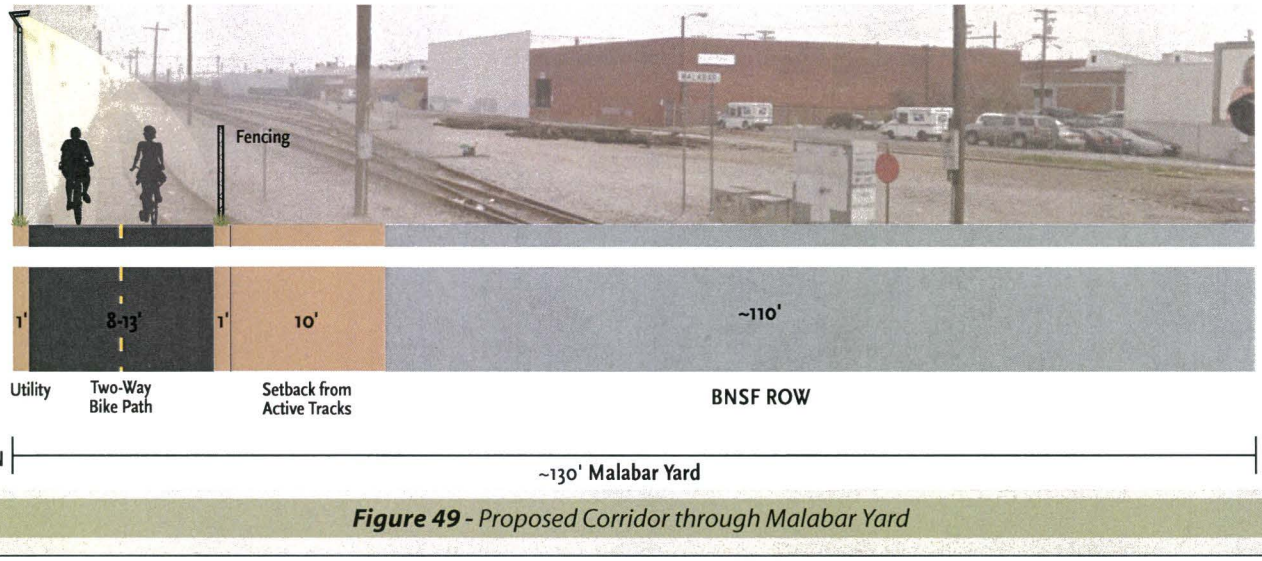


***Figure 49** - Proposed Corridor through Malabar Yard*

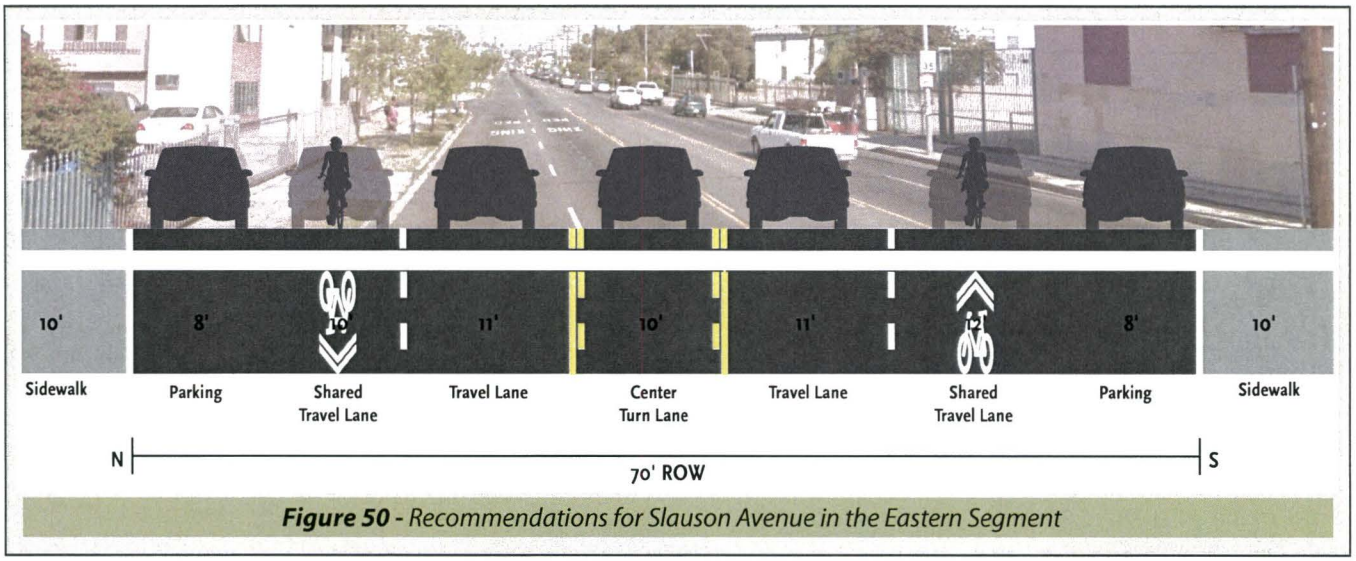


***Figure 50** - Recommendations for Slauson Avenue in the Eastern Segment*

transition onto the existing sidewalks and would need to walk to Santa Fe Avenue to safely cross south. **Figure 50 and Figure 51** show the conceptual layout of the East Slauson Avenue on-street bicycle facility.

Use of the Utility Corridor Alternative would require a cyclist to transition onto the Class III facility on Slauson Avenue until reaching the protected corridor pathway between Alcoa Avenue and Downey Road that would run through the utility ROW. Here pedestrians and bicyclists would join the typical 10-foot cycle track and 6 foot walkway that characterized the Central Segment. **Figure 52 and Figure 53** show the utility ROW and a cross section of the ATC within the 80' width of the utility corridor. Some areas of the Utility Corridor are constrained by "back-of-house" parking areas further north along the ROW.

***Figure 51** - Recommendations for Slauson Avenue in the Eastern Segment*

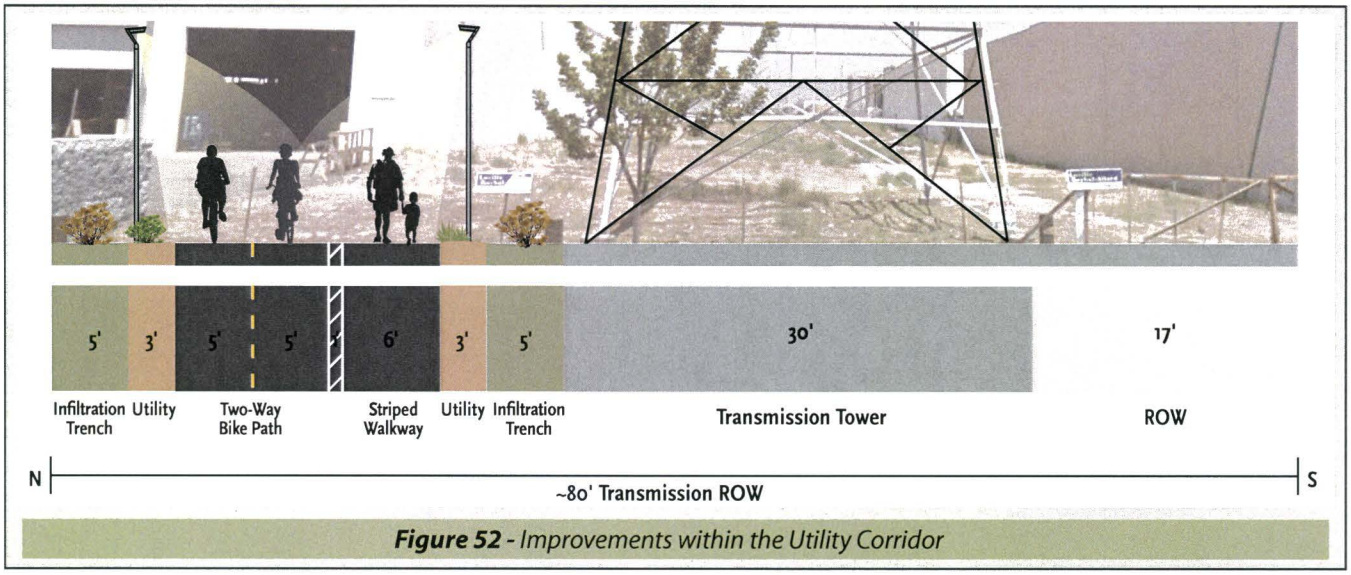


***Figure 52** - Improvements within the Utility Corridor*

The 15% Conceptual Designs also include a concept alternative alignment along the Union Pacific ROW down Randolph Street. **Figure 54** shows a cross-section consistent with the typical sections developed for the Central Segment. There is over 60' of ROW along Randolph Street and a possibility of separating the active transportation corridor from the rail lines by means of fencing. There are major street crossings at Santa Fe Avenue, Pacific Boulevard, Miles Avenue, State Street, Maywood Avenue and Atlantic Boulevard before terminating at the Los Angeles River. Each of these crossings

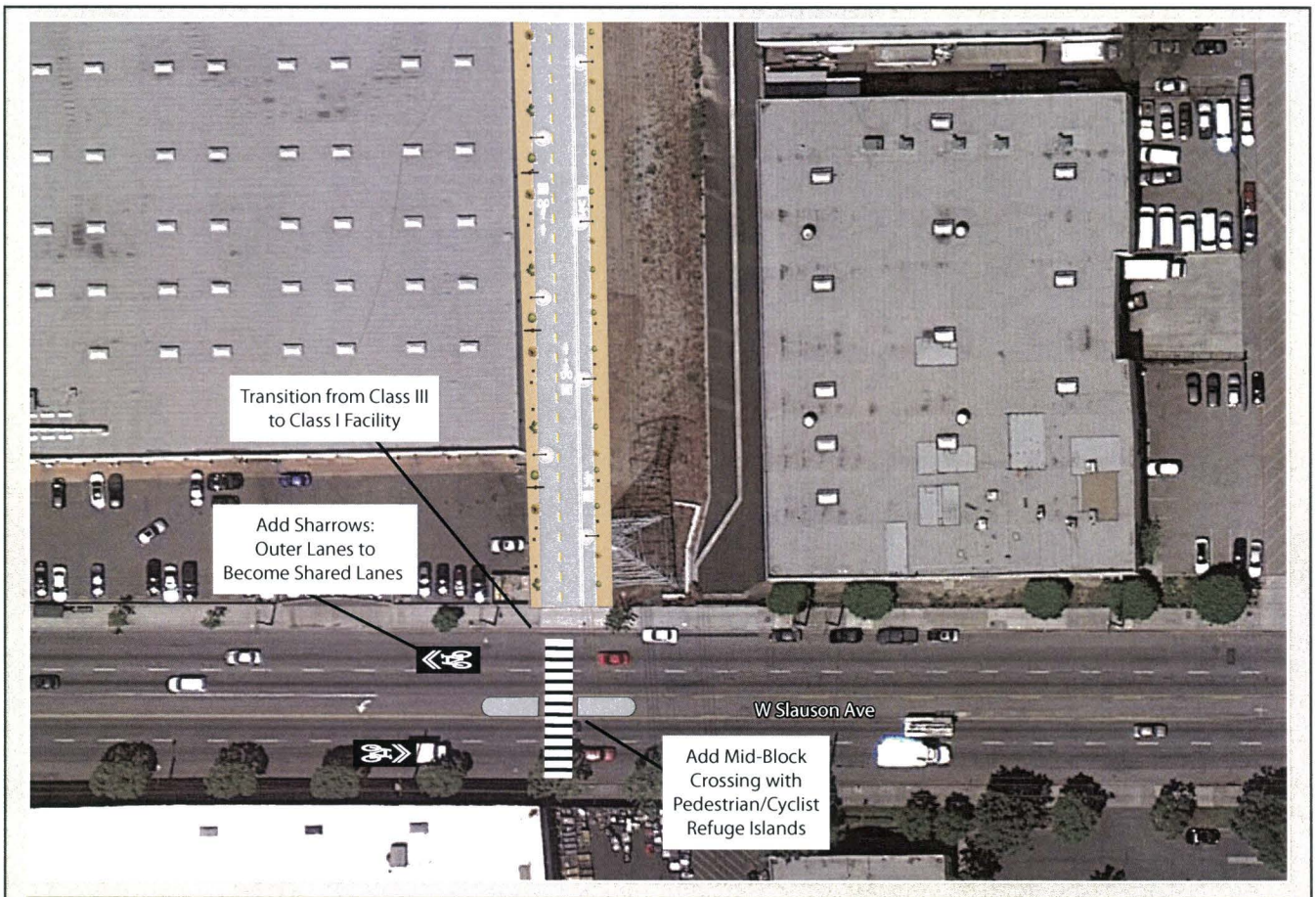


***Figure 53** - Recommendations for Slauson Avenue in the Eastern Segment*

will require further study and treatments developed for designing safe pedestrian and bicycle crossings. Drought tolerant and native planting, infiltration trenches and pedestrian-scaled solar lighting would also be included in this section of the corridor. The City of Huntington Park recently adopted a Bicycle Transportation Master Plan (Final Draft, February 3, 2014) which proposes a Class I bike path along the entire Randolph Street ROW within the City, Class II bike lanes along Pacific Boulevard and State Street, and several Class III bike routes which would cross and connect to this ROW option. The cities of Maywood and Bell also contain sections of this ROW before it connects to the LA River Bikeway.

3.5.4 Conceptual Plan: Metro Blue and Silver Line Stations

Conceptual Designs were developed for the Metro Blue and Metro Silver Transit Line stations on Slauson Avenue. **Figure 55 and Figure 56** show proposed improvements at each of the elevated stations that cross Slauson Avenue. The Metro

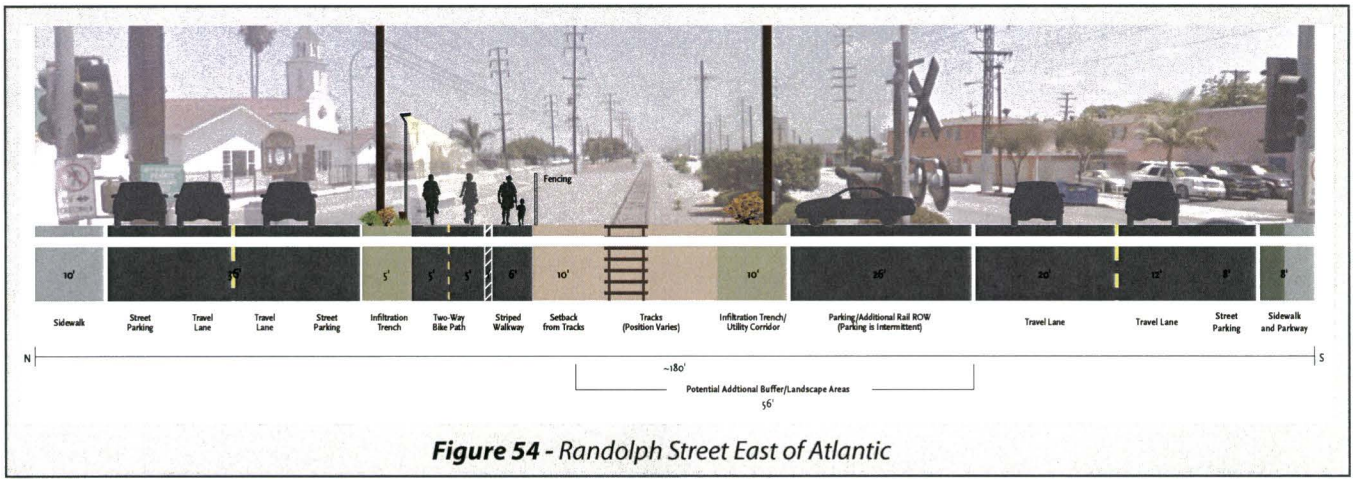


***Figure 54** - Randolph Street East of Atlantic*

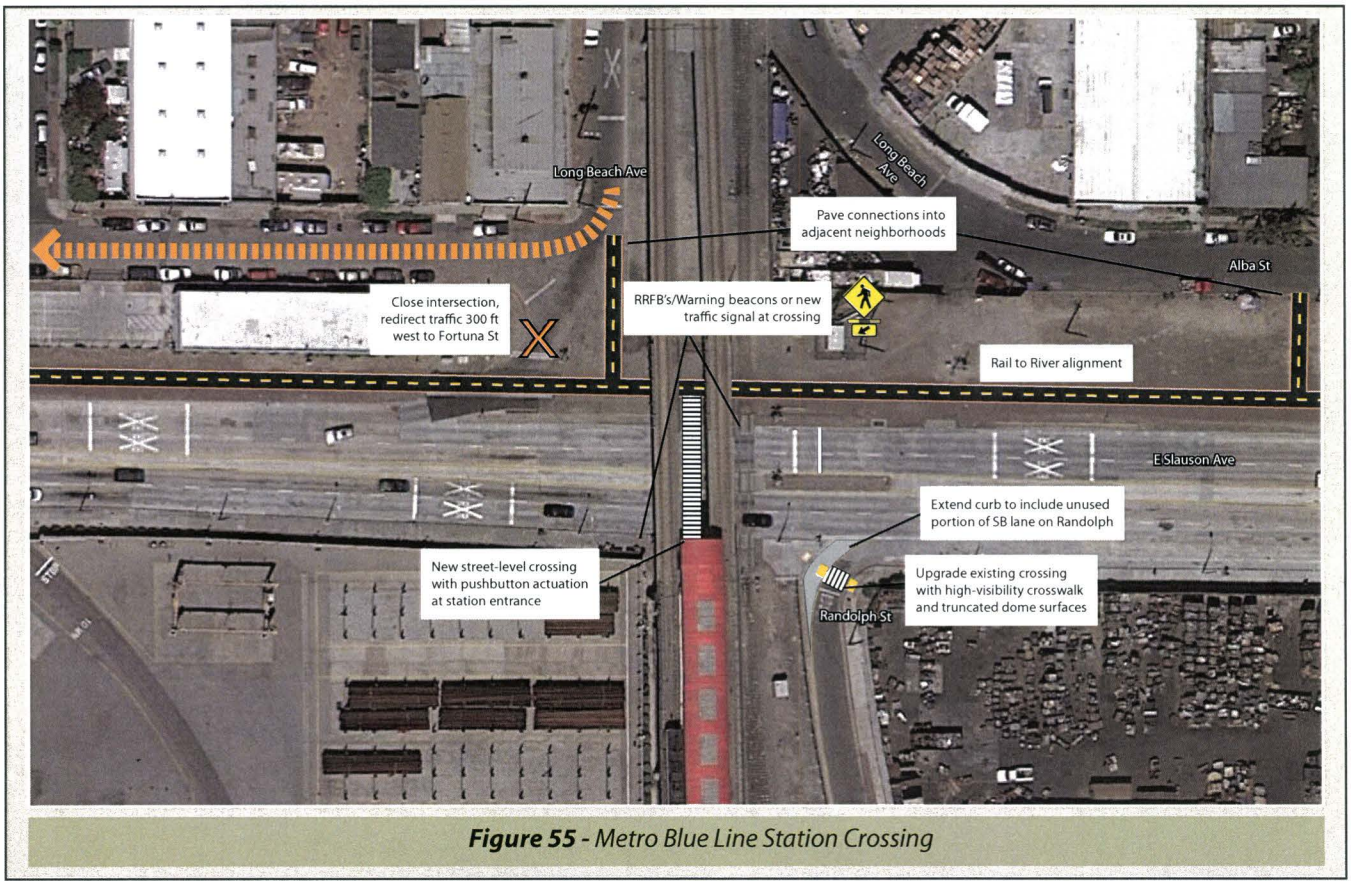


***Figure 55** - Metro Blue Line Station Crossing*

Blue Line Station is located mid-block along Long Beach Avenue. Currently Long Beach Avenue is split by the Metro Blue Line tracks and traffic flows one way on each side of the Metro ROW. The south bound connection to Slauson is via an unsignalized, right turn only access road to west bound Slauson Avenue. The conceptual designs call for closing this access over the ATC and redirecting traffic west to Fortuna Street. Because passengers who have disembarked on the south side of Slauson frequently cross mid-block with no safe crossing infrastructure, the conceptual designs call for a new street-level enhanced crosswalk with push button activation at the station entrance and would require construction of a new crosswalk, signage and pedestrian signals in order for pedestrians to safely cross to the intermediate ACT.

Passengers on the Metro Silver Line leave the station on the south side of Slauson Avenue midway between existing crosswalks at the ramps to the I-110 Freeway. Enhancing the crosswalks in both locations and supplying push button signaling would allow passengers who wish to use the intermediate ACT the ability to safely cross Slauson Avenue.

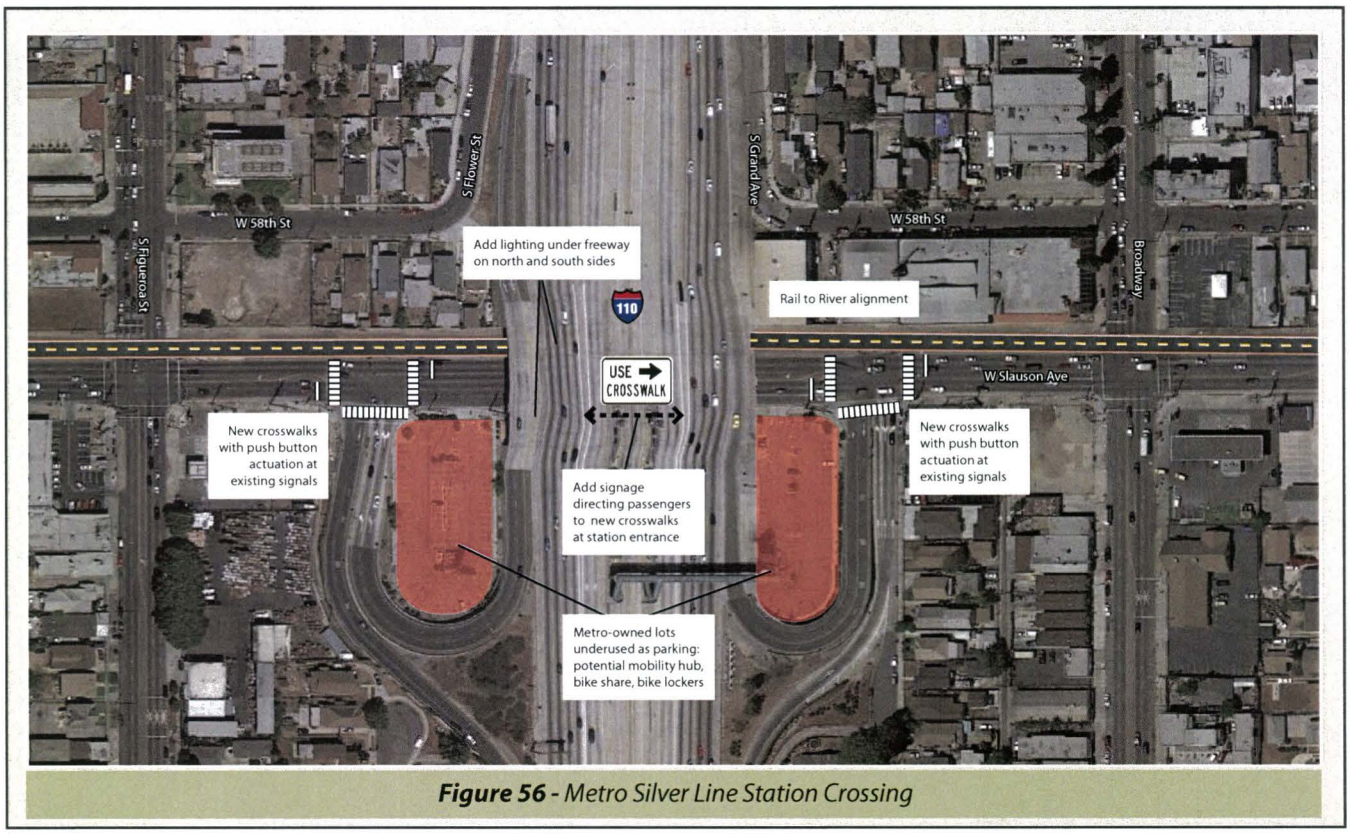


***Figure 56** - Metro Silver Line Station Crossing*

ATC AMENITIES

In order to provide a safe experience and enhance the character of the community, a suite of amenities are planned in the 15% Conceptual Designs. Though limited in scope, by creating a safe and visually pleasing ROW, these amenities can act as a catalyst to improve the aesthetics and economic development of the entire community. Plant material proposed in the conceptual plans consists of low growing, drought tolerant and native plantings clustered throughout the length of the ATC. Enhanced "gateway" planting would be appropriate at select location along the corridor such as the entry to Augustus F. Hawkins Nature Park, Los Angeles Academy Middle School, Los Angeles River nexus and the Metro-owned "Depot" property at Central Avenue.

Infiltration trenches will act not only as filters for rain runoff, but will provide areas for planting along the ROW.

Recycled railroad ties can act as places to sit or as barriers where needed. Solar lighting will provide pedestrian-scaled lighting where light levels and ambient light from street lighting is measured to be insufficient. Full suites of wayfinding and regulatory signage would be provided along and adjacent to the ATC and, in areas with expanded ROW width, there may be room to add interpretive signage relating to the history of the area, the Slauson family and the railway.

3.6 PEDESTRIAN AND BICYCLE TRAVEL DEMAND MODELING

This section forecasts the number of pedestrians and bicyclists that are likely to use the Metro owned ROW as well as each of the alignment options under consideration if constructed. Forecast bicycle and pedestrian trips include commute, utilitarian, and social trips. Utilitarian trips include travel for daily activities such as access to schools, health facilities, shopping areas, while social trips are made for pleasure or exercise.

Modeling has been prepared based on current and anticipated activity levels, connections to transit, areas with high concentrations of underserved populations and review of the overall transportation system. Modeling provides an effective way to factor multiple variables and produce a simplified result for evaluation of the various alignments.

The modeling provides a general understanding of expected activity in the pedestrian environment by combining categories representative of where people live, work, play, access public transit and go to school into a composite sketch of regional demand. Area specific land use and transportation factors, such as transit service, local retail and service destinations, and schools are considered, as well as demographic factors.

DEMAND MODELING PROVIDES THE FOLLOWING BENEFITS:

- Quantifies a variety of factors that affect bicycle and pedestrian activity.
- Objectively identifies priority destinations like schools, and parks.
- Provides comparative analysis of multiple alignments under consideration.
- Provides community stakeholders guidance on segments most likely to have high utilization.

3.6.1 Forecast Trips

Figure 57 and Figure 58 identify the forecasted number of utilitarian and social bicycle and pedestrian trips for the Metro owned ROW as well as each of the alignment options under consideration. Full data is provided in **Appendix D**.

PEDESTRIAN TRIPS

SEGMENT:	WEEKDAY	WEEKDAY PER MILE	ANNUALLY	ANNUALLY PER MILE
WEST				
Slauson Ave (1.41 mi)	1,810	1,300	493,000	350,000
59th St (1.62 mi)	2,660	1,600	724,000	447,000
67th St (2.02 mi)	2,160	1,100	588,000	291,000
CENTRAL (3.61 MI)	4,650	1,300	1,266,000	351,000
EAST				
Malabar (2.79 mi)	950	300	260,000	93,000
Utility Corridor (3.05 mi)	1,740	600	473,000	155,000
Slauson Ave (5.3 mi)	6,700	1,300	1,825,000	344,000
Randolph Street (4.34)	14,970	1,800	2,086,000	481,000

***Figure 57** - Forecast Weekday Pedestrian Trips*

As shown in **Figure 57**, weekday daily pedestrian trips are expected to range by segment from approximately 950 to 14,970 users, and the annual usage by segment ranges from 260,000 to 2.1 million trips. When assuming implementation of three segments along the entire study corridor, the ATC corridor is forecast to attract between 2.0 million and 4.0 million pedestrian trips annually.

Figure 58 identifies the number of utilitarian and social bicyclist trips forecast using the comprehensive B/PSA model for the Metro owned ROW as well as each of the alignment options under consideration.

BICYCLE TRIPS

SEGMENT:	WEEKDAY	WEEKDAY PER MILE	ANNUALLY	ANNUALLY PER MILE
WEST				
Slauson Ave (1.41 mi)	1,810	1,300	108,000	77,000
59th St (1.62 mi)	2,660	1,600	122,000	75,000
67th St (2.02 mi)	2,160	1,100	171,000	85,000
CENTRAL (3.61 MI)	270	70	1,395,000	386,000
EAST				
Malabar (2.79 mi)	210	80	109,000	39,000
Utility Corridor (3.05 mi)	340	110	174,000	157,000
Slauson Ave (5.3 mi)	2,420	460	1,233,00	233,000
Randolph Street (4.34 mi)	4,680	1,080	1,608,000	842,000

***Figure 58** - Forecast Weekday Bicycle Trips*

As shown in **Figure 58**, weekday daily bicyclists trips is forecasted to range by segment from approximately 210 to 4,680 users, and the annual usage by segment ranges from 108,000 to 1.6 million trips. When assuming implementation of three segments along the entire study corridor, the ATC corridor is forecasted to attract between 1.6 million to 3.2 million bicyclists trips annually.

As also shown in **Figure 58**, the highest bicycle activity is forecast for the Central Segment and the Randolph Street Segment with values surpassing 3 million cyclists annually. The facilities with the greatest expected bicycle and pedestrian activity are low-stress local roadways and off-street pathways adjacent to commercial and residential uses and provide those that access to multiple destinations.

3.7 ENGINEERING CONSIDERATIONS

Engineering review was completed on the conceptual plans for each study segment to identify factors to address in future design evaluation and are reflected in feasibility assessment and/or cost estimates. Engineering considerations have been summarized in terms of key topics, including utility conflicts, drainage issues, and rail removal issues.

3.7.1 Utility Conflicts

Few utility conflicts are expected since most of the study segments were constructed to host rail or auto traffic. Where an intermediate ATC would potentially replace existing railroad tracks, it can be assumed that any utilities (both aerial and below ground) will already have enough clearance to satisfy the needs of bicycle and pedestrian purposes. This is because trains have both larger envelopes which aerial utilities must clear, and are heavier than bicycles and pedestrians when it comes to the influence area for underground utilities.

Much of the rest of the corridor is under study for bicycle and pedestrian improvements in existing street rights-of-way. Sharrows, bicycle lanes and or bicycle boulevards can be implemented with signing and striping improvements only, and should not require any significant utility relocations. Sidewalk widenings may raise minor utility conflicts, but it is assumed that the widenings will only entail paving existing parkway areas and not require major relocations or utility poles or other utility infrastructure. Sidewalk enlargement may trigger the relocation of drainage catch basins, however, so roadway hydrology will need to be considered when designing any sidewalk widening.

One scenario with potential utility relocations would occur if the intermediate ATC is constructed adjacent to an existing railroad track or utility corridor. This would be the case in the Harbor Subdivision ROW north of Slauson Avenue, along Randolph Avenue, and along the utility corridor parallel to Downey Road. In these areas, the intermediate ATC would be in conflict either with longitudinal utilities which are located near the edge of the ROW to miss the existing railroad tracks, or transverse utilities which may have poles located in the path of the new corridor.

At street crossings, the path may also be in conflict with crossing gates, signal boxes, and other equipment required for road/rail grade crossings. Further definition of utility conflicts and potential solutions to address them will be carried out during Preliminary Engineering.

3.7.2 Drainage and Stormwater Treatment Opportunities

Construction within the Metro owned ROW presents an opportunity to enhance the corridor beyond transportation improvements. By incorporating appropriate drainage, stormwater capture and treatment, native landscape features, and other low impact development best management practices (BMPs), the ecological, infrastructural, and aesthetic function of the entire corridor can be improved.

The City of Los Angeles Low Impact Development (LID) Handbook offers guidance on stormwater management measures and BMP prioritization and selection. The examples described in this section are typically intended for permanent installation, therefore, further study and analysis will be needed to determine which BMPs are most appropriate for temporary installation on this corridor. Even installed on a temporary basis, stormwater treatment measures offer multiple environmental and community benefits. This corridor presents an opportunity to potentially improve stormwater run-off through temporary implementation.

Depending upon the infiltration rate of on-site soils and the area of the site being landscaped, a variety of BMPs, are evaluated, with varied levels of cost, complexity, and effectiveness. If a sufficient amount of water is unable to be retained, it must be mitigated elsewhere within the same project or on similar land uses within the same sub-watershed.

When evaluating the feasibility of various BMPs, the available ROW beyond that required for the paved portions of the ATC will largely determine which are the most appropriate LID options. Where there is ample ROW area outside of the paved pathway, treatments such as infiltration trenches, infiltration basins, and bioretention basins (See **Figure 59**) can be used.

Where ROW is only narrow enough to accommodate a path, permeable paving (porous paving materials that allow the movement of stormwater) (See **Figure 60**) and/or infiltration galleries (horizontal drains laid below the water table to collect groundwater) can be used, or the excess runoff can be mitigated in other parts of the ROW where sufficient additional space exists. Pervious paving is not recommended for the entirety of the corridor due to higher installation and maintenance costs and a shorter lifespan compared to standard asphalt. The additional funds required for pervious paving can be more effectively spent on landscape and infiltration areas, where space permits, which will also improve aesthetics and ecological function.

There is significant potential to introduce these BMPs to other jurisdictions within the study area, improving the quality of life for residents and the ecological health of the region. As appropriate, BMPs can be designed to capture water from adjacent streets and properties, reducing the flow of urban runoff into the Pacific Ocean via the Los Angeles River, helping to recharge groundwater within the basin. Urban runoff, particularly in industrial areas with heavy truck traffic, such as the study area, will contain high concentrations of pollutants. These pollutants can be greatly reduced through the use of plant-based, microbiological, and physical (gravel, geotextile) filters, all of which work together to deliver cleaner water to our aquifers and oceans.

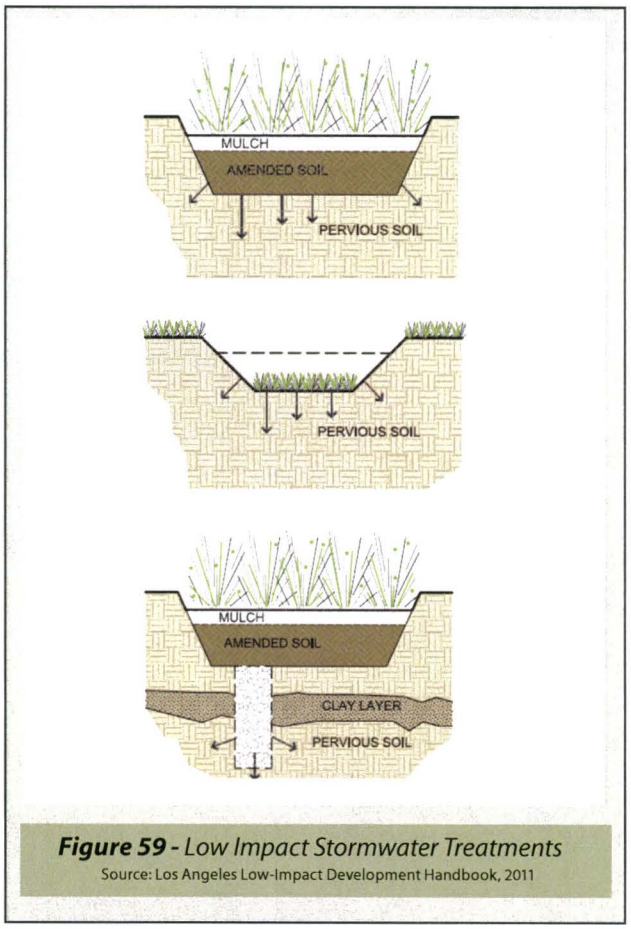


***Figure 59** - Low Impact Stormwater Treatments*
Source: Los Angeles Low-Impact Development Handbook, 2011

Landscaping is another opportunity to augment stormwater retention on-site (**Photo 12**). Using native plants in these areas reduces the need for irrigation beyond that which is captured from storm events, and many native plants will survive without irrigation following an initial establishment period. Providing landscaped

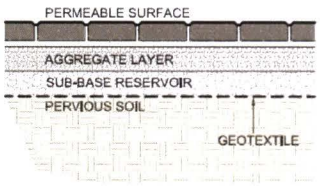


***Figure 60** - Low Impact Stormwater Treatments*
Source: Los Angeles Low-Impact Development Handbook, 2011

areas helps to beautify the project with a plant palette that has location appropriate water requirements, and is in harmony with surrounding ecosystems. Landscape areas help offset the urban heat island effect through evapotranspiration from plants' leaves, and also by simply shading the underlying pavement. Trees planted along the corridor would make for a more comfortable and desirable place for users of the corridor and provide aesthetic and environmental improvements for the surrounding areas. Trees also help reduce airborne pollutants. The study area is in a highly industrial, built-out area of Los Angeles, but is in close proximity to the Los Angeles River, facing imminent restoration, as well as the large parklands surrounding the Baldwin Hills. The Metro ROW can provide a corridor for active transportation as well as an ecological bridge that reaches from the River toward the parklands and ocean to the west.

Further study will be required to determine feasibility of these recommendations, including geotechnical and soil surveys, runoff calculations, and stormwater volumes surrounding the ROW. Actual BMPs and landscape installations may differ from these recommendations based upon findings.

Additionally, in wider areas of the ROW, partnerships could be formed with park and green space development entities, where stormwater capture and landscape can become part of public open space, bringing infrastructure that functions as a park to this historically park-poor part of Los Angeles County.

A concern for the inclusion of landscape elements into the ATC is how the project is seen in relation to Section 4(f) regulations. The Department of Transportation Act (DOT Act) of 1966 included a special provision - Section 4(f) - which stipulated that the Federal Highway Administration (FHWA) and other DOT agencies cannot approve the use of land from publicly owned parks, wildlife and waterfowl refuges, or public and private historical sites unless there is no feasible and prudent alternative to the use of land or the action includes all possible planning to minimize harm to the property resulting from use.

As an active transportation project, the intermediate use of the ROW for a bicycle/pedestrian commuter path should not present current or future Section 4(f) impacts. However, preliminary research indicates that should the project be deemed as a recreational trail or have primarily recreational benefits, it is likely that Section 4(f) impacts could apply. This would require replacement of land equal to that which may fall under Section 4(f), if the path is ever converted to a BRT or LRT.

***Photo 12** - Rain Garden*

3.7.3 Rail Removal Issues

For sections of the Harbor Subdivision ROW such as along Slauson Avenue, it is assumed that the existing railroad tracks will no longer be used if the intermediate ATC is implemented. There are two potential options for constructing the intermediate ATC: paving over the existing rails, or removing the existing rails and building in their place. Paving over the existing rails will likely be less expensive in the short-term, but will potentially have several consequences. One is that construction may be more difficult given there will be various types of foundations for the path (rock ballast, wooden ties, steel rails). Another will be the long-term appearance and wear of the path. This may be affected by the presence of the rails, with the potential for differential settlement and/or cracking of the concrete. Lastly, paving over the existing rail will raise the height of the pathway up to one foot and could cause safety issues.

Removing the existing rails would likely cost more in the short-term, but will be easier for the construction process, and result in better long-term wear and maintenance of the path. It should also be noted that while rail removal activities themselves take time and money, steel rails have a high salvage value given the high price of metal in the United States. With the ability to sell the rail or reuse it in other sections of railroad, rail removal can have costs as low as $25 per foot.

3.8 COST ESTIMATES

Cost estimates have been prepared for each study segment to identify the projected amount of funding that would be needed both to construct and maintain the improvements. This section describes the methodology, sources, and unit costs used for the estimate, and then show the capital and operating costs for the various intermediate ATC options.

3.8.1 Methodology

Costs have been estimated for the feasibility review by developing quantities for each construction item, and then assigning a unit cost to each item based on similar construction activities in Southern California. The preliminary estimates of construction costs are based upon the recommended intermediate ATC alignment and alternatives described in this report.

IMPORTANT ASSUMPTIONS USED TO ARRIVE AT THESE ESTIMATES INCLUDE:

- All costs are in 2014 dollars
- Costs do not include property acquisition or BNSF negotiations
- Peripheral roadway intersection improvements are not included
- Standard construction methods and materials are used
- Unit costs have been developed for small items (such as a square foot of concrete), and then combined with other items that make up typical sections of the project
- Costs include 30% of construction costs to cover design costs
- Costs include 30% of construction costs as a contingency
- Costs are broken out by study segment to allow for various options to be compared on the western and eastern ends of the intermediate ATC

3.8.2 Sources

Costs are based on construction cost estimates from recent capital projects and bicycle master plans in Southern California. Costs do not include potential mitigation of hazardous waste or archeological issues.

SOURCES FOR THE ESTIMATE INCLUDE THE FOLLOWING:

- South Bay Metro Green Line Extension - Capital Cost Estimate
- Riverside County Transportation Commission Perris Valley Line Project (Construction 2013-2015) - Capital Cost Estimate
- County of Los Angeles - Bicycle Master Plan - Engineering Cost Estimate
- City of Los Angeles 2010 Bicycle Plan – Operation & Maintenance Cost Estimate
- Unit costs from these sources have been escalated so that all costs are in 2014 dollars

3.8.3 Cost Estimate by Segment

Capital unit costs utilized in this report are shown in **Table 3-2 - Table 3-3**. The cost estimates including Capital and Annual O&M costs has been compiled for each segment as shown in **Table 3-2**.

As shown in **Table 3-2,** the lowest cost option for the intermediate ATC (See **Figure 61**) is to follow Slauson Avenue the entire way from Crenshaw Boulevard to the LA River. The lowest cost option would cost approximately $15.9 million to build, and $88,000 a year to maintain. The most expensive option for the intermediate ATC is to use 67th Street on the

***Figure 61** - Study Segment Overview*

west end, and the Union Pacific railroad ROW along Randolph Street on the east end. The highest cost option would be approximately $34.2 million to build, and $145,000 a year to maintain.

Each alternative segment includes elements used to unit costs in determining the estimates. Pathway widths of the ATC are consistently 17' wide throughout except through the segment of the ATC where the Metro owned ROW is 15 feet. All alignments also include pricing for track removal, pedestrian lighting , striping and signage. Additionally, costs have been developed for limited drought tolerant landscaping, stormwater retention basins and furnishings (benches, trash cans, etc.). **Table 3-2** provides a summary of estimated costs for each of the recommended intermediate segments and alternatives as well as Annual Operations and Maintenance Costs for each segment in tables. **Table 3-3** provides built-up costs per ROW width. See **Appendix F** for full detailed cost tables for each segment alternative.

Metro Rail to River Intermediate ATC Feasibility Study Capital Cost Estimate - April 28, 2014

***Table 3-2** - Summary Sheet*

Summary of Cost by Segment	Length (mile)	Capital Cost (2014 $)	Cost Per Mile	Annual O & M Cost (2014 $)
West Options				
Slauson Avenue to Crenshaw/Slauson (Class III)	1.4	$480,394	$343,138.57	$6,884
59th Street to Crenshaw/Slauson (Class I & III)	1.6	$2,443,958	$1,527,473.70	$13,490
67th Street / West Boulevard to Florence/West (Class I & III)	2.0	$6,600,019	$3,300,009.50	$25,443
Central Segment				
Slauson Avenue / Western to Long Beach Avenues (Class I)	3.6	$12,205,805	$3,390,501.30	$54,318
East Options/ Proposed Infrastructure				
Malabar Corridor to River (Class I)	2.8	$10,483,690	$3,744,175.00	$42,315
Utility Corridor to River (Class I)	3.3	$7,138,555	$2,163,198.40	$34,441
Slauson Avenue to River (Class III)	4.1	$3,219,306	$785,196.58	$26,657
Randolph Street to River (Class I or II)	4.3	$15,367,640	$3,573,869.70	$65,114

Table 3-3- *Unit Cost Detail, April 28, 2014*

Description	Unit Cost	Unit	Notes
Typical Alignment			
Asphalt Concrete Trail	$10	SF	
PCC Sidewalk	$7.15	SF	
Striping	$1.50	LF	Per Line
Symbol	$0.50	LF	$150 per symbol, spaced every 300'
Signage	$2	LF	$300 per sign, 2 spaced every 300'
Landscaping	$1.20	SF	
Benches	$7	LF	$2,100 per bench, every 300'$7
Fencing	$50	LF	Assume chain-link
Remove Railroad Track	$25	LF	
Lighting	$150	LF	(Assumes 1 $3,750 light every 25 feet)
Class II Bike Lanes	$4.90	LF	
Bicycle Boulevard	$3.35	LF	
Crossings			
Stop Line	$2	LF	
Pavement Symbol	$150	EA	
Signage	$300	EA	
Curb Cut & Ramp	$2,000	EA	
Ladder Crosswalk	$25	EA	$2.50 per SF, 10' wide crosswalk
Add pushbutton to signal	$2,000	EA	Per crosswalk
Add HAWK signal	$50,000	EA	
Other Costs			
Design Costs	30%		Construction Costs
Contingency	30%		Construction + Design Costs

Table 3-3 *Built-Up Unit Costs (including Design & Contingency)*

Description	Unit Cost	Unit	Notes
Typical Alignment			
15' ROW - Exclusive	$480.00	LF	13' trail width, one striped line, symbols, signage, lighting
20' ROW -Exclusive	$564.00	LF	17' trail width, three striped lines, symbols, signage, benches, lighting
25'-33' ROW - Street-Adjacent	$635.00	LF	17' trail width, three striped lines, symbols, signage, 14' landscaping width, benches, remove track, lighting
25'-33' ROW - Exclusive	$804.00	LF	17' trail width, three striped lines, symbols, signage, 14' landscaping width, benches, fencing, remove track, lighting
33'-40' ROW - Street-Adjacent	$647.00	LF	17' trail width, three striped lines, symbols, signage, 20' landscaping width, benches, remove track, lighting
> 40' ROW - Street Adjacent	$647.00	LF	17' trail width, three striped lines, symbols, signage, 20' landscaping width, benches, remove track, lighting
> 40' ROW - Exclusive	$816.00	LF	17' trail width, three striped lines, symbols, signage, 20' landscaping width, benches, fencing, remove track, lighting

4 Feasibility Recommendations

Transportation modes work best when knitted together into complete systems. Filling strategic gaps in existing pedestrian and bicycling networks is the best way to minimize cost and maximize impact.

Networks connect people to popular destinations such as transit hubs, schools, places of employment, shops and parks. Networks of sidewalks, bicycle and pedestrian paths, trails, and on and off-street bikeways provide safe and affordable mobility for people of all ages and abilities.

Intermediate implementation of an active transportation project along this Local North section of the Harbor Subdivision in South Los Angeles would fill a gap in the current countywide bicycle network, deliver increased transit connectivity options, increase mobility choices, and return significant economic and health benefits.

This section evaluates the feasibility of providing an intermediate ATC to link major Metro transit facilities with the LA River utilizing the Metro owned ROW and other routes. There are multiple alignment options on the western and eastern ends of the study area, some of which do not use the Metro owned ROW. Performance criteria were developed for evaluating, comparing and ranking these additional alignment concepts.

STUDY SEGMENTS (SEE FIGURE 62)

- Slauson Avenue West (Slauson Avenue from Denker Avenue to Metro Crenshaw/LAX LRT Crenshaw/Slauson Station)
- 59th Street (Metro owned ROW to 59th Street to Crenshaw/LAX LRT Metro Crenshaw/Slauson Station)
- 67th Street/West Boulevard (Metro owned ROW to 67th Street to Metro Crenshaw/LAX LRT West/Florence Station)
- Slauson Central (Slauson Avenue from Denker Avenue to Metro Blue Line LRT)
- Randolph Street (from Metro Blue Line LRT to Randolph Street Union Pacific owned Rail ROW)
- Malabar Segment (Metro owned ROW from Metro Blue Line LRT north to Washington Boulevard)
- Utility Corridor (Slauson Avenue to Southern California Edison owned ROW)
- Slauson Avenue East (Slauson Avenue from Metro Blue Line LRT to Los Angeles River)

***Figure 62** - Study Segments Overview*

WESTERN SEGMENT OPTIONS: SLAUSON AVENUE

SUMMARY

This segment would provide a connection to the proposed Metro Crenshaw/LAX Transit Line that continues directly to the west as the Metro owned ROW bends to the south of Slauson Avenue at Western Avenue. Characterized by commercial land uses and heavy vehicular traffic, this segment offers greater opportunities for shopping but none for a dedicated active transportation corridor. High rates of collision indicate a need for safety enhancements.

DETAILS

- Length: 1.41 Miles
- Pedestrian Collisions Per Mile Per Year: 24
- Bicycle Collisions Per Mile Per Year: 10
- Public Destinations Per Mile: 39
- Commercial Destinations Per Mile: 46
- Planning-Level Cost Per Mile (Millions): $0.35
- Recommended Bicycle Facilities: Class III

OPPORTUNITIES

- Provides a direct connection to future Slauson/ Crenshaw station
- Existing sidewalks for pedestrian users
- High level of commercial activity
- Remains within public ROW, with more eyes on the street

CONSTRAINTS

- Outside of Metro owned ROW
- No space for off-street bicycle facilities without lane removal
- Heavy vehicular traffic uncomfortable for cyclists riding on-street
- Existing commercial activity not pedestrian-oriented
- Higher likelihood of collisions without infrastructure improvements
- Few on-street amenities: street trees, landscaping

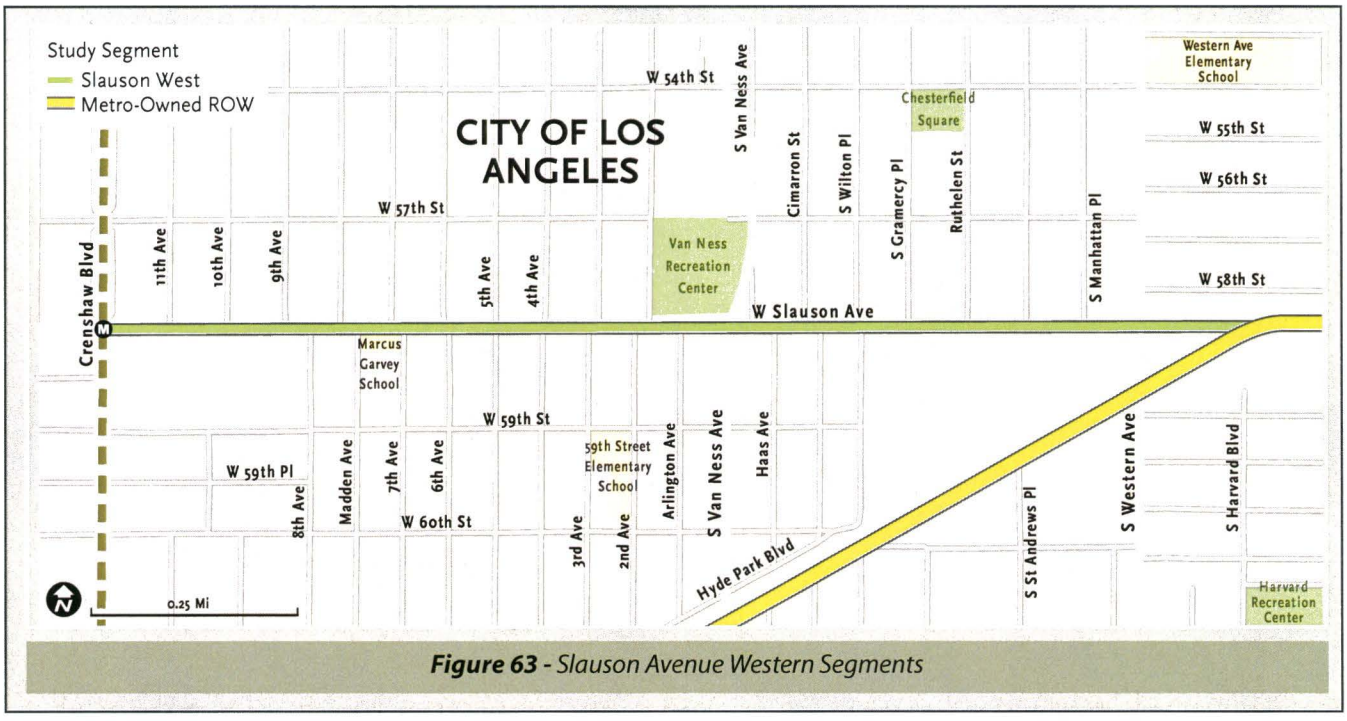


***Figure 63** - Slauson Avenue Western Segments*

WESTERN SEGMENT OPTIONS: 59TH STREET

SUMMARY

This segment follows the Metro owned ROW behind the shopping center at Slauson Avenue and Western Avenue, but leaves the ROW at Wilton Place, heads north to 59th Street, and then continues to Crenshaw Boulevard, where it meets the future Slauson/Crenshaw Metro station. The route is predominantly residential, with commercial nodes at either end and an elementary school in the middle. Improvements would largely consist of bicycle boulevard treatments, with a short Class I segment where it follows the Metro owned ROW.

DETAILS

- Length: 1.62 Miles
- Pedestrian Collisions Per Mile Per Year: 23
- Bicycle Collisions Per Mile Per Year: 9
- Public Destinations Per Mile: 29
- Commercial Destinations Per Mile: 2
- Planning-Level Cost Per Mile (Millions): $1.52
- Recommended Bicycle Facilities: Class I (on Metro ROW) & Class III (along 59th Street)

OPPORTUNITIES

- Utilizes only a portion of the Metro owned ROW
- Neighborhood route connects to homes and schools
- Avoids busy streets while connecting to the Metro Crenshaw/LAX Transit Line Station at Crenshaw/ Slauson

CONSTRAINTS

- Route only remains on Metro owned ROW for approximately ½ mile
- Mile-long route through neighborhood is less beneficial for non-residents and possibly creates more street traffic for residents
- Minimal connection to land uses or commercial activity

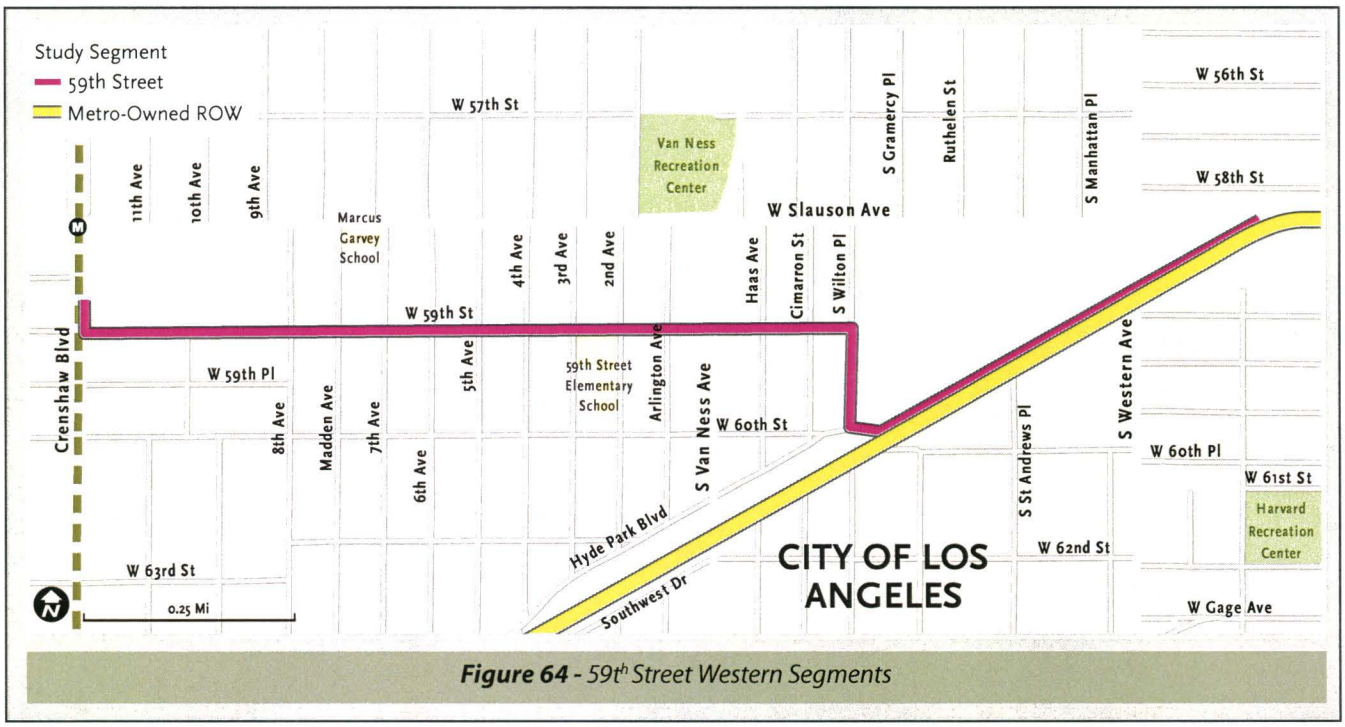


***Figure 64** - 59th Street Western Segments*

WESTERN SEGMENT OPTIONS: 67TH STREET

SUMMARY

This segment follows the greatest amount of the western portion of the Metro owned ROW, and passes behind a mix of commercial, residential, and industrial uses. This area is currently abandoned, and will require a variety of measures to ensure the safety of potential users. While pedestrians may be less likely to use this segment, cyclists would enjoy a fully off-street connection to the future Metro Crenshaw/LAX Transit Line's Florence/West Station. The segment leaves the ROW at 67th Street to avoid conflict with the future light rail line, which emerges from a tunnel just south of this location. Insufficient space exists to run a path parallel to the light rail.

DETAILS

- Length: 2.02 Miles
- Pedestrian Collisions Per Mile Per Year: 19
- Bicycle Collisions Per Mile Per Year: 7
- Public Destinations Per Mile: 25
- Commercial Destinations Per Mile: 3
- Planning-Level Cost Per Mile (Millions): $3.28
- Recommended Bicycle Facilities: Class I (on Metro ROW) & Class III (along 67th Street / West Boulevard)

OPPORTUNITIES

- Uses the most Metro owned ROW
- Allows the greatest amount of Class I bicycle facilities
- Potentially improves a currently blighted corridor
- Only segment with connection to the Florence/ West Station
- Safe crossing of Crenshaw Boulevard at existing signal at 67th Street
- Linkage to plans from Crenshaw LRT Construction Bicycle Planning Study

CONSTRAINTS

- Potential safety issues with route concealed behind land uses
- Uncomfortable route for pedestrians
- Existing homeless encampments will need to be removed
- Significant measures will need to be enacted for safety

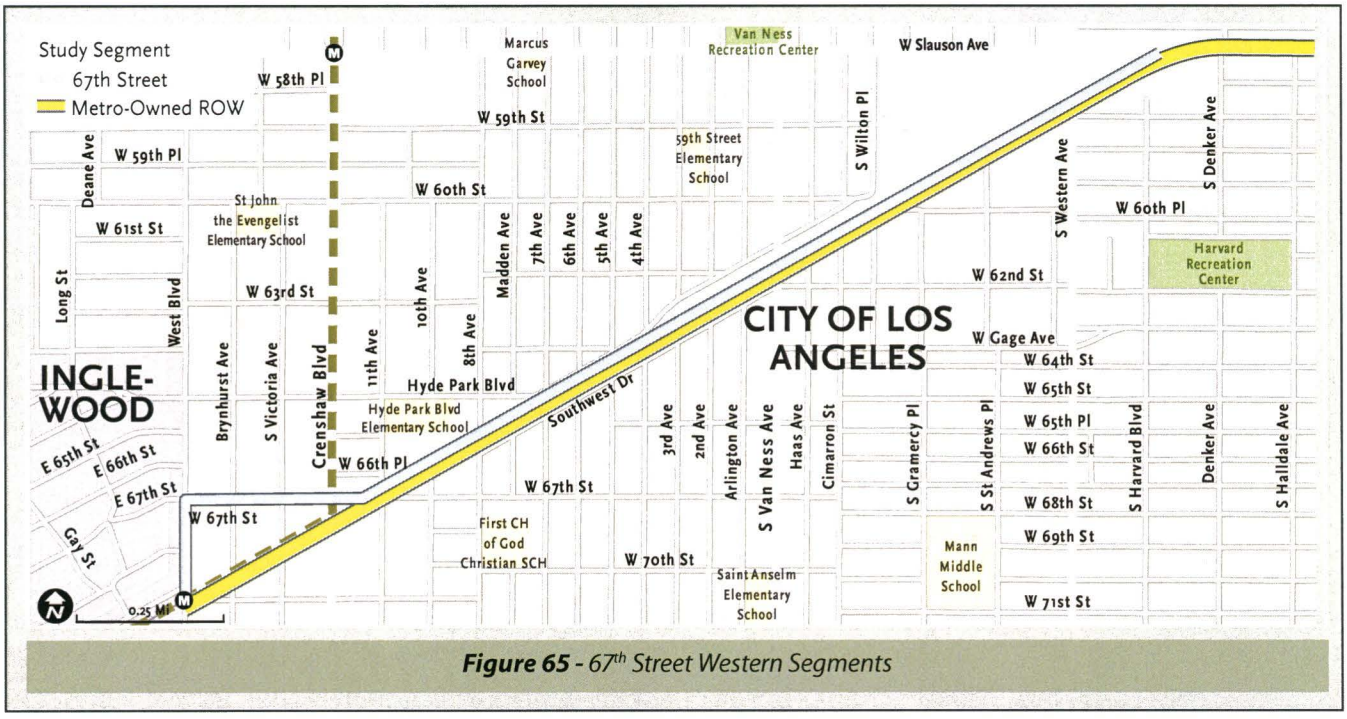


***Figure 65** - 67th Street Western Segments*

CENTRAL SEGMENT: SLAUSON CENTRAL

SUMMARY

This segment follows Slauson Avenue on the Metro owned ROW from Denker Avenue at the west to the Metro Blue Line Slauson station at the east. Land uses are primarily industrial, with mixed commercial activity. Residential areas surround Slauson Avenue to the north and south. Throughout this segment, the ROW ranges from 25' to 105', allowing for a shared bicycle and pedestrian path. At wider locations, potential exists to create interpretive nodes that reference the corridor's rail history. Despite the continuous and straight nature of this corridor, 18 street crossings, some with existing signals and some without, will require consideration.

DETAILS

- Length: 3.61 Miles
- Pedestrian Collisions Per Mile Per Year: 189
- Bicycle Collisions Per Mile Per Year: 99
- Public Destinations Per Mile: 28
- Commercial Destinations Per Mile: 17
- Planning-Level Cost Per Mile (Millions): $3.39
- Recommended Bicycle Facilities: Class I

OPPORTUNITIES

- Follows the Metro owned ROW
- Ample ROW for Class I bicycle facilities
- Potentially improves a currently blighted corridor
- Adds pedestrian walkway where sidewalks are currently missing
- Connects employers, commercial, and residential areas with the Metro Silver and Blue Lines
- Wider areas of the ROW allow for interpretive nodes and other design treatments

CONSTRAINTS

- Class I facility will require extensive construction
- Lack of adjacent streetscape amenities, such as trees, seating, etc.
- Significant existing rail will need to be removed
- Multiple street crossings will need to be designed

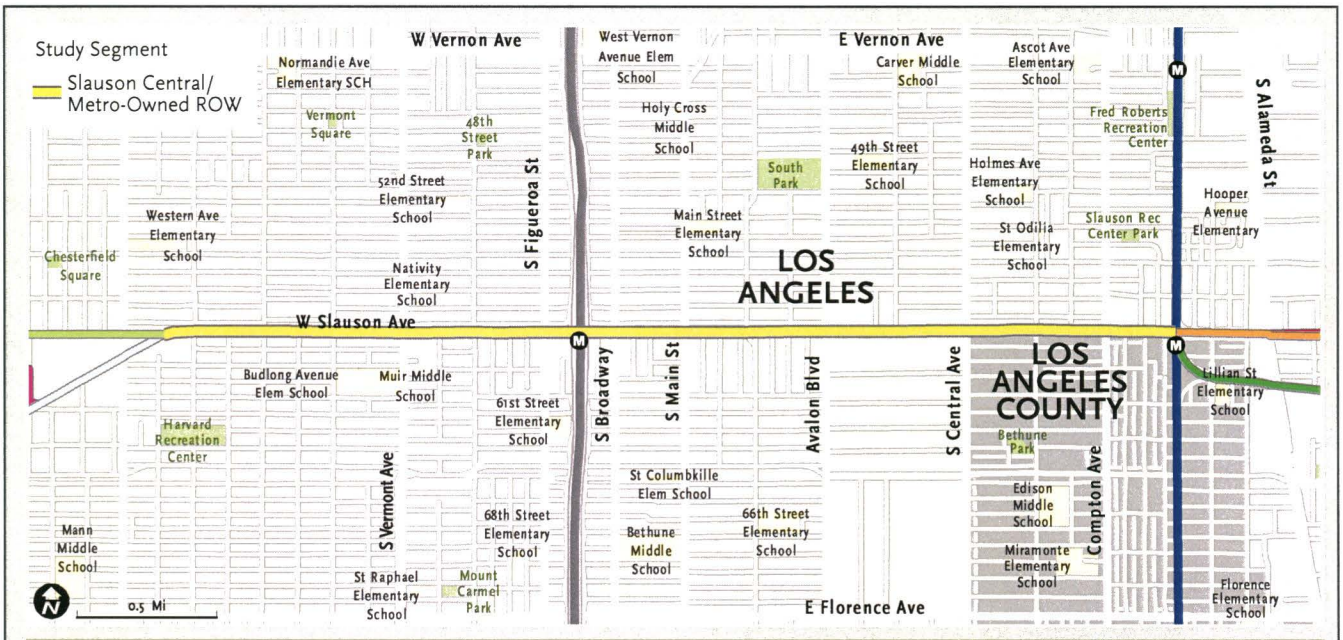


***Figure 66** - 67th Street Western Segments*

EASTERN SEGMENT OPTIONS: UTILITY CORRIDOR

SUMMARY

This segment uses a combination of Class III bikeways on Slauson Avenue and a Class I facility on a utility ROW between Alcoa Avenue and Downey Road. On-street portions of this segment traverse a mix of commercial and industrial uses. The northern end of the utility ROW approaches the Los Angeles River at Vernon Avenue, where it would either cross a parking lot or turn east to Downey Road to access the river directly.

DETAILS

- Length: 3.27 Miles
- Pedestrian Collisions Per Mile Per Year: 4
- Bicycle Collisions Per Mile Per Year: 4
- Public Destinations Per Mile: 11
- Commercial Destinations Per Mile: 14
- Planning-Level Cost Per Mile (Millions): $2.19
- Recommended Bicycle Facilities: Class I (along Metro ROW & Utility Corridor) & Class III (along Slauson Avenue)

OPPORTUNITIES

- Creates a mix of Class I and III bikeways
- Interfaces with commercial activity on Slauson Avenue
- Connects to Los Angeles River

CONSTRAINTS

- Does not use Metro owned ROW
- Requires agreements with utility landowners
- Does not connect directly to Los Angeles River
- Industrial land uses surround the utility ROW
- Some areas constrained by "back-of-house" parking lots in northern section of utility ROW

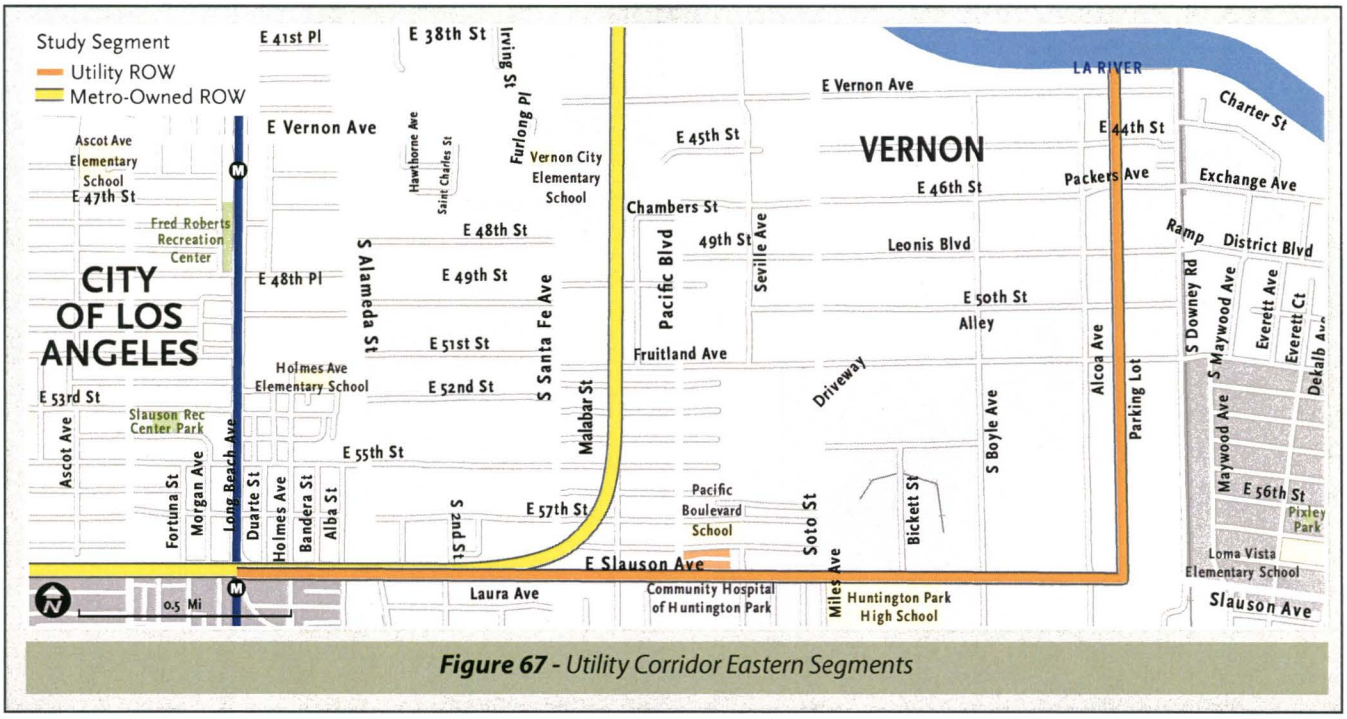


***Figure 67** - Utility Corridor Eastern Segments*

EASTERN SEGMENT OPTIONS: MALABAR

SUMMARY

This segment continues east on the Metro owned ROW and follows it as it curves north at Santa Fe Avenue, meeting Malabar Street at 55th Street. Once the ROW is north of Fruitland Avenue, land uses become entirely industrial, and other railway (BNSF) rights-of-way appear alongside the Metro owned ROW, providing some of the narrowest portions of the corridor. The ROW terminates at Washington Boulevard, approximately 800ft west of the Los Angeles River's west bank.

DETAILS

- Length: 2.79 Miles
- Pedestrian Collisions Per Mile Per Year: 5
- Bicycle Collisions Per Mile Per Year: 4
- Public Destinations Per Mile: 11
- Commercial Destinations Per Mile: 4
- Planning-Level Cost Per Mile (Millions): $3.77
- Recommended Bicycle Facilities: Class I

OPPORTUNITIES

- Follows Metro owned ROW to its eastern terminus
- Provides commuter route for industrial employees in Vernon

CONSTRAINTS

- Potentially dangerous/unpleasant passage through industrial areas
- Serves few residences
- Does not connect directly to Los Angeles River
- BNSF ROW easement

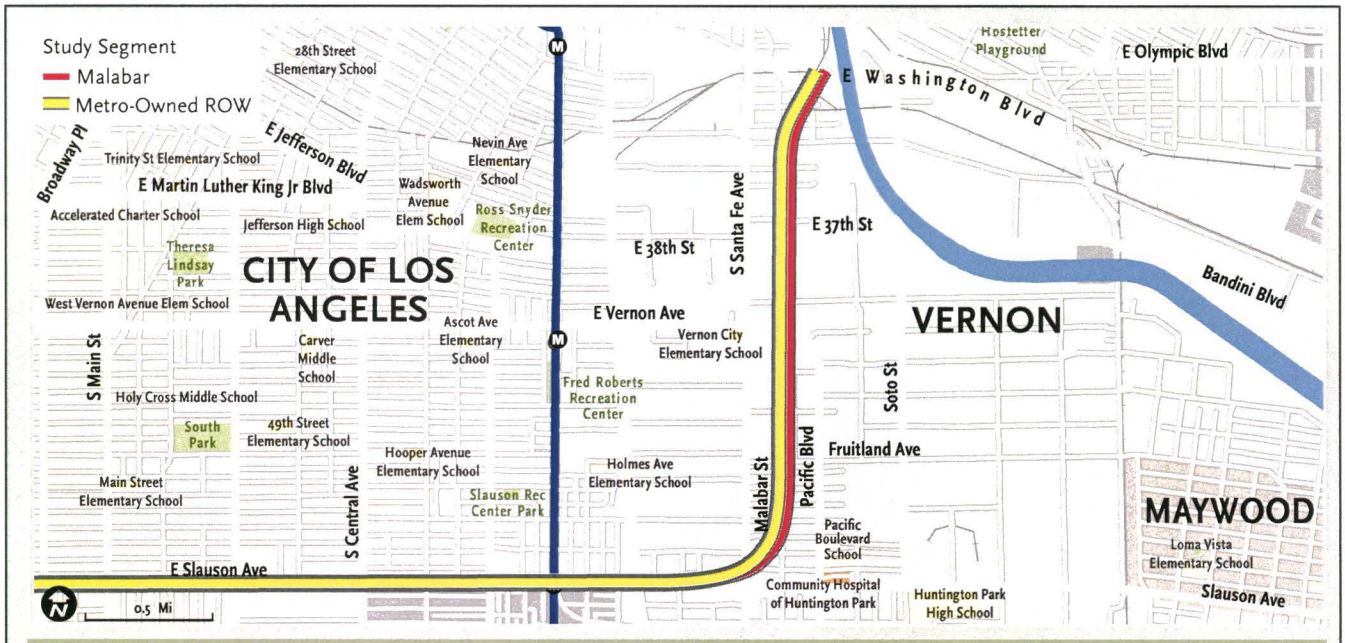


***Figure 68** - Malabar Eastern Segments*

EASTERN SEGMENT OPTIONS: SLAUSON AVENUE

SUMMARY

Traveling east, this segment remains on Slauson Avenue until Alameda Street. Between Alameda Street and Downey Road, land uses are primarily commercial and industrial. East of Downey Road, the segment enters the city of Maywood, with a variety of commercial uses on Slauson Avenue, and high density residential areas to the north and south.

DETAILS

- Length: 4.09 Miles
- Pedestrian Collisions Per Mile Per Year: 5
- Bicycle Collisions Per Mile Per Year: 4
- Public Destinations Per Mile: 18
- Commercial Destinations Per Mile: 29
- Planning-Level Cost Per Mile (Millions): $0.79
- Recommended Bicycle Facilities: Class I (along Metro ROW) & Class III (along Slauson Avenue)

OPPORTUNITIES

- Provides a direct connection to the Los Angeles River
- Serves a high residential population density
- Passes adjacent to schools and parks
- Terminus at existing river-oriented park

CONSTRAINTS

- On-street class III facilities on a high-traffic street, for the majority of the segment
- Does not use the entirety of Metro owned ROW
- Crosses into another jurisdiction and would require further outreach and coordination

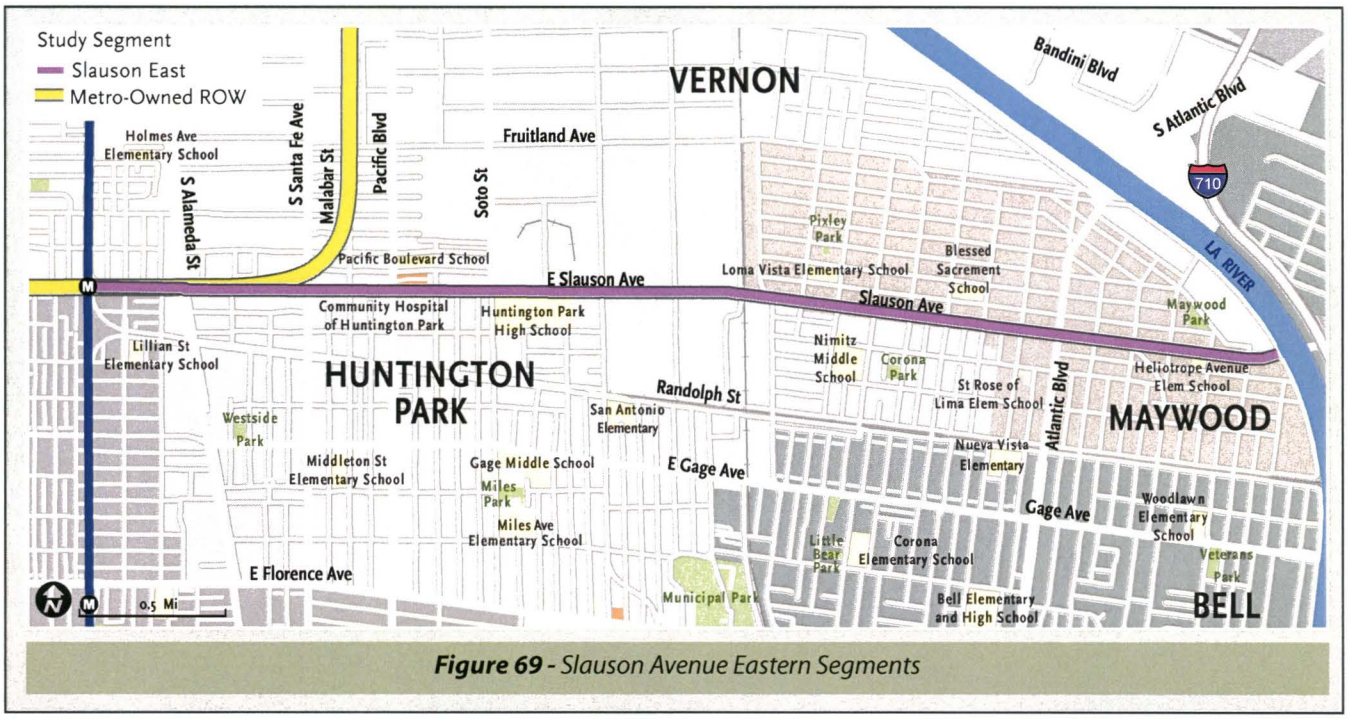


Figure 69 *- Slauson Avenue Eastern Segments*

EASTERN SEGMENT OPTIONS: RANDOLPH STREET

SUMMARY

This segment transitions from the Metro owned ROW to an active Union Pacific-owned ROW on Randolph Street in Huntington Park. Already used by residents as a walking and jogging path, this segment would legitimize an existing informal active transportation corridor, serve residents and visitors to the Los Angeles River, and provide a connection to downtown Huntington Park.

The City of Huntington Park recently adopted a Bicycle Transportation Master Plan (Final Draft, February 3, 2014) which proposes a Class I bike path along the entire Randolph Street ROW within the City, Class II bike lanes along Pacific Boulevard and State Street, and several Class III bike routes.

OPPORTUNITIES

- Uses existing ROW and encourages existing land use
- Provides connection to Los Angeles River
- Adjacent to neighborhoods, commercial center, parks, and schools

CONSTRAINTS

- Does not use Metro owned ROW
- Does not serve commuters to Vernon
- Requires agreement with Union Pacific and specific construction techniques to comply with an active railway corridor

DETAILS

- Length: 4.34 Miles
- Pedestrian Collisions Per Mile Per Year: 10
- Bicycle Collisions Per Mile Per Year: 8
- Public Destinations Per Mile: 29
- Commercial Destinations Per Mile: 6
- Planning-Level Cost Per Mile (Millions): $3.56
- Recommended Bicycle Facilities: Class I or II

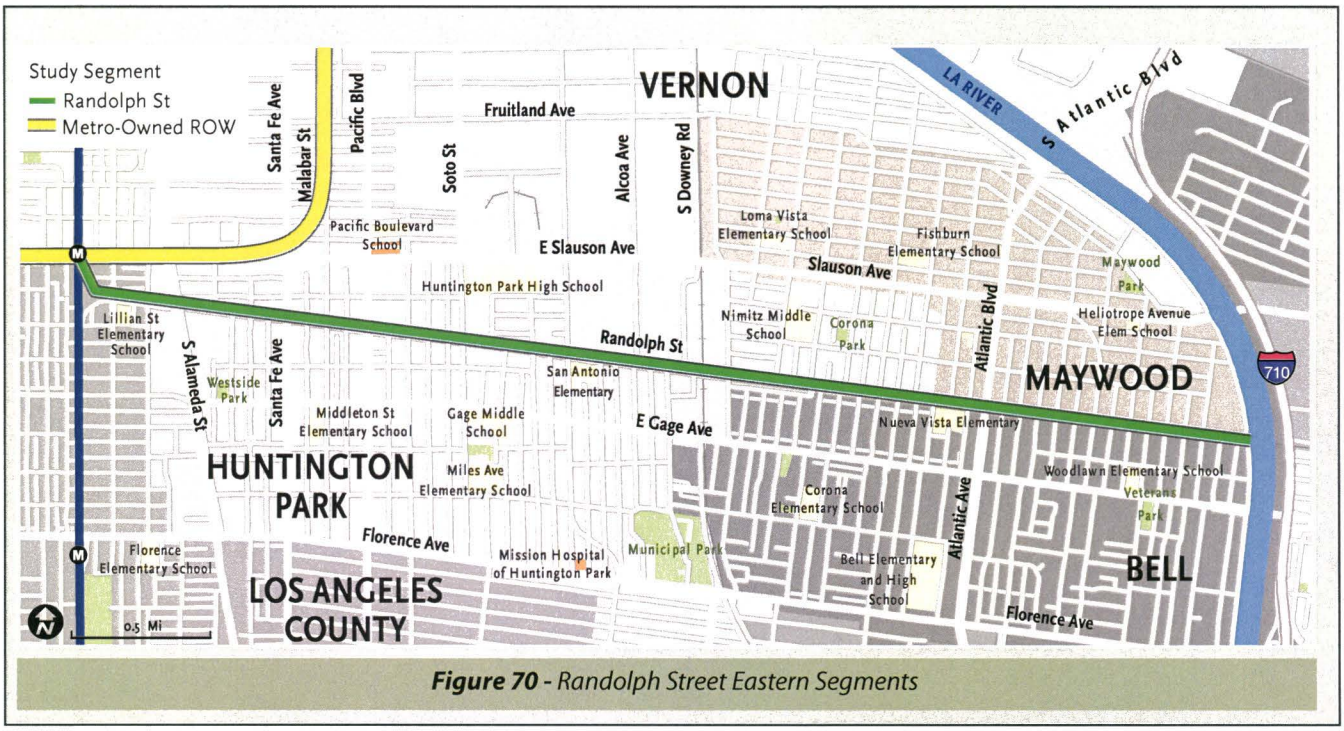


***Figure 70** - Randolph Street Eastern Segments*

4.1 RANKING CRITERIA

The following criteria were developed to evaluate additional linkages on the west to rail facilities (Metro Crenshaw/ LAX transit line) and linkages on the east to the Los Angeles (LA) River. Where quantitative data are evaluated, such as population, employment, destinations served, and costs, the values have been divided by the segment length for comparative purposes.

Following the creation of the 15% Conceptual Designs and cost estimates, each alternative within the Study Segments was analyzed in order to develop recommendations for the feasibility of identified alignments. Ranking criteria were developed to evaluate the proposed alternatives in the Western, Central and Eastern Segments using a 12-point list of criteria to establish an aggregate score.

1 Pedestrian Experience – the type and condition of the pedestrian facilities that are envisioned in the study, and the overall pedestrian user experience along the segment. A facility separated from traffic and providing a wide paved area will be scored higher than one adjacent to roadways with a narrow pedestrian sidewalk or path. The volume, speed, and nature of the adjacent traffic are also a consideration; exposure to more traffic will result in a lower score. Finally, consideration will be given for potential views, and the aesthetics of the adjacent structures or landscape, considering the potential for improvements reflected in the study concepts.

2 Bicycle Experience – the type and condition of the bicycle facilities that are envisioned in the study, and the overall bicycle use experience along the segment. A Class I facility separated from car traffic and providing a wide paved area will be scored higher than a segment with bike lanes (Class II) or where bicyclists share the lanes with traffic (Class III). Additionally, a buffered bike lane with extra separation from traffic and/or the "door zone" of adjacent parked cars will score higher than a conventional bike lane. The volume, speed, and nature of the adjacent traffic are also a consideration; exposure to more traffic will result in a lower score. Finally, consideration will be given for potential views, and the aesthetics of the adjacent structures or landscape, considering the potential for improvements reflected in the study concepts.

3 Linkage to Destinations – a measure of the major destinations within ½ mile of the segment, such as schools; health, medical, community, and job training centers; and parks and public spaces. The total number of destinations will be divided by the segment length for comparative purposes.

4 Linkage to LA River – a measure of the connectivity to the LA River. The segments on the east will receive the highest score as long as direct connection to the river is achieved. The segments on the west will also provide connection to the LA River, but to a lesser degree.

5 Linkage to Major Transit – a measure of the major transit facilities served by the segment, such as the future Metro Crenshaw/LAX transit line, the Metro Silver Line, and the Metro Blue Line. Direct transit access will score the highest while parallel segments that provide more circuitous access to major transit facilities will score lower.

6 Commercial Interface – a review of the segment's proximity to retail and service businesses, including stores and food sources. A segment in front of commercial properties may provide enhanced economic activity between businesses and the intermediate ATC. The opportunity to promote redevelopment or redesign of underutilized commercial properties and to be a catalyst for economic development in communities adjacent to the intermediate ATC is also considered in the score.

7 Pedestrian Trip Demand – a GIS-based measure of potential pedestrian activity along the study segment based on population and employment Census data for within ½ mile of the segment. The analysis summarizes total population and total number of jobs divided by the segment length for comparative purposes. Higher numbers represent a higher estimated potential pedestrian demand and therefore a higher priority for treatment.

Ranking Criteria (Continued)

8 Bicycle Trip Demand – a GIS-based measure of potential bicyclist activity along the study segment based on population and employment Census data for within three miles of the segment. The analysis summarizes total population and total number of jobs divided by the segment length for comparative purposes. The total value will be divided by the segment length for comparative purposes. Higher numbers represent a higher estimated potential bicyclist demand and therefore a higher priority for treatment.

9 User Security – a measure of the sense of security along the segment based on the visibility of the corridor from adjacent land uses or from the street. Segments along roadways or visible from businesses, homes, or schools will score higher than segments located in areas with reduced visibility and sightlines from other locations not on the intermediate ATC. Segments screened from public view might feel less safe and have lower attractiveness to bicyclists and pedestrians.

10 Public Support – a measure of the public support received during public engagement activities. The input was received during meetings with elected officials, public stakeholders, residents, and agency representatives and is primarily based on the input received during the public workshops.

11 Ease of Implementation – a measure of challenges to implement, operate, and maintain the segment, including key requirements or physical constraints such as ROW or easement acquisition needs, conflicts with on-street parking, and significant construction challenges such as major utility relocations, removal of existing infrastructure such as buildings or railroad tracks, and constrained ROW which requires either disruption of existing activities (such as street or railroad operations) or non-standard (and expensive) construction techniques. Segments will score lower when there are more legal, administrative, or environmental hurdles.

12 Cost – a measure of the costs associated with the segment by mile, accounting for design, ROW acquisition, environmental review, construction, and operations and maintenance costs.

Weighting was developed for the criteria listed above to address key study objectives such as the user experience, linkages to transit and the LA River, and ease of implementation. The criteria weighting utilized for the analysis is shown in **Table 4-1.**

Table 4-1 - Criteria Weighting

Criterion	Weighting Utilized in Analysis
Pedestrian Experience	2
Bicycle Experience	2
Linkage to Destinations	1
Linkage to LA River	2
Linkage to Major Transit	2
Commercial Interface	1
Pedestrian Trip Demand	1
Bicycle Trip Demand	1
User Security	1
Public Support	2
Ease of Implementation	2
Cost	1

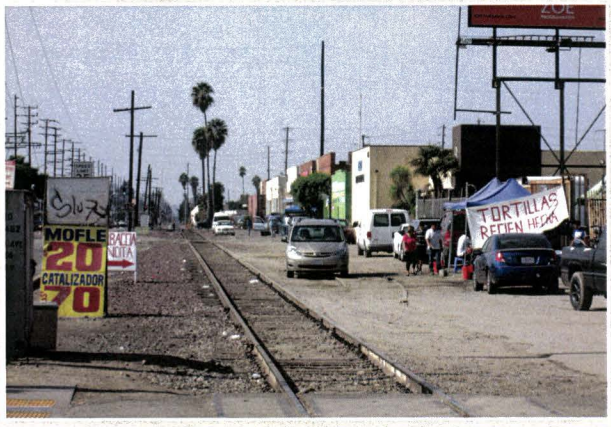


Photo 13 - Existing activity on the ROW

4.2 RESULTS OF RANKING ANALYSIS

The ranking criteria and weighting have been applied to each potential segment, with a weighted score assigned to each segment between 0 and 100, with better scoring segments receiving a value closer to 100. Criteria ranking is based on qualitative scoring except for the following categories where GIS data or cost is available for the analysis:

- Linkage to Destinations
- Commercial Interface
- Pedestrian Trip Demand
- Bicycle Trip Demand
- Cost

Table 4-2 summarizes the results of the ranking analysis for the West and Central Segments.

Table 4-2 *- West & Central Segments Scoring*

Criteria	West Segments						Central Segment	
	Slauson Avenue		59th Street		67th Street		Slauson Avenue	
	RS	WS	RS	WS	RS	WS	RS	WS
1. Pedestrian Experience	2.0	5	4.0	10	4.0	10	5	12
2. Bike Experience	1	2	3.5	8	4.5	11	5	12
3. Linkage to Destinations	35	6	29	5	25	4	28	5
4. Linkage to LA River	3	7	3	7	3	7	4	10
5. Linkage to Major Transit	5	12	4.5	11	5	12	5	12
6. Commercial Interface	46	6	2	0	3	0	17	2
7. Pedestrian Trip Demand	40309	6	35253	5	32081	5	36,223	5
8. Bicycle Trip Demand	497957	6	445983	5	383201	5	273,981	3
9. User Security	4	5	5	4	3	4	5	6
10. Public Support	1	1	4	5	4	5	5	6
11. Ease of Implementation	3	7	4	10	5	12	3	7
12. Cost	$0.35	6	$1.52	1	$3.28	1	$3.39	1
Total Weighted Score	--	69	--	71	--	76	--	81

Note: RS = Raw Score, WS = Weighted Score
Raw scores for qualitative criterion range between 1 and 5 with highest score receiving 5.
Raw scores for empirical criteria is based on GIS data or cost per mile.
Raw scores are normalized to provide a highest possible total score of 100.

As shown in **Table 4-2** and **Table 4-3**, through the ranking analysis, Slauson Avenue in the Central Segment received the highest score of 81 out of 100 points. Among the West Segment alternatives, 67th Street ranked the highest score, while Randolph Street scored the highest among the East Segment alternatives. Based on the scoring evaluation, the following segments are recommended for further evaluation:

- West Segment: 67th Street (between Slauson Avenue and Western Avenue)
- Central Segment: Slauson Avenue (between Western Avenue and Santa Fe Avenue)
- East Segment: Randolph Street (between Santa Fe Avenue and LA River)

It should be noted that this is a feasibility study and additional alignment options may potentially be identified based on further review. Further analysis and community input may shift the conceptual alignments described in this study while providing similar connectivity and linkage to key uses. For example, a bicycle boulevard along 59th Street was evaluated; however, shifting the alignment to nearby roadways may be desired based on further community and technical staff input. The concepts presented in this study are recommended for consideration and comparison, but consideration of other route alternatives should be a part of the alternative analysis in Phase 2.

Table 4-3 summarizes the results of the ranking analysis for the east segments.

***Table 4-3** - East Segments Scoring*

Criteria	East Segments							
	Malabar		Slauson Avenue		Utility Corridor		Randolph	
	RS	WS	RS	WS	RS	WS	RS	WS
1. Pedestrian Experience	3	7	3	7	4	10	5	12
2. Bike Experience	4	10	1	2	2	5	5	12
3. Linkage to Destinations	11	2	18	3	11	2	29	5
4. Linkage to LA River	5	12	5	12	5	12	5	12
5. Linkage to Major Transit	4.5	11	5	12	4.5	11	4	10
6. Commercial Interface	4	1	29	4	14	2	5	1
7. Pedestrian Trip Demand	27,345	4	29,190	4	28,797	4	36,333	5
8. Bicycle Trip Demand	420,021	5	245,000	3	295,955	4	236,308	3
9. User Security	1	1	5	6	3	4	4	5
10. Public Support	2	2	3	4	2	2	5	6
11. Ease of Implementation	1	2	3	7	3	7	2	5
12. Cost	$3.77	1	$0.79	3	$2.19	1	$3.56	1
Total Weighted Score	--	67	--	65	--	62	--	74

Note: RS = Raw Score, WS = Weighted Score
Raw scores for qualitative criterion range between 1 and 5 with highest score receiving 5.
Raw scores for empirical criteria is based on GIS data or cost per mile.
Raw scores are normalized to provide a highest possible total score of 100.

4.3 PHASED APPROACH TO PROJECT DEVELOPMENT

The feasibility study findings demonstrate that an active transportation corridor is a feasible intermediate transportation use for this ROW, facilitating opportunities for improved access to major transit facilities, and key destinations such as the Los Angeles River. Based on analysis of existing conditions, opportunities/constraints, unique ROW segment characteristics identified, and upon review of performance criteria developed for the study area, a phased approach to project development is recommended.

Performance criteria included pedestrian/bicycle environment, linkage to key land uses and transit, trip demands, sense of security on the corridor by community, public support and the ability to catalyze private sector investment, and ease of implementation. Criteria were developed to evaluate linkage opportunities from the west (Metro Crenshaw/LAX future station) to destinations on the east (Los Angeles River) utilizing 8.3 miles of Metro owned ROW. Weighting was developed for the criteria to address key study objectives, and each was applied to potential ROW segments.

Implementation of the entire intermediate ATC at one time might not be feasible due to funding, jurisdictional and engineering constraints. A phased project development plan for the Rail to River ATC, including segment lengths and cost estimates, is provided in **Figure 71**.

***Figure 71** - Alignment Alternatives and Project Phasing*

Phase 1 – Rail to Rail ATC Connector Recommendation:

Begin Advance Design and Environmental Review of the Western (67th Street) and Central Segments (Metro Crenshaw/LAX LRT at West Boulevard and Florence Avenue to Metro Blue Line LRT at Slauson Avenue and Long Beach Avenue), for a combined 5.6 mile Phase 1 intermediate ATC Project.

WESTERN SEGMENT ALTERNATIVES:

- Slauson Avenue West (to Crenshaw/Slauson station for Crenshaw/LAX LRT)
  - 1.4 miles – Cost $480,394
- 59TH Street (to Crenshaw/Slauson station for Crenshaw/LAX LRT)
  - 1.6 miles – Cost $2,443,958
- 67th Street /West Boulevard (to West Boulevard/ Florence Avenue for Crenshaw/LAX LRT)
  - 2.0 miles – Cost $6,600,019

Of the three alternatives, the Metro owned ROW to 67th Street concept was selected for the Western Segment of the Study area as the recommended alternative for Phase 1 – Rail to Rail intermediate ATC Connector due to overall ease of implementation, lower safety risks for users compared to other alignment alternatives, and the opportunity that exists to fill a significant gap in the Los Angeles County Bicycle Network.

West Boulevard, the proposed western terminus for the Rail to River Intermediate ATC received bike lanes in May, 2014.

CENTRAL SEGMENT ALIGNMENT:

- Slauson Avenue East-West (Denker Avenue to Long Beach Avenue)
  - 3.6 miles – Cost $12,205,805

***Figure 72** - Phase 1*

The Phase 1 – Rail to Rail ATC Connector is an approximate 5.6 mile corridor segment with an estimated capital *cost of $18,805, 824.

***Cost associated with BNSF easement abandonment of rail freight operations on the ROW are not included in capital cost estimations provided in this report.**

PHASE I STRONGLY RECOMMENDED FOR CONSIDERATION AS A NEAR-TERM IMPROVEMENT FOR THE FOLLOWING REASONS:

- The segment from the future Metro Crenshaw/ LAX Transit Line station at Florence/West to the existing Metro Blue Line Station at Slauson Avenue will require easement resolution with the current railroad user, however, the ROW is managed by Metro.
- The existing north-south street crossings already have traffic signals aligned for rail use and can, with new striping and signage, provide infrastructure for crossings at major intersections.
- The development of the Phase I alignment provides access to the Metro Crenshaw/LAX, Silver, and Blue Lines as well as all existing Metro bus lines in operation on or crossing Slauson Avenue.
- The Phase I alignment provides high visibility to the community for public investment given the proximity to Slauson Avenue. The entire community will see this segment whether or not they are actively engaged in active transportation uses along the corridor. Use by the community is envisioned to be immediate due to this visibility.
- The recommended alignment for Phase I makes use of the greatest length of Metro owned ROW which will lead to lower user safety risks.
- The development of the Phase I alignment will fill a significant gap in the Los Angeles County Bicycle Network.

Phase 1 - Project Development Elements

Should funding be secured and approval granted to proceed, the development plan for Phase 1 would include the following elements:

- Metro Inter-Departmental Coordination
- Multi-Jurisdictional Collaboration
- Public Participation Plan (PPP) Implementation
- Performance Metrics - Identification, Assessment, and Refinement
- Environmental Review Process
- Advance Design / Design Development
- Construction Documents and Implementation

METRO INTER-DEPARTMENTAL COORDINATION

To ensure the highest level of project management moving forward, Metro staff support would include, but not necessarily be limited to the following departments: 1) Countywide Planning, 2) Capital Planning, 3) Communications, 4) Marketing, 5) Facility Maintenance, 6) County Counsel, 7) Engineering and 8) Construction.

MULTI-JURISDICTIONAL COLLABORATION

Continued collaboration with local jurisdictions will be a key factor with respect to the success of project development and implementation moving forward. Partners in this effort will include The City of Los Angeles, the County of Los Angeles, and the cities of Vernon, Huntington Park, Maywood and Bell, as well as key stakeholders.

PUBLIC PARTICIPATION PLAN

The Public Participation Plan (PPP) will include a set of strategies for accomplishing the objectives related to public engagement in the planning process. The PPP will be designed to inform, educate and engage community members, business owners, local jurisdictions, Elected Officials, and other targeted stakeholders. The project development goal will be to advance design, further development and strategically implement a safe and sustainable active transportation corridor that connects people and places, creates community value and conserves resources.

The following outreach strategies will support the technical process for the Phase 1- Rail to Rail intermediate ATC. Proposed outreach activities include:

- Ensure involvement from a wide and varied group of interested stakeholders
- Provide project related information in a timely manner
- Solicit, organize and report public comment
- Maintain stakeholder database for project related notifications
- Coordinate with partnering agencies on the development of project related materials/notices/media coverage
- Contribute content for project related printed materials, webpages, and presentations
- Facilitate: Public Meetings, Ad-Hoc Stakeholder Briefings, and TAC Meetings
- Manage project development schedule

PERFORMANCE METRICS- IDENTIFICATION, ASSESSMENT, AND REFINEMENT

Identification, assessment, and refinement of established performance metrics will be a key strategy in the project development process moving forward. The promotion

and integration of healthy transportation alternatives at all levels of project planning will be considered. Impact assessment studies will be conducted and the correlation between improved health and transportation performance will be reviewed.

Quantitative and qualitative data will be considered. Data sources will include, but not be limited to the following:

- U.S. Census
- Federal and State Reporting
- Los Angeles County Metropolitan Transportation Authority data
- Los Angeles County Department of Public Health statistics
- National Best Practices
- California Department of Transportation (Caltrans)
- Southern California Association of Governments (SCAG)
- Stakeholder Engagement

ADVANCED DESIGN / DESIGN DEVELOPMENT

Fifteen percent conceptual designs have been prepared as a part of this feasibility study. In order to develop plans during Phase I, key decisions will still need to be made regarding the design of the ATC pathway, at grade crossings, Metro Blue and Silver Line Transit Station crossings and access to the Metro Crenshaw/LAX Transit Line Station at Florence/West. If a decision is made to pursue the recommended alignment, key decisions about elements to include and costs will need to be developed and finalized.

ENVIRONMENTAL REVIEW

As mentioned in Section 3.2.2, pursuant to the existing CEQA Regulations, the creation of bicycle lanes on the ROW may be categorically exempt and could require Mitigated Negative Declaration, Environmental Impact Report and National Environmental Policy Act documentation based on federal funding and/or jurisdictional regulations. The need to file any documentation will be determined during this phase. Due to the nature of the prior rail use, a more pressing environmental concern involves the nature and extent of contaminants and the need for an environmental assessment and mitigation plan.

CONSTRUCTION DOCUMENTS, PERMITTING, AGREEMENTS AND IMPLEMENTATION

Once Advanced Design is complete and the path alignments have been approved, full construction documents will be produced and agency approvals and permitting will be obtained. Development of jurisdictional agreements, final construction costs, scheduling and project implementation will follow.

Phase 2 - Rail to River ATC Connector Recommendation

Due to multi-jurisdictional collaboration and coordination needs, current and planned land uses, Los Angeles River master planning, and design opportunities and constraints, a more detailed Alternatives Analysis of the Eastern Segment alignment options from the Metro Blue Line LRT to the Los Angeles River is recommended.

Preliminary capital cost estimates are provided below.

EASTERN SEGMENT ALTERNATIVES:

- Randolph Street (Union Pacific owned Rail ROW)
  - 4.3 miles – Cost $15,367,640
- Malabar Segment (Metro owned Rail ROW from Metro Blue Line north to 25th Street)
  - 2.8 miles – Cost $10,483,690
- Utility Corridor (Southern California Edison owned ROW)
  - 3.3 miles – Cost $7,138,555
- Slauson Avenue East (from Metro Blue Line to Los Angeles River)
  - 4.1 miles – Cost $3,219,306

A connection from the Metro Blue Line Station at Slauson Avenue to the LA River is a key component of the strategy for Phase II development of the ATC. This study has pointed out existing plans for developing the LA River and the goals set out in the 2007 LA River Revitalization Master Plan. Among these are "greening neighborhoods" by

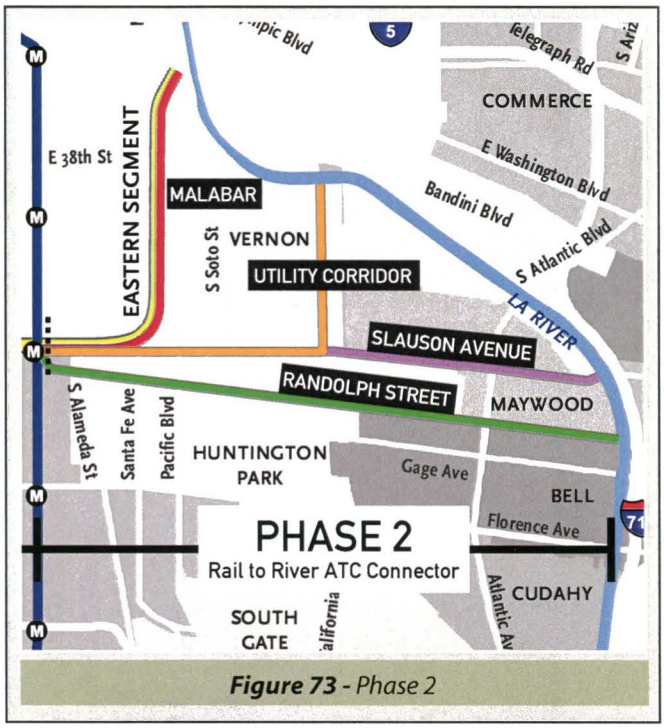


***Figure 73** - Phase 2*

transforming the river corridor into a continuous greenway that will act as a non-motorized transportation spine of the city, connecting neighborhoods to the river, increasing pedestrian access and creating safe, non-motorized routes between the river and employment centers within 1 mile of the river. Development of a Phase II alignment that connects to the LA River Bikeway furthers those goals.

This does not preclude any of the four alignment options outlined in this study. Currently the LA River Bikeway extends only as far north as Atlantic Boulevard, making the connections from Randolph Street and Slauson Avenue alternatives more attractive in the short term. The goals stated in both the 2011 City of Los Angeles Bike Master Plan and the 2012 County of Los Angeles Bike Master Plan are to provide gap closure and countywide connectivity where possible. Safe connectivity for bicyclists from the LA River to transit and employment centers is a key justification for developing a Phase II link from the Metro Blue Line Transit station to the LA River. Should Metro enter into a negotiation with BNSF for easement abandonment within the Malabar Yards ROW, an important gap in the commuting leg of the ATC will exist into the City of Vernon.

Phase 2 - Project Development Elements

Should funding be secured and approval granted to proceed, the development plan for Phase 2 would include the following elements:

- Metro Inter-Departmental Coordination
- Multi-Jurisdictional Collaboration
- BNSF Negotiation
- Alternative Analysis
- Public Participation Plan (PPP) Implementation
- Performance Metrics - Identification, Assessment, and Refinement
- Environmental Review Process
- Advance Design
- Construction Documents and Implementation

METRO INTER-DEPARTMENTAL COORDINATION

To ensure the highest level of project management moving forward, Metro staff support would include, but not necessarily be limited to the following departments: 1) Countywide Planning, 2) Capital Planning, 3) Communications, 4) Marketing, 5) Facility Maintenance, 6) County Counsel, 7) Engineering and 8) Construction.

MULTI-JURISDICTIONAL COLLABORATION

Continued collaboration with local jurisdictions will be a key factor with respect to the success of project development and implementation moving forward. Partners in this effort will include The City of Los Angeles, the County of Los Angeles, and the cities of Vernon, Huntington Park, Maywood and Bell, as well as key stakeholders.

BNSF NEGOTIATION

Use of the Malabar Segment in the Alternative Analysis will require opening discussions with BNSF to negotiate the abandonment of the ROW north of Santa Fe Avenue. Given that the negotiation of the operating easements for an inactive section of the rail line for the Metro Crenshaw/ LAX Line took three years and $4.5 million dollars, it is assumed that this effort will require greater or equal effort and resources.

ALTERNATIVE ANALYSIS

In parallel with the Public Participation effort, an analysis of the four Eastern Segment Options will be undertaken to assess and identify one pathway alignment to be developed in Advanced Design.

PUBLIC PARTICIPATION PLAN

The Public Participation Plan (PPP) will include a set of strategies for accomplishing the objectives related to public engagement in the planning process. The PPP will be designed to inform, educate and engage community members, business owners, local jurisdictions, Elected Officials, and other targeted stakeholders. The project development goal will be to participate in the analysis and assessment of the four Eastern Segment alternative, advance design, further development and strategically implement a safe and sustainable active transportation corridor that connects people and places, creates community value and conserves resources.

The following outreach strategies will support the technical process for the Phase 2- Rail to Rail intermediate ATC. Proposed outreach activities include:

- Ensure involvement from a wide and varied group of interested stakeholders
- Provide project related information in a timely manner
- Solicit, organize and report public comment
- Maintain stakeholder database for project related notifications
- Coordinate with partnering agencies on the development of project related materials/notices/ media coverage
- Contribute content for project related printed materials, webpages, and presentations
- Facilitate: Public Meetings, Ad-Hoc Stakeholder Briefings, and TAC Meetings
- Manage project development schedule

- Southern California Association of Governments (SCAG)
- Stakeholder Engagement

ENVIRONMENTAL REVIEW

As mentioned in Section 3.2.2, pursuant to the existing CEQA Regulations, the creation of bicycle lanes on the ROW may be categorically exempt and could require Mitigated Negative Declaration, Environmental Impact Report and National Environmental Policy Act documentation based on federal funding and/or jurisdictional regulations. The need to file any of this documentation will be determined during this phase. Due to the nature of the prior rail use, a more pressing environmental concern involves the nature and extent of contaminants and the need for an environmental assessment and mitigation plan.

PERFORMANCE METRICS- IDENTIFICATION, ASSESSMENT, AND REFINEMENT

Identification, assessment, and refinement of established performance metrics will be a key strategy in the project development process moving forward. The promotion and integration of healthy transportation alternatives at all levels of project planning will be considered. Impact assessment studies will be conducted and the correlation between improved health and transportation performance will be reviewed.

Quantitative and qualitative data will be considered. Data sources will include, but not be limited to the following:

- U.S. Census
- Federal and State Reporting
- Los Angeles County Metropolitan Transportation Authority data
- Los Angeles County Department of Public Health statistics
- National Best Practices
- California Department of Transportation (Caltrans)
- Southern California Association of Governments (SCAG)
- Stakeholder Engagement

ADVANCED DESIGN

Fifteen percent Conceptual Designs have been advanced as a part of this feasibility study. In order to develop Phase I further, key decisions will still need to be made regarding the design of the ATC pathway, at grade crossings, Metro Blue Line Station and connections to the LA River. If a decision is made to develop the identified alignment, key decisions about elements to include and costs will need to be developed and finalized.

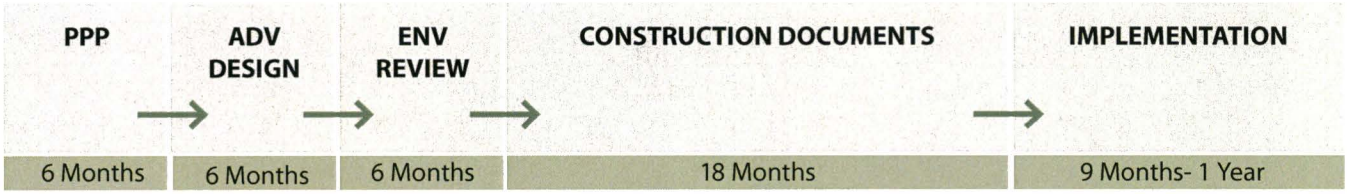
CONSTRUCTION DOCUMENTS, PERMITTING, AGREEMENTS AND IMPLEMENTATION

Once Advanced Design is complete and the path alignments have been approved, full construction documents will be produced and agency approvals and permitting will be obtained. Development of agreements, final construction costs, scheduling and project implementation will follow. Operations and management is the responsibility of local jurisdictions under special use permitting and appropriate agreements with Metro.

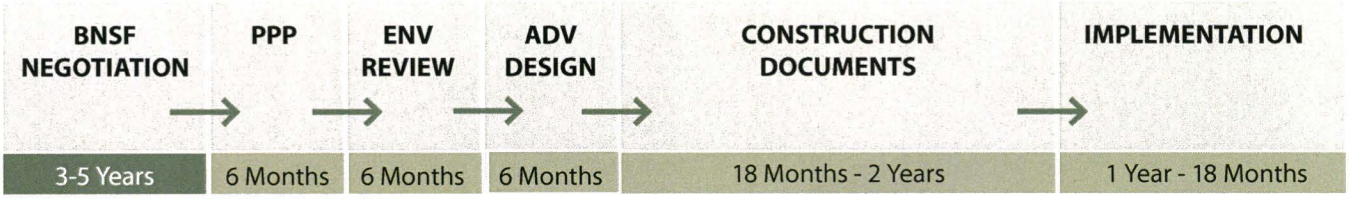
PROJECT PHASE SCHEDULING

Phase 1 and 2 are meant to run concurrently. Shown below is a timeline for implementing the two phases in tandem. It is expected that Metro Multi-Departmental Coordination and Multi-Jurisdictional Collaboration will be an on-going project management task that will last through the life of each phase. A key element in Phase 2 will be opening and negotiating the purchase of the BNSF ROW through the Malabar Yards north of Santa Fe Avenue. Based on the previous negotiation to secure the ROW for the Metro Crenshaw/LAX Line, the negotiation and purchase could take from 3 to 5 years.

PHASE 1



PHASE 2



4.4 POTENTIAL FUNDING SOURCES

This study considers the feasibility of using the Metro owned ROW for an intermediate ATC. It is not a plan reflecting commitment to any project; therefore, no specific funding, design, or implementation steps have been completed or scheduled. The study does include consideration of possible funding sources if a commitment to a project was made. The ATC Project would need to be adopted in the CRTP as a part of the commitment process.

The Study Team worked with technical staff from Metro to identify various sources that can potentially be accessed to fund further study or implementation of the ATC. Several of the funding sources offer grant opportunities in the near term, such as the state's Active Transportation Program, Metro Call for Projects, Metro ExpressLanes Net Toll Revenue Re-Investment Grant Program, and the SCAG Sustainability Program. **Table 4-5** summarizes promising near-term funding sources that could potentially be utilized to advance the ATC.

Other funding programs, such as the federal Transportation Investments Generating Economic Recovery (TIGER) Program, provide relatively large grant opportunities, but also require more extensive applications and introduce competition with major projects on a nationwide basis.

Assuming the ATC concept advances to environmental review and advance design, each local jurisdiction would be responsible for the implementation of segments within their boundaries. Metro can assist local jurisdictions in the grant process by providing letters of support, grant notifications and guidance, and support during environmental review and preliminary design. Coordination between jurisdictions to implement segments simultaneously is encouraged. Refer to **Appendix G** for a more complete summary of funding opportunities developed for this study.

Table 4-5 - Near-Term Funding Sources

Funding Source	Applicability
Prop C 25%	Bicycle Paths
Congestion Mitigation and Air Quality (CMAQ)	Bicycle and pedestrian facilities; traffic control measures; bus stop improvements
Prop A & C Measure R - Local Return (Measure R: Bicycle and Pedestrian Paths only)	Prop C: Bikeway projects include bikeway construction and maintenance, signage, information/safety programs, and bicycle parking, and must meet the following conditions: • Shall be linked to employment or educational sites • Shall be used for commuting or utilitarian trips • Jurisdictions must have submitted a PMS Self Certification
Cap And Trade Expenditure Plan/ Strategic Growth Council Funding	Sustainable Communities Program: increasing transit ridership and active transportation (walking/biking).
Caltrans Active Transportation Program	Planning, design, and construction, of facilities for active transportation.
Metro Call for Projects	Planning, design, and construction, of facilities for bicycle and pedestrian improvements. Planning and design funding can be obtained when related to construction activities.
Metro ExpressLanes Net Toll Revenues	Planning, design, and construction, of facilities for active transportation. Funding provided for all phases of a project provided that application indicates that there is also funds budgeted for the implementation or construction.
SCAG Sustainability Program	Planning and Conceptual Design for projects that address four key principles of Mobility, Livability, Prosperity, and Sustainability.

Table 4-5 - Near-Term Funding Sources (continued)

Funding Source	Applicability
Land and Water Conservation Fund	Federal fund provides matching grants to state and local governments for the acquisition and development of land for outdoor recreation use. Lands acquired through program must be retained in perpetuity for public recreational use.
Southern California Edison Rule 20A Funds	Planning, design, and construction, of facilities for undergrounding of power lines.
Note: *Refer to* **Appendix G** *for more funding sources.*	

INNOVATIVE FINANCING STRATEGIES

Seeking funding that is dedicated to increasing opportunities to safely bike and walk is essential to creating a properly functioning and efficient transportation system. Local communities will need the assistance of innovative financing opportunities to build the most effective transportation networks. Federal, state, and local government, partnerships with private philanthropic groups and organizations will play an important role in creating and implementing funding opportunities.

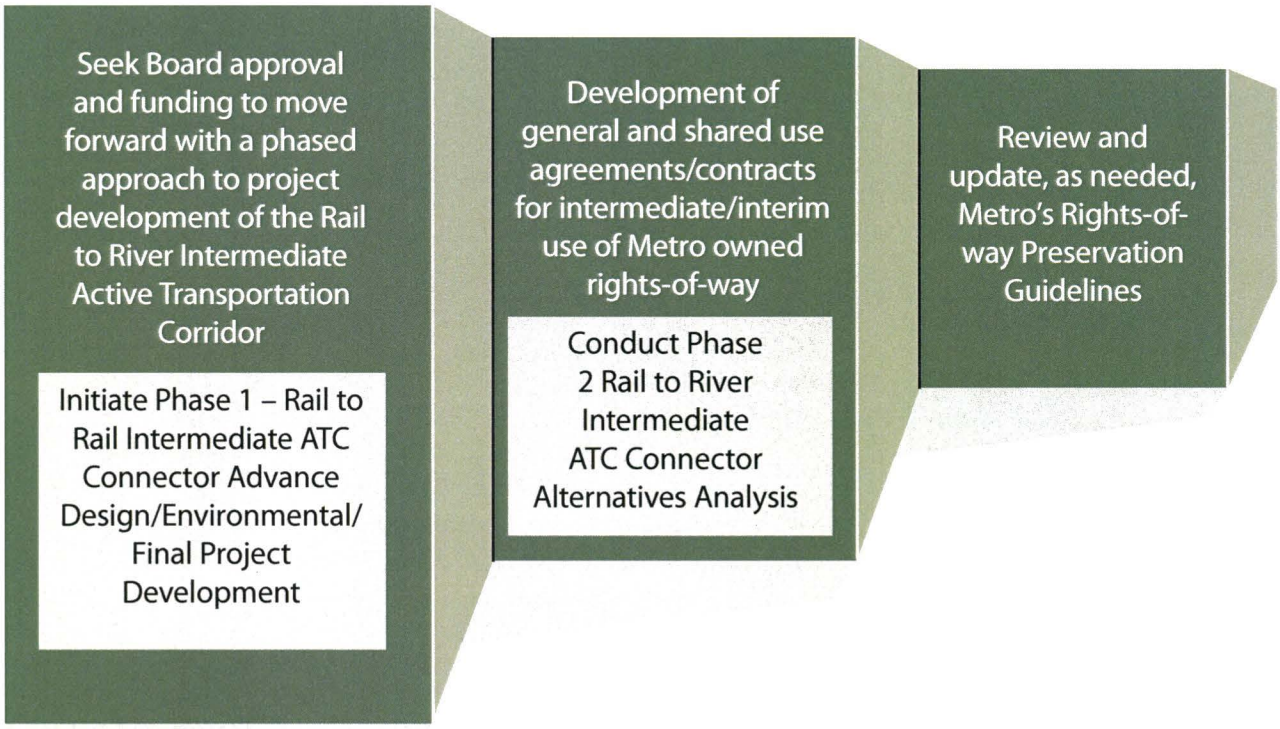
Compared to traditional procurement methods, public-private partnerships are any situation in which the private sector assumes a greater role in the planning, financing, design, construction, operation and maintenance of an active transportation facility.

4.5 NEXT STEPS

Although challenges exist for implementation of an ATC along the Metro owned ROW for the Local North section of the Harbor Subdivision, feasibility efforts indicate significant opportunities for improvement to the current blighted condition of the ROW, as well as opportunities for intermediate multi-modal transportation use integration.

As stated in the motion authorizing the study of the feasibility of an active transportation corridor along the Metro owned ROW by Supervisors Mark Ridley-Thomas and Gloria Molina, a "bikeway along this segment would provide significant enhancements and close gaps within the regional bike transportation network, creating a unique benefit to the surrounding communities. Metro plays an important role in bicycle planning across Los Angeles County, facilitating first mile/last mile connections to transit and supporting bicycle transportation through various policies and programs development." A Rail to River ATC is consistent with Metro's emerging policies and actions to encourage bicycling as an active and sustainable, emission-free form of transportation and providing for safe pedestrian experiences to and from transit facilities. In addition, the adopted Long Range Transportation Plan (LRTP) supports active transportation through funding the development of bicycle facilities and pedestrian improvements throughout Los Angeles County, as does Metro's Board (July 2014) Adopted Short Range Transportation Plan.

NEXT STEPS



Transformation of rail lines into pedestrian access routes has been successfully undertaken throughout the country, perhaps most notably on the "High Line" in New York City. The transformation of this ROW for bike and pedestrian use could not only become a tremendous benefit for the transportation network, but also achieve significant environmental and economic benefits for the region.

Active transportation facilities provide seamless connections to public transportation services offering healthier mobility options. Safe pathways for walking, bicycling, or using a wheelchair, work together with transit to provide access for all users. The majority of trips taken, by bus or train begin, and end with pedestrian movement. Therefore sidewalks, pathways, and safe crossings are very low-cost means to maximize benefits of investments in transit. People-powered mobility options often replace short driving trips, thereby reducing congestion and lowering greenhouse gas emissions.

With these actions moving forward, the Rail to River Intermediate ATC is poised to become a significant asset for the residents, businesses and visitors to South Los Angeles. Adoption and implementation of the recommendations outlined in this report will facilitate community improvements such as the provision of healthier and more sustainable access to transportation alternatives.

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APPENDIX A

RAIL TO RIVER BIKEWAY MOTION BY SUPERVISOR MARK RIDLEY-THOMAS AND SUPERVISOR GLORIA MOLINA

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Motion by Supervisor Mark Ridley-Thomas
and Supervisor Gloria Molina
Metro Planning and Programming Committee
September 19, 2012

Rail to River Bikeway

Metro initiated an Alternatives Analysis study in 2008 for the Harbor Subdivision Transit Corridor, an approximately 26-mile-long Metro-owned right-of-way (ROW) in southwestern Los Angeles County. The Harbor Subdivision was purchased by Metro in the early 1990s from the predecessor of the Burlington Northern Santa Fe (BNSF) Railway, which currently operates freight rail service along the subdivision. The corridor runs from south of downtown Los Angeles at Redondo Junction southwest to Los Angeles International Airport (LAX), then turns southeast through the South Bay area before ending at Watson Yard in Wilmington.

Metro continues to study a variety of future transit uses for the corridor. However, no immediate major investment in the corridor is planned. As it currently stands the right-of-way serves as major blight in the community. Metro should look at intermediate uses for this stretch of right-of-way that would not preclude future transit uses. Of particular interest is the segment of the right-of-way from the Los Angeles River to the West Boulevard Station for the Crenshaw/LAX Light Rail in the City of Inglewood. This segment travels through a number of communities and currently provides no public benefits.

A bikeway along this segment would provide significant enhancements to the regional transportation network, creating a unique benefit to the surrounding communities. Metro plays an important role in bicycle planning across Los Angeles County, facilitating first mile/last mile connections to transit and supporting bicycle transportation through various policies and programs.

A Rail to River Bikeway is consistent with Metro's previous policies and actions of encouraging bicycling as an active and sustainable, emission-free form of transportation.

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In addition, the adopted Long Range Transportation Plan (LRTP) supports active transportation by the development of bicycle facilities and pedestrian improvements throughout Los Angeles County.

The transformation of rail lines into pedestrian access routes has been done successfully throughout the country, perhaps most notably on the "High Line" in New York City. The transformation of this right-of-way for bike and pedestrian use could not only become a tremendous benefit for the transportation network, but also achieve significant environmental and economic benefits for the region.

We, Therefore, Move that the MTA Board of Directors direct the CEO to:

Report back at the January 2013 Metro Planning and Programming Committee in writing with recommendations along with a funding strategy and timeline for moving forward with a Rail to River Bikeway along the Metro-owned right-of-way from the Los Angeles River to the West Boulevard Station for the Crenshaw/LAX Light Rail Line.

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APPENDIX B
2000 METRO ROW PRESERVATION GUIDELINES

Los Angeles County Metropolitan Transportation Authority (LACMTA)

MTA RIGHTS-OF-WAY PRESERVATION GUIDELINES
(As approved by the LACMTA Board in February 2000.) ***HELD OVER TO MARCH**

INTRODUCTION

These guidelines are intended to supplement the existing Real Estate Department Policies and Procedures. The existing policies provide guidance for property management operations with respect to commercial leases and other uses of MTA real property assets including non-operating rights-of-way and other MTA-owned properties. The existing policies require the preservation of the rights-of-way for future transportation projects while encouraging utilization on an interim basis for the creation of revenue to MTA. While these Policies and Procedures are comprehensive with respect to general property management practices, they provide no specific direction to staff on a number of issues which may affect the preservation of the rights-of-way for future transportation projects.

MTA has received requests from neighborhood associations, cities and nearby residents and landowners to allow extensive landscaping, linear parks and equestrian trails, track removal and public community areas on MTA rights-of-way. In addition, MTA has granted funding to several cities to construct bikeways on segments of several rights-of-way. The existing policies do not provide sufficient guidance for staff or the community as to which of these interim uses will be allowed.

Some of these requests may impact MTA's goal of preserving the rights-of-way for future transit use because it could be extremely difficult to remove extensive landscaping, park like areas, and/or community uses that have been in place for many years. Further, any new residents to an area may not even be aware that a transportation corridor exists and is intended for future transit use.

The following supplemental guidelines seek to balance community needs to beautify and improve MTA's property with MTA's need to preserve the corridors for future transportation uses.

RAIL REMOVAL/COVERING

Rail/track removal is not permitted except for the following purposes:

a transportation project, including a Class 1 bike path
intersection improvements needed for vehicular and/or pedestrian/bicycle safety and flow

Track and other track material removal for beautification purposes only is not allowed. Tracks and other track material may be covered with paving, dirt or mulch.

LANDSCAPING

Trees are permitted only within five (5) feet of each edge of MTA's right-of-way to the property line; other landscaping, i.e., low shrubbery or ground cover is permitted within an area of ten (10) feet along the outer edges of MTA's right-of-way to the property line. Lease boundary fences may be covered with screening vines. No significant grading or mounding of soil is permitted.

Planting should comply with local ordinances for street and sidewalk visibility and should not compromise overhead clearance for buses and trucks when fully matured. Plantings should be selected which are drought tolerant, preferably native species. Landscape plans are to be submitted to MTA for review and approval.

Perimeter landscaping must be maintained by the project sponsor or lease holder. The project sponsor or lease holder must enter into a License or Lease Agreement with the MTA Real Estate Department that satisfies the Facilities Maintenance Department. The Facilities Maintenance Department may require that the project sponsor provide maintenance for the entire width of the right-of-way, possibly subject to reimbursement from MTA, where appropriate.

If allowed, imported soil must meet MTA's specifications for clean backfill material guidelines, and the lessee shall be required to follow MTA's specified environmental protocol governing hazardous materials for such soil movement.

BICYCLE AND PEDESTRIAN PATHS

Construction of a bikeway and/or pedestrian path is prohibited unless the bikeway or pedestrian path is designed so that the sponsor can demonstrate that it will not have to be relocated or removed to allow for construction or operation of a future transportation project. The additional width of the right-of-way that is not being used for the bikeway/pedestrian facility may not be converted to a landscaped linear park.

An exception to the above requirement is made for the City of Burbank's bikeway project on the Burbank Branch right-of-way west of the Burbank Metrolink Station to the City of Los Angeles city limits. The project has already been fully funded and designed for this segment; the right-of-way is only 36 feet in width; and this segment of the right-of-way has never been included in MTA's Long Range Transportation Plan for a transit project. Because of the narrow width of this right-of-way segment, a bicycle path and adjacent pedestrian path will be allowed in the center of the right-of-way with adjacent perimeter landscaping, subject to approval by the MTA's CEO or his designee.

Similarly, the final one mile segment of this funded bikeway project is in the City of Los Angeles just east of the North Hollywood Red Line station in the area not proposed for any immediate transit use. The right-of-way in this segment, however, is 60 feet wide. The most appropriate placement of the bikeway and landscaping in this segment shall be subject to approval by MTA's CEO or his designee.

Exceptions to the bikeway guideline for other MTA right-of-way segments may be made only at the discretion of the MTA Board.

BILLBOARD REMOVAL

Requests for removal of licensed billboards shall be considered only if, in MTA's sole opinion, it is in the best economic interests of MTA to do so. In the event billboard removals are allowed, the requesting party shall be required to assume all legal and financial responsibility which may arise as a result of the removals, including, but not limited to, relocation or removal expenses to which the billboard owners would be entitled under the law, and reimbursement to MTA of its anticipated lost revenue stream, for a period of not less than ten (10) years, as determined by MTA in its sole discretion.

USE RESTRICTIONS

Temporary structures - Leases may allow temporary structures only, such as construction trailers, portable offices or other portable structures, on concrete slabs or temporary pier footings, if any, and that can be easily relocated at minimal cost. No permanent structures will be allowed.

Supplemental parking - Leases for parking on the rights-of-way shall be for supplemental parking only, for the convenience of employees or customers, and not parking to fulfill zoning or occupancy code requirements or otherwise serve as primary parking for a permanent use.

Public community use - Leases should not be made for a public community use, such as temporary church, school classroom or other community building, parks and recreational uses, equestrian trails, farmers' market, municipal parking lots to serve public civic areas, community gardens and pet parks.

Outdoor storage areas - Leases for outdoor storage uses in or near residential areas shall require that the stored materials be screened by normal height fences.

Compatibility with surrounding areas - Local elected officials and/or city staff may be contacted for input regarding compatibility with local land uses prior to issuing a lease. Uses should not be allowed that could cause community complaints or erode community goodwill towards the MTA and/or future support for any transit project.

GRADE CROSSINGS

Grade crossings of an MTA-owned right-of-way to an adjacent private property will be allowed only if the crossing is to be used as secondary access to the lessee's property, is not for primary access, and is designed and operated in coordination with local city traffic engineering requirements. Crossings will not be allowed if termination of a crossing right by MTA would make all or a portion of the adjacent property unusable. Exceptions may be made if the private property has the potential for another access which could be readily used if the MTA grade crossing was removed in the future. Permission will be granted only by a short term license agreement.

DEVIATIONS FROM THE GUIDELINES

Minor deviations consistent with the overall intent of the guidelines may be made with the approval of MTA's CEO.

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APPENDIX C
ADDITIONAL BACKGROUND POLICY REVIEW

METRO

MTA Right of Way Preservation Guidelines – 2000

The Guidelines encourage the utilization of Metro-owned ROW on an interim basis. However, the policies require the preservation of the Rights-of-Way for future transportation projects stating that construction of a bikeway and/or pedestrian path is prohibited unless the bikeway or pedestrian path is designed so that the sponsor can demonstrate that it will not have to be relocated or removed to allow for construction or operation of a future transportation project. Given current guidelines and the limited width of the ROW, this condition cannot be met.

While clearly prioritizing preservation of ROWs for future transportation projects, the guidelines indicate that exemptions are allowed at the discretion of the Metro Board.

Metro Bicycle Transportation Strategic Plan – 2006

The goal of Metro's Bicycle Transportation Strategic Plan (BTSP) is to integrate bicycle use in transportation projects. The document demonstrates "the significance of bicycle use with transit as a viable mode to improve mobility options in the region." By promoting the bicycle as a viable transportation mode, the BTSP offers a vision of a Los Angeles region with improved overall mobility, air quality, and access to opportunities and resources.

The BTSP focuses on "Bike-Transit Hubs", which are essentially locations where numerous transit lines, activity, and surrounding demographics make them prime candidates to improve bicycle access. The BTSP offers case studies of several Bike-Transit Hubs that, in theory, can apply to similar situations throughout the County. For instance, the Willow Bike-Transit Hub illustrates a Bike to Urban Light Rail interface in the City of Long Beach. This type of Hub might be applicable to a future Rail to River/ Metro Blue Transit Line connection at the BTSP-designated Slauson Bike-Transit Hub. Likewise, the Harbor Transitway Bike-Transit Hub at Expo Park/USC provides an example of a Bike to Busway connection that may be useful when planning the interface between the Rail to River intermediate ATC and the Harbor Transitway's Slauson Station (which is also identified as a Bike-Transit-Hub in the report).

The BTSP also looks at major gaps in the inter-jurisdictional bikeway network. One such gap in the LA River Path is through the industrial portions of downtown Los Angeles and Vernon. This area is currently congested by railroads and freeways, and heavy freight trucks create a stressful environment for cycling while also contributing to poor pavement quality. Metro's BTSP recommends that, "any redevelopment of this area should include improvements to bicycle circulation in the area." The envisioned Rail to River corridor terminates at the L.A. River about 3 miles northwest of the current terminus of the L.A. River Bike Path. Thus, the Rail to River corridor would not provide a true connection to the L.A. River unless either the L.A. River Bike Path is extended towards downtown Los Angeles with an access point at Washington Boulevard near the end of the Metro-owned Harbor Subdivision ROW, or adequate bicycle facilities are provided along Slauson Avenue between Albany Street and Atlantic Boulevard then along Atlantic Boulevard to the current access point to the L.A. River Bike Path.

In addition, the BTSP discusses the benefits and constraints associated with converting abandoned rail corridors to bike paths (Rails-to-Trails) and developing bike paths within active rail corridors (Rails-with-Trails). Both options offer the opportunity to provide a separate path for bicyclists and others, instead of busy roadways. However, they both face major challenges, such as current ownership, potential future use as a transit corridor, current leases on the property, numerous mid-block street crossings, and concerns from adjacent neighbors. Rails-with-Trails projects face additional concerns about safety, trespassing, and limited width. Projects in Whittier, Long Beach, and Burbank are cited as examples of successful conversions of abandoned rail corridors to bike paths.

Metro Harbor Subdivision Transit Corridor Alternatives Analysis Report – Final 2009

The Alternatives chapter (Ch.3) of the Harbor Subdivision Transit Corridor study introduces a preliminary set of alternatives for transit use along the corridor, screens these alternatives using predetermined criteria, and identifies a refined set of alternatives to be further analyzed in a second stage of planning and design. (This 2009 report builds off of a previous 2006 Harbor Subdivision Transit Analysis that identified the initial feasibility of various transit modes.) Only an extension of the Metro Green Line to Torrance was recommended for immediate advancement into environmental review. Therefore, options for transit within the Harbor Subdivision along the proposed Rail to River active transportation corridor will not likely be taken forward for several years, if not decades. In the meantime, the corridor could be utilized to accommodate bicycle and pedestrian movement. Nonetheless, this Rail to River study should consider potential use of the corridor for transit in the future.

The Analysis shows that for approximately nine miles of the Harbor Subdivision (about 1/3 of its length, almost all of it between Redondo Junction and Crenshaw Boulevard

in South Los Angeles), the ROW is 30-40'; too narrow to accommodate both an at-grade rail line and continuous bicycle/pedestrian path. In addition, there is insufficient space for both freight trains and transit vehicles to operate side by side, but this can be solved with temporal separation of freight and passenger services. These constraints are especially significant in the north/south portion of the ROW from Redondo Junction to Slauson Boulevard where widths are as narrow as 12 feet.

The Local North Alternative, which was advanced to the final screening and Conceptual Engineering stage, shows that a transit facility would turn north off of Slauson Boulevard at Long Beach Boulevard and follow the Metro Blue Transit Line until diverting to Alameda Street near 24th Street. This option would free up the Metro-owned ROW east of Long Beach Boulevard until its terminus near the LA River for construction of a dedicated bicycle and pedestrian facility. Proposed transit stations along the Harbor Subdivision in the Rail to River study area include Slauson/Long Beach (existing Metro Blue Transit Line), Slauson/Central, Slauson/I-110 (existing Harbor Transitway/Metro Silver Transit Line), Slauson/Vermont, Slauson/Western, and Florence/West (planned Metro Crenshaw/LAX Transit Line).

The Regional and Express Alternatives, however, would utilize the Harbor Subdivision ROW east and northeast of the Slauson Metro Blue Transit Line station through the end of the Metro-owned ROW, continuing to Union Station. The very narrow ROW in this far-eastern portion of the proposed Rail to River corridor would make it difficult to accommodate both a transit facility and an intermediate ATC.

Metro Long Range Transportation Plan (LRTP) – 2009

The LRTP only includes the Harbor Subdivision Transit Corridor in the Supplemental section as an unfunded, strategic project. However, the LRTP does lay out Metro's commitment to increasing the share of trips in the County made by bicycle and on foot.

The LRTP states, "Bicycle and pedestrian programs are critical components of a successful transit system, as transit riders should be able to access buses and trains without having to drive a vehicle to and from transit stations. The sustainability of our transportation system depends upon the interface between modes." The Rail to River corridor would serve Metro's goal of connecting people to transit without them having to drive to stations or stops.

In addition, Metro's Pedestrian Priority Improvement Program aims, "to develop more safe, connected, and walkable pedestrian environments that promote non-motorized transport as a viable alternative for an increasing share of trips made by residents and visitors of Los Angeles County." The Rail to River corridor would also help Metro achieve their Pedestrian goals by providing a safe and attractive pathway for residents to walk to their destinations; including transit stops.

The LRTP estimates Metro's Call for Projects to include $12.5 million/year for Strategic Plan bicycle projects and $10.0 million/year for Strategic Plan pedestrian projects.

Metro Crenshaw/LAX Transit Corridor Final EIS/EIR – 2011

The Metro Crenshaw/LAX light-rail project EIR provides data on transit service and daily ridership along the ROW, which includes two future stations that could possibly serve as a terminus for the Rail to River Active Transportation Corridor: Crenshaw/Slauson and Florence/West. The study also shows that Metro Bus Route 108 along Slauson Avenue sees 14,000[1] daily boardings. Metro Bus Route 358 also travels along Slauson Avenue.

Metro's Countywide Sustainability Planning Policy & Implementation Plan – 2012

The Sustainability Plan lays out several Principles and Priorities that will help the agency "bring greater clarity, meaning, and consistency to its approach for implementing the 'sustainability' commitments currently reflected in its principal values, business goals, and sustainability mission and vision." Some of the principles and priorities that are relevant to the communities along the Rail to River Study Corridor are:

- Prosperity. Reduce transportation costs for residents and provide the mobility necessary to increase economic competitiveness.
- Green Modes. Promote clean mobility options to reduce criteria pollutants, greenhouse gas emissions, and dependence on foreign oil.
- Healthy Neighborhoods. Improve public health through traffic safety, reduced exposure to pollutants, and design and infrastructure for active transportation.
- Community Development. Design and build transportation facilities that promote infill development, build community identity, and support social and economic activity.
- Context Sensitivity. Build upon the unique strengths of Los Angeles County's communities through strategies that match local and regional context and support investment in existing communities.

1. From Fiscal Year 2007 1st Quarter data

Metro's increased focus on sustainable communities and on improved accessibility suggests that the agency's direct or indirect sponsorship of localized strategies may be needed to advance regional goals. By adopting the above principles, Metro is committing itself to supporting initiatives aimed at intermodal connectivity, green modes, and healthy neighborhoods. These priorities require implementation and attention to detail at the local level. Desired outcomes include a higher number of trips made by active transportation and growth in transit trips that benefit from more attractive and welcoming pedestrian and bicycle infrastructure

Bicycle Share Program Implementation Plan Motion presented September 20, 2012

The Metro Board voted in January 2014 to approve development of a bicycle share program implementation plan. The motion indicates that in October 2013, the Metro Board adopted, as policy, bicycle use as a formal transportation mode.

Rail to River Bikeway Motion by Supervisors Mark Ridley Thomas and Gloria Molina presented September 20, 2012

The motion describes the public benefits that would result from converting the Harbor Subdivision right-of-way (between the proposed West Boulevard Station on the Metro Crenshaw/LAX Transit Line and Redondo Junction south of Downtown Los Angeles) to an active transportation corridor. Among these benefits are enhancements to the regional transportation network, first mile/last mile connections to transit, reductions in vehicle emissions along the corridor, and economic benefits for the region if the new path is attractive to visitors. The motion suggests that Metro "look at intermediate uses for this stretch of right-of-way that would not preclude future transit uses."

Metro Active Transportation Alternative Preliminary Assessment: Rail to River Commuter Path – 2013

The Preliminary Assessment explains that the transit option for the Harbor Subdivision corridor has been identified as a Strategic Project with no current funding. Currently, the right-of-way (ROW) provides no public benefit. Metro staff recommends that the corridor be used for active transportation as an interim use. The Assessment also notes potential constraints and opportunities:

CONSTRAINTS

- The ROW is an active freight corridor where BNSF currently runs service. Regular freight service is provided from the LA River to the Malabar yard, with very limited services on the portion beyond the yard. BNSF operates the facility through an existing easement agreement with Metro.
- Often, improvements that are made on an interim basis tend to become permanent due to the desires of a segment(s) of the community to retain the project indefinitely. As a result, if future funding becomes available to pursue a major transit project on the Metro-owned ROW as indicated in the 2009 Long Range Transportation Plan (LRTP), Metro would have to either purchase additional ROW, (which may be both difficult and costly) or pursue other solutions (which may significantly increase the cost of the transit project) to maintain the active transportation commuter path.

OPPORTUNITIES

- Preliminary analysis of the corridor has brought to light opportunities that exist to improve ROW conditions. Some opportunities include connectivity to transit for pedestrians and bicyclists, filling an existing gap in the countywide bicycle transportation network, and providing Metro transit riders and community members with transportation infrastructure that promotes healthier, more environmentally sustainable, and safer transportation alternatives including first/last mile access. Field observations during preliminary assessment of current ROW conditions indicated that in at least a 5 mile segment of the potential study area, a significant number of pedestrians and bicyclists were present; suggesting that potential high utilization for pedestrian and bicycle infrastructure exists.
- The community is considered to be transit dependent with current Metro ridership along the Slauson Corridor from Santa Fe Avenue to Crenshaw Boulevard at 19,502 weekday boardings. Opportunity exists along Slauson Boulevard and the Metro-owned ROW through Crenshaw Boulevard, particularly from Long Beach Boulevard (location of the Metro Blue Transit Line station) and west along Slauson and then southwest along ROW to Crenshaw Boulevard where the future Metro Crenshaw/LAX Transit Line, Florence Avenue/West Boulevard station is to be located.
- The ROW current condition poses a blight to the community. Construction of an interim project (assuming sponsorship from local jurisdiction for maintenance) would reduce dumping along ROW, mitigate nuisance related issues, deter and mitigate vandalism, reduce the number of homeless encampments along the alignment, and most notably provide a safe transportation option in an area where the ROW currently serves no utilitarian purpose.

Metro First Last Mile Strategic Plan & Planning Guidelines (2014)

Metro's First Last Mile Strategic Plan, adopted by the Metro Board in April 2014, seeks to better coordinate infrastructure investments in rail station and bus stop areas to extend the reach of transit services with the ultimate goal of increasing ridership. The Plan utilizes the concept of "the Pathway" to improve station access and extend access coverage to Metro Rail and BRT stations. The Pathway will be located along key access routes selected to shorten trip length and seamlessly connect transit riders with intermodal facilities such as bus stops, bike hubs, parking lots, or regional bikeways. **Figure C-1** illustrates a proposed Pathway network in North Hollywood.

Metro is currently supporting Pilot station areas in Arcadia, Duarte, Los Angeles, and Santa Monica. Relevant stations in this feasibility study area that will be subject to the planning guidelines include the existing Metro Blue and Silver Transit Line stations, as well as the future Metro Crenshaw/ LAX Transit Line stations at Slauson Avenue/Crenshaw Boulevard and Florence Avenue/West Boulevard.

Download the First Last Mile Strategic Plan at: http://media.metro.net/board/Items/2014/04_april/20140424rbmitem7.pdf

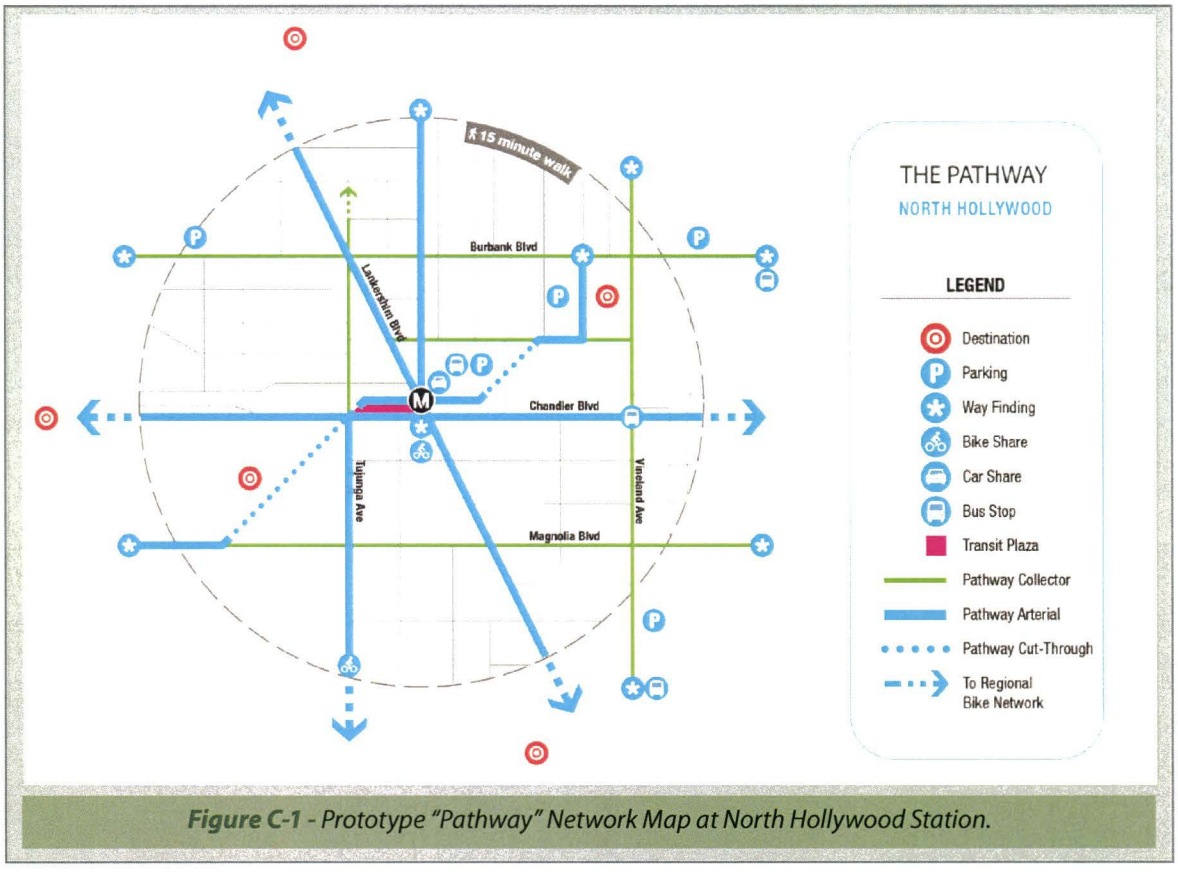

Figure C-1 - Prototype "Pathway" Network Map at North Hollywood Station.

COUNTY OF LOS ANGELES

Los Angeles River Master Plan – 1996

The Los Angeles River Master Plan released by the Los Angeles County Department of Public Works was largely replaced by the City of Los Angeles' 2007 L.A. River Revitalization Master Plan, but the older County plan includes jurisdictions along the River that are outside of the City of L.A. The County's Master Plan, for example, provides detailed guidance for connecting the L.A. River to the cities of Vernon, Maywood, and Bell.

Figure C-2 shows recommended access improvements around the River in these cities. Notable recommendations include a "potential city bike path with river access" along 52nd Street in Maywood and a Rail-to-Trail conversion in the Southern Pacific Railroad ROW along Randolph Street that might eventually connect with the Rail to River corridor.

In general, the County Master Plan encourages connections to the River from schools, parks, workplaces, and "public gathering locations" located within one mile of the River. It also recommends that as trails are developed and improved, they should be connected to parks and community facilities in adjacent neighborhoods through streetscape and signage improvements that lead to the River

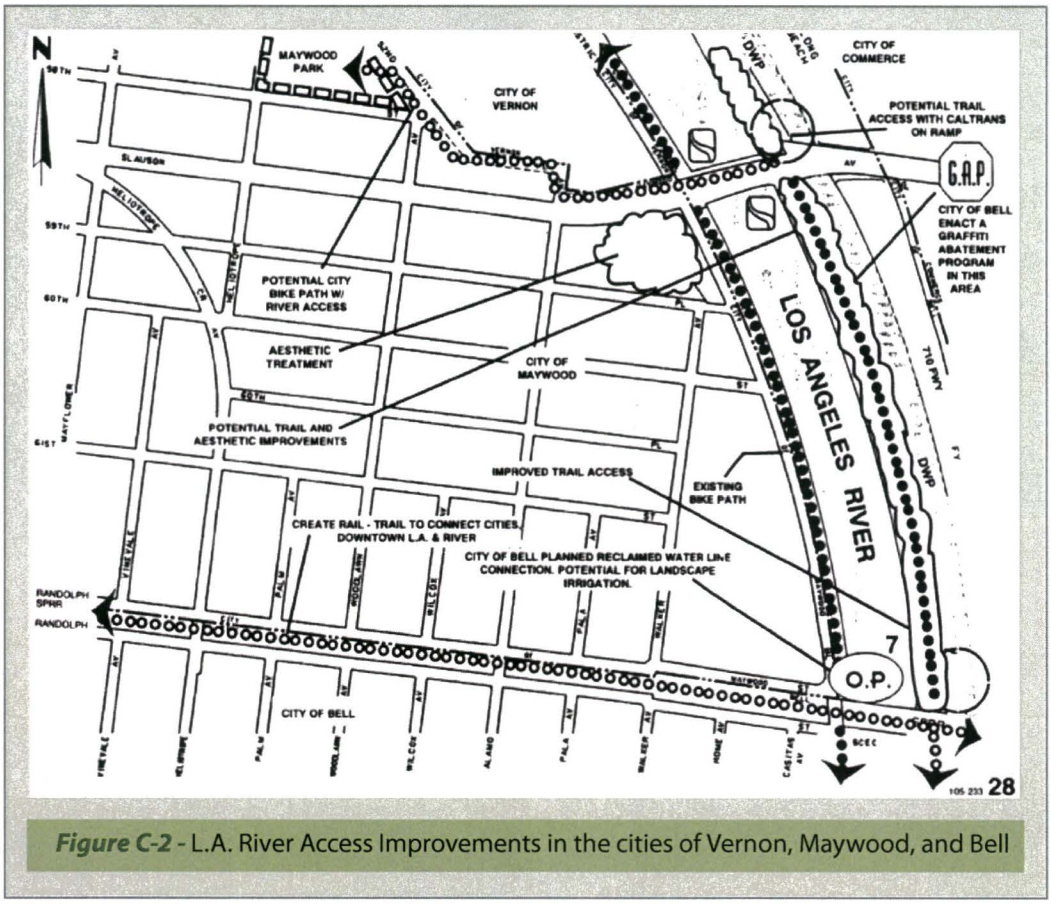

Figure C-2 - L.A. River Access Improvements in the cities of Vernon, Maywood, and Bell

County of Los Angeles Bicycle Master Plan – 2012

The County of Los Angeles Bicycle Master Plan proposes to build on the existing 144 miles of bikeways throughout the unincorporated portions of the County and install approximately 831 miles of new bikeways in the next 20 years. The Rail to River project corridor is located adjacent to a section of unincorporated County in the Metro planning area. **Table C-1** displays proposed bikeways from the Plan that intersect the corridor, which are also shown in **Figure C-3**.

Table C-1 - County-proposed Bikeways Intersecting the Rail to River Corridor

Street	Proposed Facility Type
Central Avenue	Bikeway Proposed by Other Jurisdiction
Compton Avenue	Class II Bike Lanes
Holmes Avenue	Class II Bike Lanes
Hooper Avenue	Class II Bike Lanes
Miramonte Boulevard	Bicycle Boulevard
Slauson Avenue	Class II Bike Lanes

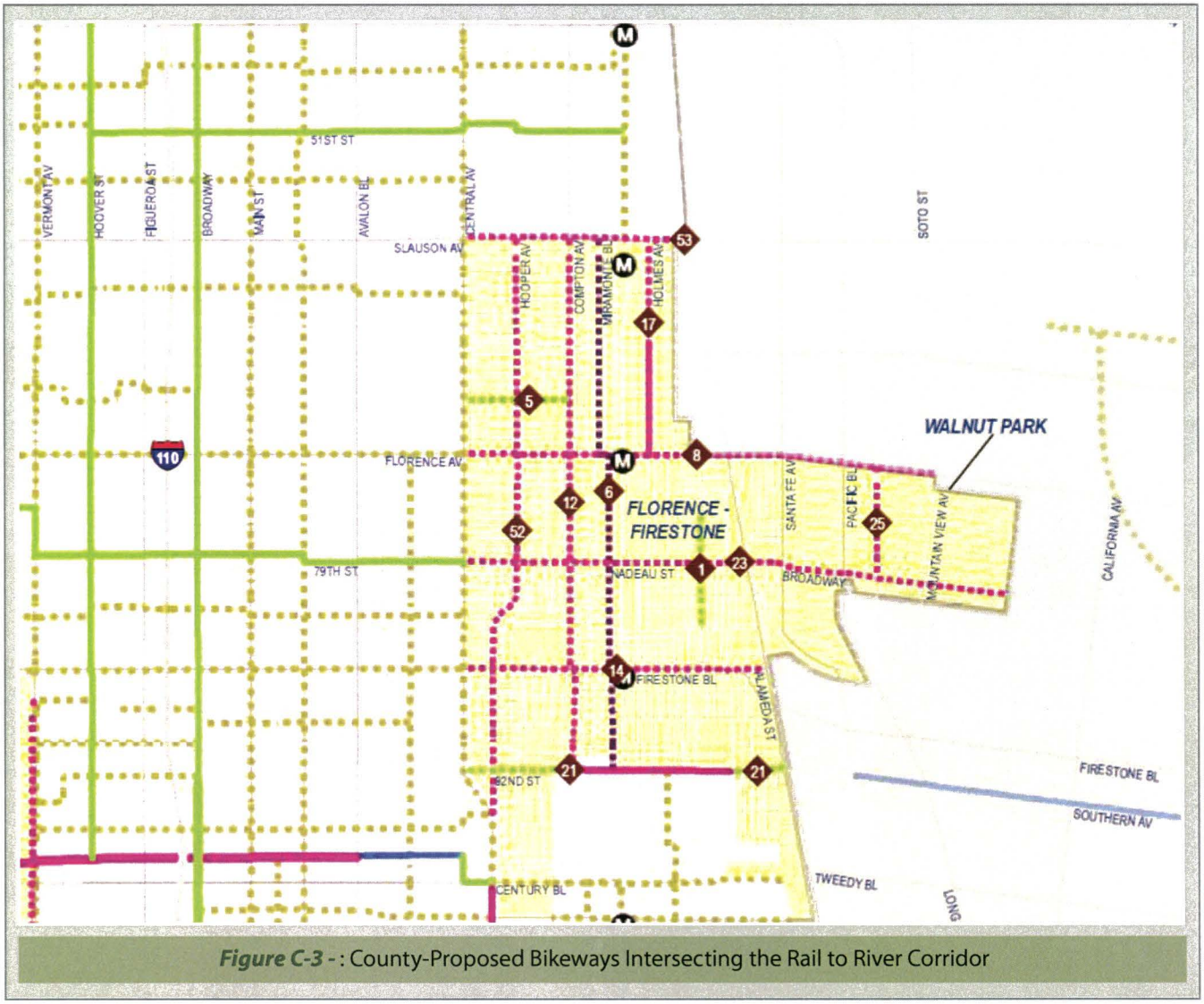

Figure C-3 - : County-Proposed Bikeways Intersecting the Rail to River Corridor

Table C-2 identifies the goals and policies from the County of Los Angeles Bicycle Master Plan that relate to the Rail to River project.

Table C-2 - Relevant Goals and Policies from the County of Los Angeles Bicycle Master Plan

Goals and Policies
Goal 1 – Bikeway System. Expanded, improved, and interconnected system of county bikeways and bikeway support facilities to provide a viable transportation alternative for all levels of bicycling abilities particularly for trips of less than five miles
IA 1.1.2 Coordinate with adjacent jurisdictions and LACMTA to implement bicycle facilities that promote connectivity
Goal 2 – Safety. Increased safety of roadways for all users
IA 2.1.3 Coordinate with the California Public Utilities Commission to consider impacts and safety mitigation measures when proposed bicycle facilities are adjacent to, near, or over any railroad or rail transit right-of-way

County of Los Angeles General Plan 2035 (Public Review Draft) – 2012

The Rail to River corridor runs adjacent to a portion of unincorporated Los Angeles County along Slauson Avenue between Central Avenue and Wilmington Avenue. Therefore, this piece of a potential active transportation path may have to conform to the L.A. County General Plan.

MOBILITY ELEMENT (CHAPTER 4)

The Introduction affirms that the County's General Plan will comply with the State's Complete Streets Act of 2007: "The California Complete Streets Act of 2007 requires the General Plan to demonstrate how the County will provide for the routine accommodation of all users of a road or street, including pedestrians, bicyclists, users of public transit, motorists, children, seniors, and the disabled. The Mobility Element addresses this requirement with policies and programs that consider all modes of travel, with the goal of making streets safer, accessible, and more convenient to walk, ride a bicycle, or take transit." In several places, the General Plan references the County's focus on both, "providing streets that accommodate all users" and "creating a multimodal transportation system."

Regarding bikeways, the General Element claims that, "the lack of public awareness and the safety concerns associated with road sharing create a need for bikeways with a grade separation, lane delineation, or designated trail/path construction for bicycle users throughout the County." The General Plan defers to the 2012 Los Angeles County Bicycle Master Plan for guidance on bicycle facilities in unincorporated parts of the County.

The General Plan also includes pedestrian travel in its commitment to improving conditions to allow for increased alternative transportation uses. "The General Plan includes a program to prepare community pedestrian plans for the County that will set standards for sidewalks, street crossings, sidewalk continuity, street connectivity, and topography. The community pedestrian plans will emphasize the connectivity of pedestrian paths to and from public transportation, major employment centers, shopping centers, and government buildings."

Goals and policies relevant to the development of the Rail to River corridor for transportation purposes are in **Table C-3** below.

Table C-3 - Relevant Goals and Policies from the Mobility Element

Goals and Policies
Goal M-1: Street designs that incorporate the needs of all users.
M 1.1 Provide for the accommodation of all users, including pedestrians, motorists, bicyclists, equestrians, users of public transit, seniors, children, and persons with disabilities when requiring or planning for new, or retrofitting existing, roads and streets.
M 1.2 Ensure that streets are safe for sensitive users, such as seniors and children.
M 1.3 Realign capital improvement programs and funding streams to ensure the implementation of complete streets.
M 1.4 Utilize industry standard rating systems, such as the Institute for Sustainable Infrastructure (ISI) Rating System, to assess sustainability and effectiveness of street systems for all users.
Goal M-2: Interconnected and safe bicycle- and pedestrian-friendly streets, sidewalks, paths and trails that promote active transportation and transit use.
M 2.1 Design streets that accommodate pedestrians and bicyclists, and reduce motor vehicle accidents through a context sensitive process that addresses the unique characteristics of urban, suburban, and rural communities.

Goals and Policies
M 2.2 Accommodate pedestrians and bicyclists, and reduce motor vehicle accidents by implementing the following street designs, whenever appropriate and feasible: ● Lane width reductions to 10 or 11 feet in low speed environments with a low volume of heavy vehicles. ● Wider lanes may still be required for lanes adjacent to the curb, and where buses and trucks are expected. ● Low-speed designs. ● Access management practices developed through a community-driven process. ● Back in angle parking at locations that have available roadway width, and bike lanes where appropriate.
M 2.3 Accommodate pedestrians and bicyclists, and reduce motor vehicle accidents by implementing the following intersection designs whenever appropriate and feasible: ● Right angle intersections that reduce intersection skew. ● Smaller corner radii to reduce crossing distances and slow turning vehicles. ● Traffic calming measures, such as bulb-outs, sharrows, medians, roundabouts, and narrowing or reducing the number of lanes (road diets) on streets. ● Gutter placement between parking and bikeways. ● Crossings at all legs of an intersection. ● Shorter crossing distances for pedestrians. ● Right-turn channelization islands. Sharper angles of slip lanes may also be utilized. ● Signal progression at speeds that support the target speed of the corridor. ● Pedestrian push buttons when pedestrian signals are not automatically recalled. ● Walk interval on recall for short crossings. ● Left-turn phasing. ● Prohibit right turn on red. ● Signs to remind drivers to yield to pedestrians.
M 2.4 Ensure a comfortable walking environment for pedestrians by implementing the following, whenever appropriate and feasible: ● Designs that limit dead-end streets and dead-end sidewalks. ● Adequate lighting on pedestrian paths, particularly around building entrances and exits, and transit stops. ● Designs for curb ramps, which are pedestrian friendly and compliant with the American Disability Act (ADA). ● Perpendicular curb ramps at locations where it is feasible to reduce the curb return radius. ● Pedestrian walking speed based on the latest standard for signal timing. Slower speeds should be used when appropriate (i.e., near senior housing, rehabilitation centers, etc.). ● Approved devices to extend the pedestrian clearance times at signalized intersections. ● Accessible Pedestrian Signals (APS) at signalized intersections. ● Pedestrian crossings at signalized intersections without double or triple left or right turn lanes. ● Pedestrian signal heads, countdown pedestrian heads, pedestrian phasing and leading pedestrian intervals at signalized intersections. ● Exclusive pedestrian phases (pedestrian scrambles) where turning volume conflicts with very high pedestrian volumes. ● Advance stop lines at signalized intersections. ● Pedestrian Hybrid Beacons. ● Medians or crossing islands to divide long crossings.

Goals and Policies
• High visibility crosswalks. • Pedestrian signage.
• Advanced yield lines for uncontrolled crosswalks. • Rectangular Rapid Flashing Beacon or other similar approved technology at locations of high pedestrian traffic. • Safe and convenient crossing locations at transit stations and transit stops located at safe intersections.
M 2.5 Ensure a comfortable bicycling environment by implementing the following, whenever appropriate and feasible: • Bicycle signal heads at intersections. • Bicycle signal detection at all signalized intersections. • Wayfinding signage. • Road diet techniques such as lane narrowing, lane removal, and parking removal/restriction. • Appropriate lighting on all bikeways, including those in rural areas. • Designs, or other similar features such as shoulder bikeways, cycle tracks, contra flow bike lanes, shared use paths, buffered bike lanes, raised bike lanes, and bicycle boulevards.
M 2.6 Encourage the implementation of future designs concepts that promote active transportation, whenever available and feasible.
M 2.7 Require sidewalks and bikeways to accommodate the existing and projected volume of pedestrian and bicycle activity, considering both the paved width and the unobstructed width available for walking.
M 2.8 Connect pedestrian and bicycle paths to schools, public transportation, major employment centers, shopping centers, government buildings, residential neighborhoods, and other destinations.
M 2.9 Encourage the planting of trees along streets and other forms of landscaping to enliven streetscapes by blending natural features with built features.
M 2.10 Encourage the provision of amenities, such as benches, shelters, secure bicycle storage, and street furniture, and comfortable, safe waiting areas near transit stops.
M 2.11 Promote the continuity of streets and sidewalks through design features, such as limiting mid-block curb cuts, encouraging access through side streets or alleys, and promoting shorter block lengths.
Goal M-3: Streets that incorporate innovative designs.
M 3.1 Facilitate safe roadway designs that protect users, preserve state and federal funding, and provide reasonable protection from liability.
M 3.2 Consider innovative designs when part of an accepted standard, or when properly vetted through an appropriate engineering/design review, in compliance with all state and federal laws.
M 3.3 Complete the following studies prior to the implementation of innovative design concepts: • An analysis of the current and future context of the community and neighborhood in which they are proposed • A balanced assessment of the needs of all users and travel modes (i.e., pedestrian, bicycle, transit, vehicular, and equestrian, where appropriate) • A technical assessment of the operational and safety characteristics for each mode;
• A consistency check with transportation network plans, including the Highway Plan, Bicycle Master Plan, and Community Pedestrian Plans.
M 3.4 Support legislation that minimizes or eliminates liability associated with the implementation of innovative street designs that accommodate all users.
Goal M-4: An efficient multimodal transportation system that serves the needs of all County residents.
M 4.1 Expand transportation options throughout the County that reduce automobile dependence.
M 4.4 Ensure expanded mobility and increase transit access for underserved transit users, such as seniors, students, low income households, and persons with disabilities.

Goals and Policies
M 4.6 Support alternative LOS standards that account for a multimodal transportation system.
M 4.8 Ensure the participation of all potentially affected communities in the transportation planning and decision-making process.
M 4.9 Support the linkage of regional and community-level transportation systems, including multimodal networks.
M 4.11 Work with adjacent jurisdictions to ensure connectivity and the creation of an integrated regional network.
Goal M-5: Land use planning and transportation management that facilitates the use of transit.
M 5.1 Facilitate transit-oriented land uses and pedestrian-oriented design to encourage transit ridership.
M 5.3 Maintain transportation right-of-way corridors for future transportation uses, including bikeways, or new passenger rail or bus services.
M 5.4 Support dedicated funding streams for the construction, maintenance and improvement of roadway, public transit, pedestrian, and bicycle transportation systems.
Goal M-6: The safe and efficient movement of goods.
M 6.6 Preserve property for planned roadway and railroad rights-of-way, marine and air terminals, and other needed transportation facilities.
Goal M-7: Transportation networks that minimizes negative impacts to the environment and communities.
M 7.1 Encourage the use of natural systems to treat stormwater and rainwater runoff.
M 7.2 Minimize roadway runoff through the use of permeable surface materials, such as porous asphalt and concrete materials, wherever feasible.
M 7.3 Encourage the creation of wildlife underpasses and overpasses, fencing, signage, and other measures to minimize impacts to wildlife at junctures where transit infrastructure passes through sensitive habitats.
M 7.4 Encourage the use of sustainable transportation facilities and infrastructure technologies, such as liquid and compressed natural gas, hydrogen gas stations, ITS, and electric car plug-in ports.
M 7.5 Policy M 7.5: Where the creation of new roadways or other transportation systems is necessary in areas with sensitive habitats, particularly SEAs, use best practice design to encourage species passage and minimize genetic diversity losses when new transportation infrastructure cannot avoid crossing through undisturbed natural areas.

The Parks and Recreation Element of the General Plan asserts the County's support for improving the region's multi-use trail system:

Trails offer opportunities for people to hike, walk, run or ride, and encourage people to connect with nature. As linear parks, trails help make the region more livable and provide communities with access to increased health and fitness activities. Trails can also promote increased activity with smaller amounts of land than large parks, and can often use leftover or unwanted land. As the County's population continues to grow and the region becomes increasingly urbanized, the demand for outdoor recreation opportunities and trails will increase. One way to meet this demand is to create and maintain an adequate multi-use trail system that is accessible to all County residents and to provide continuous enjoyment though increased and expanded connectivity. Additional trails are also needed closer to population centers in the central and southwestern portions of the County, where more residents could conveniently access and reap the recreation, health, and mobility benefits of trails. Multi-use trails are used by equestrians, cyclists, hikers, and runners. As the amount of public land continues to decrease, the need for multi-use trails will continue to grow, as well as the need to find solutions to possible user conflicts. An expanded multi-use trial system can alleviate user conflicts, while also providing increased access to this important health and fitness system.

The County is also interested in working with other public agencies to provide more residents with access to parks and recreational facilities. Residents in the unincorporated portions of L.A. County will benefit from the proposed Rail to River corridor as much as residents of nearby cities. For example, the Rail to River corridor will link the City of L.A.'s Augustus F. Hawkins Natural Park to the unincorporated communities south of Slauson Avenue.

County goals and policies relevant to the development of the Rail to River corridor for recreational purposes are in **Table C-4**.

Table C-4 - Relevant Goals and Policies from the Parks and Recreation Element

Goals and Policies
Goal P/R 2: Enhanced multi-agency collaboration to leverage resources.
P/R 2.1 Develop joint-use agreements with other public agencies to expand recreation services.
P/R 2.3 Build multi-agency collaborations with schools, libraries, non-profit, private, and other public organizations to leverage capital and operational resources.
P/R 2.5 Support the development of multi-benefit parks and open spaces through collaborative efforts among entities such as cities, County, state, and federal agencies, private groups, schools, private landowners, and other organizations.
P/R 2.6 Participate in joint powers authorities (JPAs) to develop multi-benefit parks as well as regional recreational facilities.
Goal P/R 4: Improved accessibility and connectivity to a comprehensive trail system including rivers, greenways, and community linkages.
P/R 4.1 Create multi-use trails to accommodate all users.
P/R 4.2 Develop staging areas and trail heads at strategic locations to accommodate multi-use trail users.
P/R 4.3 Develop a network of feeder trails into backbone trails.
P/R 4.4 Maintain and design multi-purpose trails in ways that minimize circulation conflicts among trail users.
P/R 4.5 Collaborate with other public, non-profit, and private organizations in the development of a comprehensive trail system.
P/R 4.6 Create new multi-use trails that link community destinations including parks, schools, and libraries.

CITY OF LOS ANGELES

Crenshaw Corridor Specific Plan – 2004

The Rail to River corridor will terminate at Crenshaw Boulevard just south of West 67th Street. This terminus intersects with the Crenshaw Specific Plan area, as well as the Design Review Board Boundary, so any trailhead that Metro plans to construct may be subject to the Specific Plan's guidelines. The paragraph below lays out the legal basis for compliance.

> Section 5. SPECIFIC PLAN COMPLIANCE AND EXEMPTIONS.
>
> A. Specific Plan Compliance Required for Building Permit.
>
> Notwithstanding any provision of the LAMC to the contrary, no building permit, grading permit or foundation permit shall be issued for a Project, including Projects on the public right-of-way, unless the applicant complies with this Specific Plan. All Projects shall be subject to the Project Permit Compliance requirements of Section 11.5.7 C of the LAMC.

The Specific Plan focuses on improving the pedestrian experience along the Crenshaw Corridor, which will benefit the Rail to River project by making the approach to the path more attractive and safer for pedestrians and bicyclists. For instance, two of the Specific Plan's stated purposes are:

- E. To promote a high level of pedestrian activity in areas identified as Pedestrian Oriented by promoting neighborhood serving uses, which encourage pedestrian activity and promote reduced traffic generation.
- F. To promote an attractive pedestrian environment in the areas designated as Pedestrian Oriented by regulating the design and placement of buildings and structures which accommodate outdoor dining and other ground level retail activity.

Lastly, Part A of Section 11 states that Pole Signs are prohibited in the Specific Plan. This may affect the design of wayfinding signage at a potential Rail to River trailhead at Crenshaw Boulevard.

Figure C-4 shows the extent of the Specific Plan's boundaries in the portion where the Rail to River corridor will terminate.

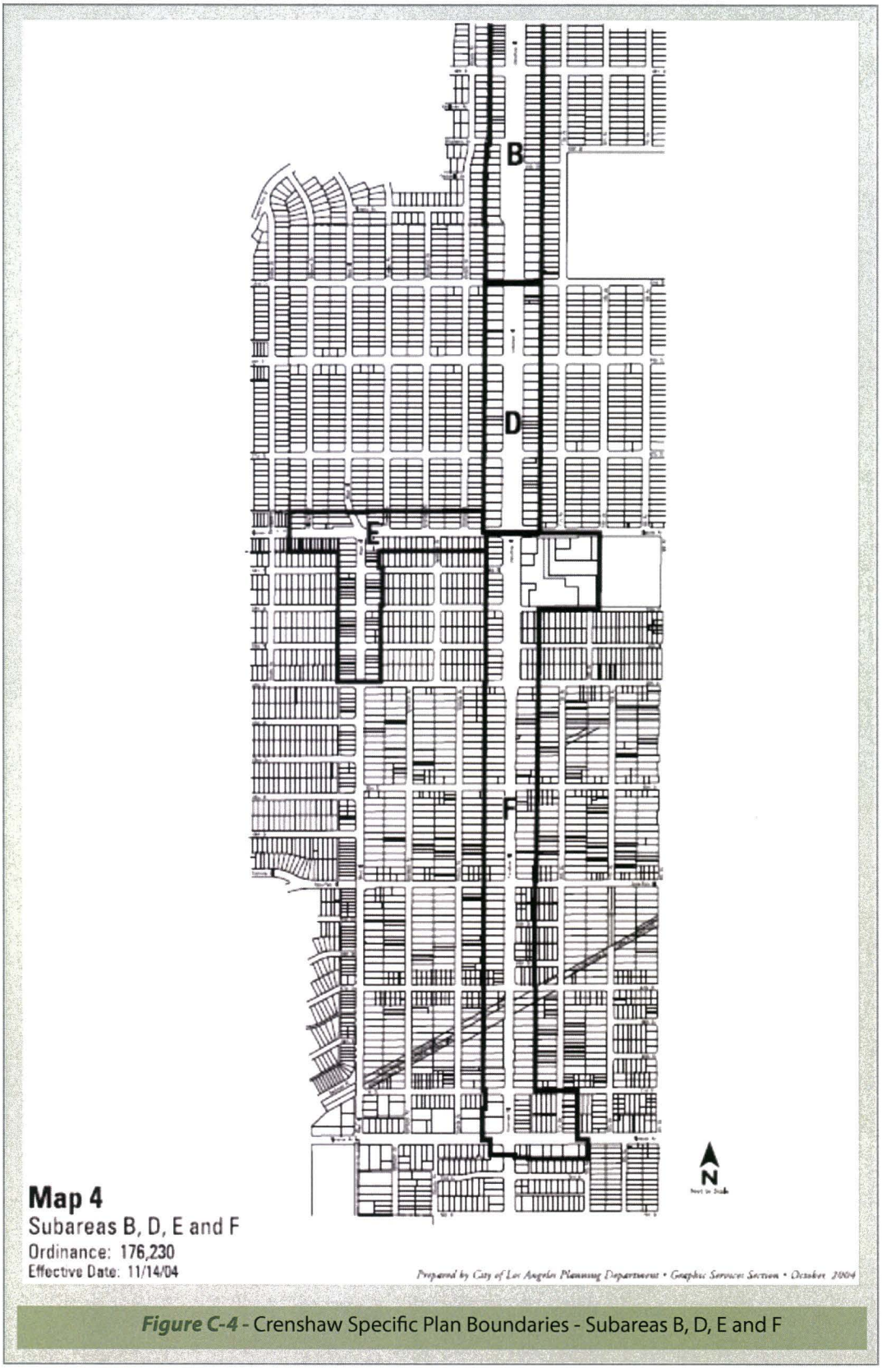

Figure C-4 - Crenshaw Specific Plan Boundaries - Subareas B, D, E and F

Los Angeles River Revitalization Master Plan – 2007

The L.A. River Revitalization Master Plan (RMP) study area reaches from the San Fernando Valley through Downtown Los Angeles to Washington Boulevard in the industrial district. This terminus is virtually identical to the eastern terminus of the Rail to River active transportation corridor. An overarching goal of the RMP is to create a continuous 32-mile L.A. River Greenway with frequent access at key locations.

The L.A. River RMP seeks to re-connect adjacent neighborhoods to the River, while ensuring that all connections between the community and the River accommodate multiple modes, including motorized traffic, rail transit, bicyclists, pedestrians, and equestrians per acceptable design standards. The RMP's Recommendation #5.5 seeks to, "create safe non-motorized routes between the River and cultural institutions, parks, civic institutions, transit-oriented development, schools, transit hubs, and commercial and employment centers within 1 mile of the River." The proposed Rail to River corridor would provide a high-quality link between the River and communities along the Harbor Subdivision ROW. The RMP also recognizes that many of the former rail right-of-ways along the River, "offer unique opportunities for adaptive reuse as trails."

South Los Angeles Transportation Master Plan (TMP)– 2009

The study area for this TMP includes the community plan areas of West Adams-Baldwin Hills-Leimert, South Los Angeles, and Southeast Los Angeles. The Executive Summary states that, "between 2000 and 2030, the population in the study area is expected to increase by 17%, and employment is expected to grow by 18%. Travel volumes are predicted to increase predominantly along east-west arterial segments, especially near Interstate 110 (Harbor Freeway). Traffic congestion is expected to increase most dramatically in the east-west direction."

This TMP used a SCAG model to predict future increases in traffic volume on South Los Angeles' surface streets. The model showed that AM peak hour traffic volumes on Westbound Slauson Boulevard between I-110 and Central Avenue are expected to increase up to 24% between 2000 and 2030. In addition, a notable 30% increase in PM peak period cut-through traffic (i.e., drivers who pass through the area without stopping on the way to their ultimate destination) is forecast on Slauson Blvd. While most north-south cut-through traffic occurs on I-110 rather than on surface streets, drivers traveling east-west in the area between I-110 and I-105 are more likely to cut through the study area by using streets like Slauson Boulevard. While not stated in the report, these findings seem to justify providing high-quality active transportation corridors in the east-west direction so that more trips will be made by modes other than motor vehicles.

At the time of this 2009 TMP's publication, the City of Los Angeles was revising its Bicycle Master Plan, so please refer to the 2010 City of Los Angeles Bicycle Plan for current maps of proposed and existing bicycle facilities. The South Los Angeles TMP does mention that the City of Los Angeles has a policy stating that, "bikeway facilities are to be made part of the design of transit facilities that are to operate in dedicated rights-of-way." Thus, any future high-capacity transit line planned for the Harbor Subdivision right-of-way shall also include a bikeway.

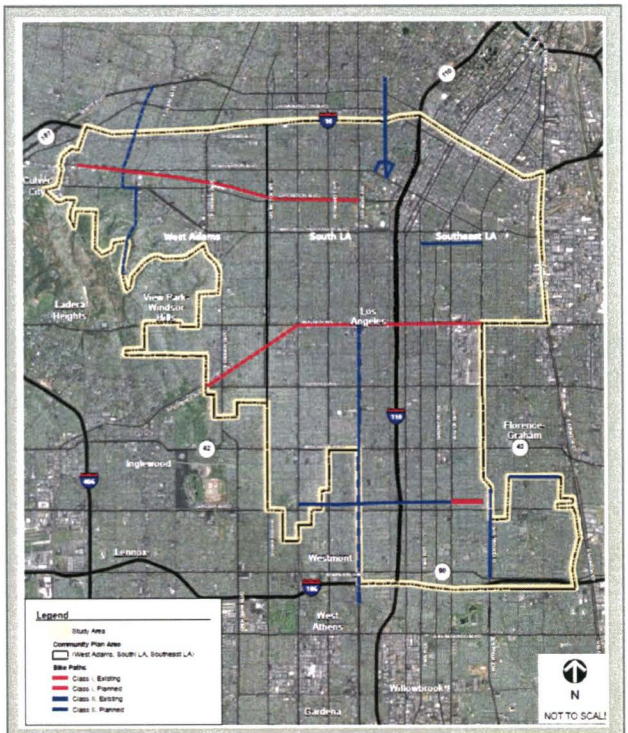

Figure C-5 - Bicycle Routes in the South Los Angeles Transportation Master Plan Study Area

City of Los Angeles 2010 Bicycle Plan – 2011

The City of Los Angeles's 2010 Bicycle Plan aims to increase the number and types of bicyclists who bicycle in the City, make every street a safe place to ride a bicycle, and make the City of Los Angeles a bicycle friendly community. The Plan recommends 1,684 miles of new bikeways and introduces three new bikeway networks: the Backbone, Neighborhood, and Green Network. Recommended mileage and descriptions of each network are presented in **Table C-5**.

Figure C-6 displays recommended bikeways adjacent to the Rail to River study corridor.

Table C-5 - Proposed Bikeway Mileage in the Los Angeles Bicycle Plan

Network Type	Proposed Mileage	Description	Expected Population	
Backbone	719	Comprised primarily of bicycle lanes	Experienced riders who are comfortable riding close to moderate to heavy traffic volumes	
Neighborhood	825		Comprised primarily of Bicycle-Friendly Streets, (on Local and Collector Streets) which are characterized by low traffic volumes and slower speeds	All bicycle riders, including children, women, families, young adults, and seniors
Green	139		Enhances access, through bicycle paths and shared use paths, to the City's green open spaces, particularly river channels	Multiple types of riders, including experienced transportation/ recreational bicyclists and beginning bicyclists

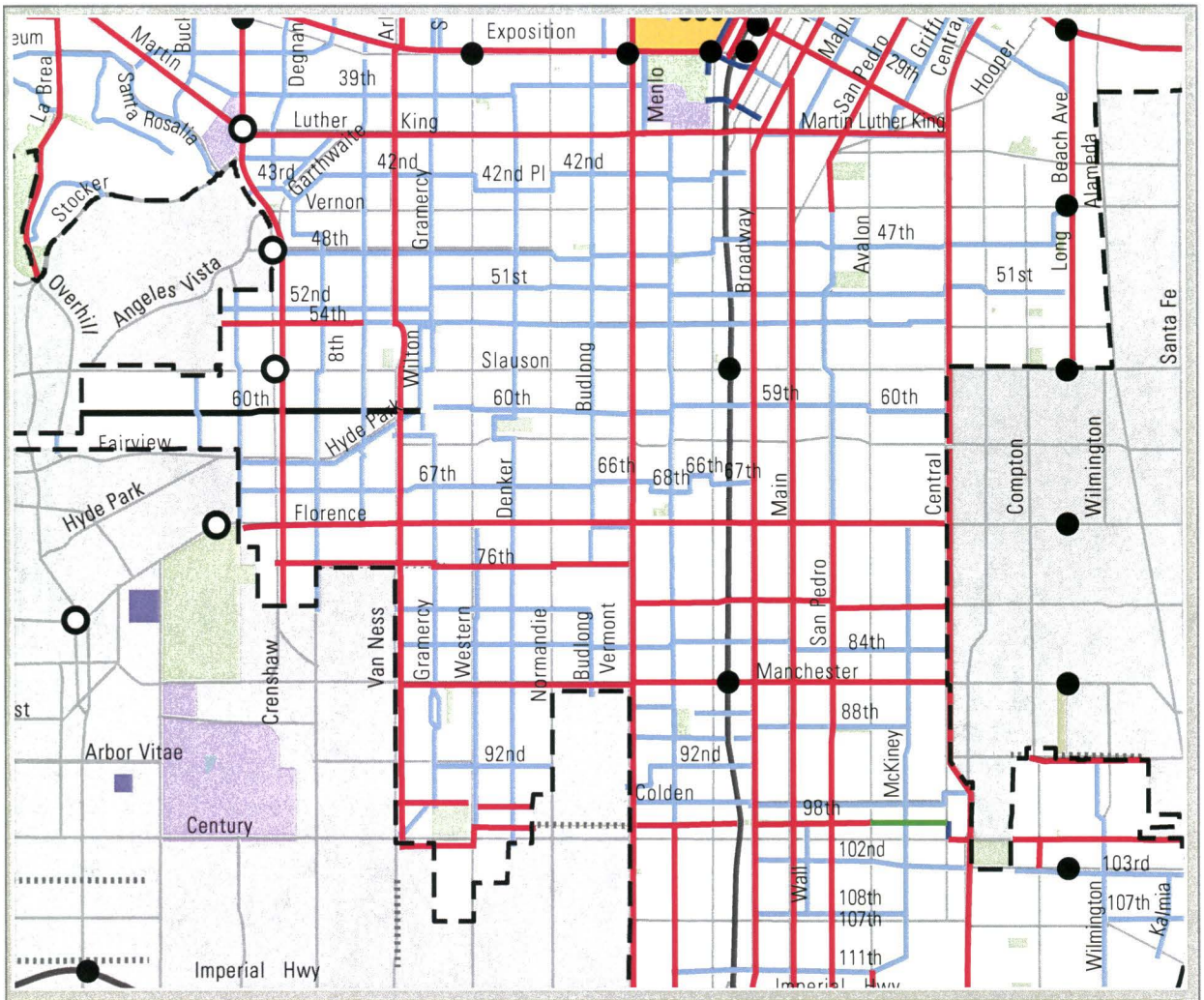

Figure C-6 - City of Los Angeles Proposed Bikeways

The Plan includes a comprehensive set of policies and programs to improve bicycling in the City. Policies and programs that are related to shared-use paths and other components of the Rail to River project are identified in **Table C-6** below.

Table C-6 Relevant Policies and Programs in the Los Angeles Bicycle Plan

Policies	Programs
Policy 1.1.8 Require a public hearing for the proposed removal of an existing or designated bicycle lane or path	A. Public Hearing Process for Bicycle Facility Removal
Policy 1.3.1 Incorporate bikeways into transit projects that include an exclusive right-of-way	A. Bikeways along Exclusive Transit Rights-of-Way
Policy 2.3.1 Upgrade bridges, intersections, freeway ramps, tunnels, and grade separations that impede safe and convenient bicycle passage	A. Signalization Program B. Bridge Design Program
Policy 2.3.3 Provide and maintain bicycle sensitive signal detectors, informational signage, and lighting, along City bikeways	A. Bicycle-Sensitive Detectors B. Bicycle Network Wayfinding Program
Policy 2.3.4 Maintain and facilitate best bikeway design practices	B. Bicycle Facility Design Review Program
Policy 2.3.5 Maintain safe bikeways through regular inspection and maintenance	D. Routine Bikeways Maintenance Program
Policy 3.3.1 Provide a connected network of Class I Bikeways facilities linking bicyclists to recreational, transportation, and community facilities	A. Green Network B. Los Angeles River Path F. Green Network Expansion
Policy 3.3.2 Increase the presence of LAPD Officers on bicycle paths and provide and maintain informational signage, lighting, and shade and landscaping amenities along Class I Bicycle Paths	A. Bicycle Path Officer Deployment Program B. Bicycle Path Landscaping C. Bicycle Path Lighting D. Bicycle Path Mile Markers
Policy 3.3.3 Maintain safe Class I Bicycle Paths through regular inspection and maintenance	A. Path Inspection and Cleaning Program

City of Los Angeles 2010 Bicycle Plan: Five-Year Implementation Strategy – 2011

The Plan recommends a Five-year Implementation Strategy that details the sequencing and priorities for the selection and installation of new bikeway facilities. The Five-Year Implementation strategy focuses on initiating at least 200 miles on the Backbone and Neighborhood Networks every five years. At this pace the City would be able to complete the Backbone and Neighborhood Networks within 35 years, resulting in every Los Angeles residence living within approximately one mile of a bikeway. Projects near the Rail to River corridor are included in **Table C-7** and organized by priority.

Table C-7 Bikeway Projects by Priority

Street	1st Cross Street	2nd Cross Street	Mileage
Priority 1			
S. Figueroa (west side)	State Drive	Martin Luther King Jr. Boulevard	0.2
S. Figueroa (east side)	State Drive	Martin Luther King Jr. Boulevard	0.2
Martin Luther King Jr. Boulevard	Westside Avenue	Normandie Avenue	1.5
Martin Luther King Jr. Boulevard (north side)	Normandie Avenue	Figueroa Street	0.5
Martin Luther King Jr. Boulevard (south side)	Normandie Avenue	Figueroa Street	0.5
Priority 2			
Central Avenue	10 Freeway	95th Street	5.1

South Los Angeles Community Plan – 2012

The South Los Angeles Community Plan Area is located approximately three miles southwest of Downtown Los Angeles, covering over 15 square miles of land area, and shown in **Figure C-7**. One of the Plan's guiding elements is to improve mobility and access by providing adequate accessibility to jobs, services, amenities, open space, and entertainment, and maintaining acceptable levels of mobility of all those who live, work, travel, or move goods in Los Angeles. The Plan also aims to create more small parks, pedestrian districts, and public open space in the planning area.

The Plan places an emphasis on providing for and supporting a variety of travel modes, including walking and bicycling, as shown in the Plan's community-wide mobility goals and policies. Goals and policies related to walking and biking as they relate to the Rail to River project are presented in **Table C-9**

Table C-9 Relevant Goals and Policies from the South Los Angeles Community Plan

Goals and Policies
Goal M1: A street system that is diverse and balances the needs of pedestrians, bicyclists, transit users, mobility challenged persons, and vehicles, while providing sufficient mobility and abundant access options for the existing and future users of the street system
M1-4 Private Investment for Off-site Facilities/Amenities. Encourage new developments to include bicycle and pedestrian amenities and include off-site transit and road improvements, creating a circulation system that optimizes travel by all modes
Goal M2: A circulation system that supports successful neighborhood commercial areas by providing multi-modal access, streets that accommodate public open space and gathering places, and streets that enhance sustainable watershed management
M2-1 Streetscapes. Encourage and support streetscape improvements in neighborhood district commercial areas and transit-oriented development areas in order to foster the appeal of the street as a gathering place, including street furniture, well-maintained street trees, publicly accessible courtyards, wide sidewalks, bicycle access and appropriate traffic control measures to reduce travel speeds

Table C-9 Relevant Goals and Policies from the South Los Angeles Community Plan (continued)

Goals and Policies
Goal M3: Throughout the community, a street environment that is pleasant, universally accessible, safe, and convenient for pedestrians
M3-2 Priority Pedestrian Routes. Streets within commercial, transit-oriented, mixed-use and employment districts should have pedestrian priority, establishing pedestrian needs as paramount to vehicular circulation needs and encouraging investment in pedestrian improvements and programs for identified segments
M3-4 Minimize Pedestrian Conflicts. Minimize conflicts between buses, car, and pedestrians by designing and constructing sidewalks and crosswalks that make pedestrians feel safe, as well as by creating well-marked crossings at intersections and select mid-block locations preferably within Transit-Oriented Areas and Districts
Goal M4: A safe, comprehensive, and integrated bikeway network that is accessible to all, and encourages bicycling for recreation and transportation
M4-1 Priority Bikeways. Support the Citywide bikeway network to establish bicycle circulation as paramount to vehicular circulation needs on key streets and to encourage investment in bicycle improvements and programs on these identified streets.
M4-2 Bikeway Connections. Provide bicycle access for open space areas, commercial and mixed-use boulevards, transit-oriented community centers and neighborhood districts in order to allow easy connection between residential neighborhoods and employment centers, as well as important non-work destinations
M4-4 Regional Coordination. Coordinate with adjacent jurisdictions and communities to require that local bicycle routes and trails be linked with those of neighboring areas
M4-5 Reclaimed Land for Bikeways. Incorporate bicycle facilities into recreational reuse of reclaimed land such as recreational use of closed oil fields, reservoirs, as well as public utility rights-of-way and access roads
Goal M9: Improved air quality and health of residents as a result of decreased single-occupant automobile demand and reduced vehicle miles traveled
M9-3 Alternatives to the Automobile. Reduce automobile dependency by providing a safe, convenient transit system, pedestrian linkages, and a network of safe and accessible bikeways
Goal CF9: Neighborhoods that are safe and attractive places for recreational exercise
CF9-3 Accommodate Greenways. Identify opportunities to increase acreage of total recreational areas by converting outdated railroad rights-of-way to accommodate greenways and bicycle trails

Figure C-7 - South Los Angeles Community Plan

The City of Los Angeles's Transportation Element allows communities to further classify streets by priority mode or modes of travel, termed Priority Streets. Priority Streets are organized by walking, bicycling, transit, or motor vehicle priority. Priority streets for biking and walking in the South Los Angeles Community plan adjacent to the Rail to River corridor include: Martin Luther King Jr. Boulevard, Slauson Avenue, Florence Avenue, Western Avenue, Vermont Avenue, and Figueroa Street.

The EIR for this Community Plan is not yet available.

Southeast Los Angeles Community Plan – 2012

The Southeast Los Angeles Community Plan area is located just south of Downtown Los Angeles and is approximately 15.7 square miles. The planning area is shown in **Figure C-8**. One of the Plan's guiding elements is to improve mobility and access by providing adequate accessibility to jobs, services, amenities, open space, and entertainment, and maintaining acceptable levels of mobility of all those who live, work, travel, or move goods in Los Angeles. The Plan also aims to create more small parks, pedestrian districts, and public open space in the planning area.

The Plan places an emphasis on providing for and supporting a variety of travel modes, including walking and bicycling, as shown in the Plan's community-wide mobility goals and policies. Goals and policies related to walking and biking as they relate to the Rail to River project are presented in **Table C-10**.

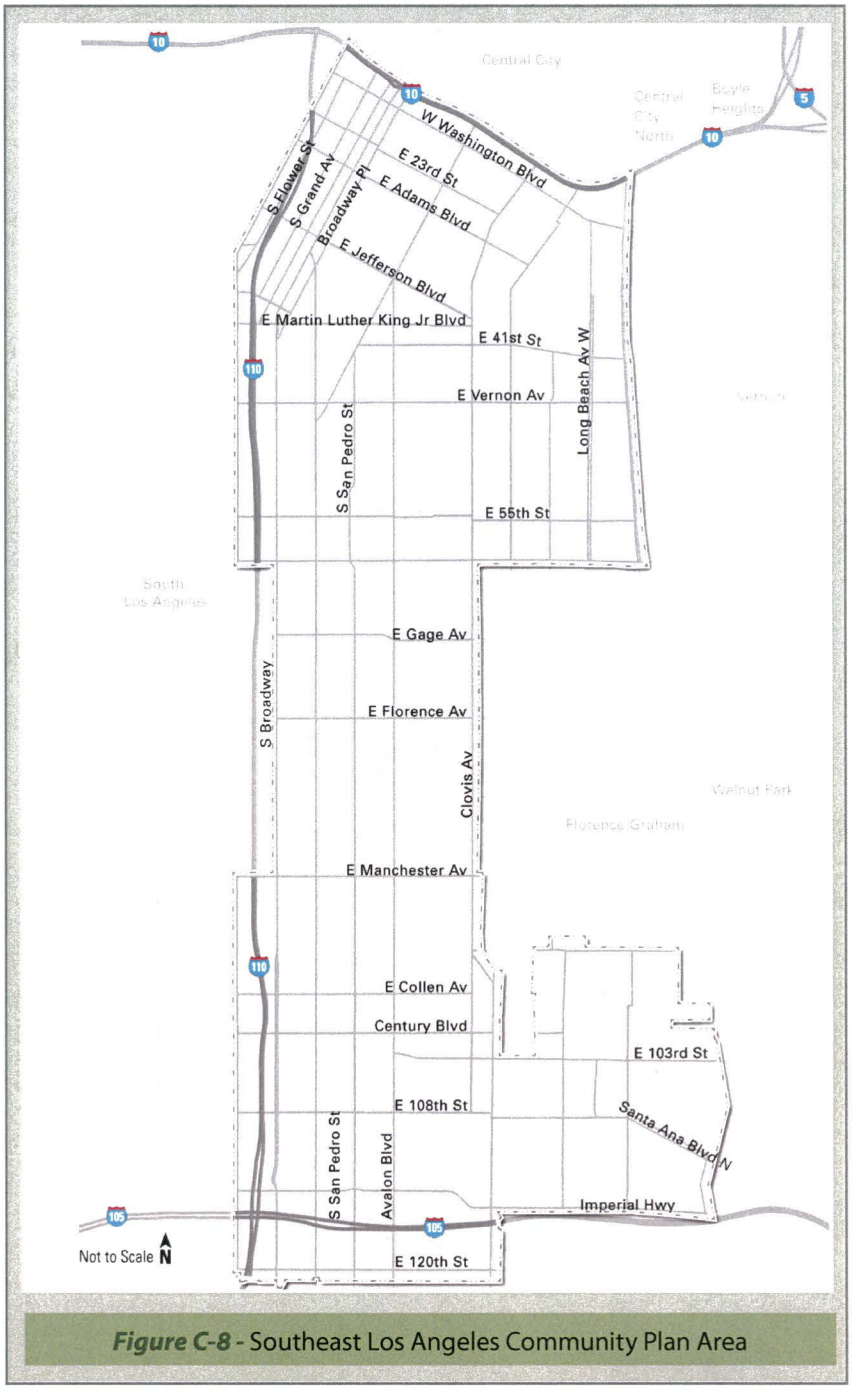

Figure C-8 - Southeast Los Angeles Community Plan Area

Table C-10 Relevant Goals and Policies from the South Los Angeles Community Plan

Goals and Policies
Goal LU3: Safe, secure, healthy and high quality multi-family residential environments that provide housing for all economic levels, ages, physical abilities and ethnicities of the community
LU3-10 Open Space and Recreation. Encourage the development of parks and open space as well as a network of pedestrian walkways for physical activity in all multi-family neighborhoods
Goal LU11: "Green" development that promotes an ecologically sustainable community and reduces greenhouse gases
LU11-4 Reduce Vehicle Trips. Develop strategies to reduce vehicle miles traveled (VMT) including locating commercial uses near transit and reducing distances between commercial, job-creating uses and residential areas
Goal M1: A diverse and multi-functional system of streets that balances the needs of pedestrians, bicyclists, transit users, mobility-challenged persons and vehicles while providing sufficient mobility options for the existing and future users of the street system
M1-1 Complete Streets. Ensure the community is served by a complete street system with some streets strategically prioritized for target users and other streets that connect the complement of arterials together to serve all users
Goal M3: A walkable community that is universally accessible, safe, pleasant, convenient, and contains an integrated pedestrian system that reduces vehicular conflicts, promotes walking and provides links within the community and to surrounding communities
M3-2 Priority Pedestrian Routes. Selected streets within commercial, transit-oriented, mixed-use, and employment districts should have pedestrian priority, establishing pedestrian needs as paramount to vehicular circulation needs and encouraging investment in pedestrian improvements and programs for these segments
M3-4 Minimize Pedestrian Conflicts. Minimize conflicts between buses, cars, and pedestrians by designing and constructing sidewalks and crosswalks that make pedestrians feel safe, minimizing the number of curb cuts along primary streets and by creating well-marked crossings at intersections and mid-block locations
M3-5 Easements and Public Right-of-way. Encourage the safe utilization of easements and/or right-of-way along flood control channel, public utilities, railroad right-of-way and streets wherever feasible for pedestrians and/or bicycles
Goal M4: A safe, comprehensive and integrated bikeway network that is accessible for all, and encourages bicycling for all community members
M4-1 Priority Bikeways. Support the Citywide Bike Plan to establish bicycle circulation as paramount to vehicular circulation needs on key streets and to encourage investment in bicycle improvements and programs on these identified streets
M4-2 Bicycle Connections. Provide bicycle access for open space areas, regional center, neighborhood districts, transit-oriented districts, and community centers to allow easy connection between residential neighborhoods and employment centers, as well as important non-work destinations
M4-4 Regional Coordination. Coordinate with adjacent jurisdictions and communities to ensure that local bicycle routes and trails are linked with those of neighboring areas
M4-5 Reclaimed Land for Bikeways. Incorporate bicycle facilities into recreational reuse of under-utilized land such as public utility right-of- way and access roads
Goal M9: Improved air quality and health as a result of decreased single-occupant automobile demand and reduced vehicle miles traveled
M9-3 Alternatives to the Automobile. Reduce automobile dependency by providing a safe, convenient transit system, pedestrian linkages and a network of safe and accessible bikeways
Goal CF8: Neighborhoods that are safe and attractive places for recreational exercise
CF8-2 Accommodate Greenways. Identify opportunities to increase acreage of total recreational areas by converting outdated railroad rights-ofway and select alleyways to accommodate greenways and bicycle trails, and by utilizing public easements for community gardens

The City of Los Angeles's Transportation Element allows communities to further classify streets by priority mode or modes of travel, termed Priority Streets. Priority Streets are organized by walking, bicycling, transit, or motor vehicle priority. Priority streets for biking and walking in the South Los Angeles Community plan adjacent to the Rail to River corridor include: Florence Avenue, Slauson Avenue, Broadway, and Martin Luther King Jr. Boulevard. The EIR for this Community Plan is not yet available.

West Adams-Baldwin Hills-Leimert New Community Plan and Draft EIR – 2012

The West Adams-Baldwin Hills-Leimert New Community Plan Area (CPA) is bounded by Pico and Venice Boulevards to the north, the City of Inglewood to the south, Arlington and Van Ness Avenues to the east, and Culver City to the west. The planning area is shown in Figure B-11. This Plan will supersede the existing 1998 West Adams-Baldwin Hills-Leimert Community Plan.

The Plan seeks to promote overall health and well-being for all who share the community. By encouraging the creation of active, inclusive, and responsive neighborhoods where healthy habits are encouraged rather than discouraged, the Plan acknowledges the link between the built environment and health, and particularly the influence that land use patterns, walkability, safety, access to transportation, and street design have on chronic diseases and health disparities. The Plan states that streets should support all modes of travel including walking and bicycling.

The West Adams-Baldwin Hills-Leimert Community Plan recommends new street standards with the overarching objectives of:

- Prioritizing enhancement of the pedestrian realm
- Incentivizing conservation of desirable neighborhood character
- Enhancing pedestrian, bicycle and vehicular connectivity to Light Rail Transit stations, major bus centers, parking and other support facilities
- Conceptually delineating preferred streetscape enhancements

Figure C-9 - West Adams-Baldwin Hills-Leimert Community Plan Area

Table C-11 displays the Plan's goals and policies related to walking and biking as they relate to the Rail to River project.

Table C-11- : Relevant Goals and Policies from the West Adams-Baldwin Hills-Leimert Community Plan

Goals and Policies
Goal M3: A community-wide pleasant street environment that is universally accessible, safe, and convenient for pedestrians
M3-2 Priority Pedestrian Routes. Selected streets within commercial, transit-oriented, mixed-use, and employment districts should have pedestrian priority, establishing pedestrian needs as paramount to vehicular circulation needs and encouraging investment in pedestrian improvements and programs for these segments
M3-4 Minimize Pedestrian Conflicts. Minimize conflicts between buses, cars, and pedestrians by designing and constructing sidewalks and crosswalks that make pedestrians feel safe, minimizing the number of curb cuts along primary streets and by creating well-marked crossings at intersections and mid-block locations
M3-5 Easements and Public Right-of-way. Encourage the safe utilization of easements and/or right-of-way along flood control channel, public utilities, railroad right-of-way and streets wherever feasible for pedestrians and/or bicycles
Goal M4: A safe, comprehensive, and integrated bikeway network that is accessible to all, and encourages bicycling for recreation and transportation
M4-1 Priority Bikeways. Support the Citywide Bike Plan to establish bicycle circulation as paramount to vehicular circulation needs on key streets and to encourage investment in bicycle improvements and programs on these identified streets
M4-2 Bikeway Connections. Provide bicycle access for open space areas, regional center, neighborhood districts, transit-oriented districts, and community centers to allow easy connection between residential neighborhoods and employment centers, as well as important non-work destinations
M4-4 Regional Coordination. Coordinate with adjacent jurisdictions and communities to ensure that local bicycle routes and trails are linked with those of neighboring areas
M4-5 Reclaimed Land for Bikeways. Incorporate bicycle facilities into recreational reuse of under-utilized land such as public utility right-of- way and access roads
Goal M13: A community with abundant opportunities for exploration of its natural and recreational assets
M13-2 Recreation Trails. Encourage where appropriate a network of trails to facilitate uses such as hiking and mountain biking

DRAFT EIR

The Draft EIR for the West Adams-Baldwin Hills-Leimert area documents environmental impacts associated with projects in the plan. The EIR identifies three scenarios of impacts associated with bikeway implementation:

- First scenario: Assumes no additional bike lanes in the West Adams CPA
- Second scenario: Assumes bike lanes along all identified corridor segments in the West Adams CPA per the Citywide Bicycle Plan
- Third scenario: Assumes bike lanes along select identified corridor segments in the West Adams CPA

Based on the analysis results, none of the three proposed scenarios would be effective in improving overall operating conditions over existing (Year 2008) conditions as measured by average vehicle to capacity (V/C) ratio. The Draft EIR states that there will be significant and unavoidable transportation impacts, though no feasible mitigation measures were identified to reduce the significant impact related to the circulation system and Congestion Management Plan to less than significant. There would be reductions in roadway capacity along major corridors required to provide proposed bike lanes that would encourage vehicles passing through the West Adams CPA to reroute around the West Adams CPA. **Figure C-10** shows the locations of bikeway improvements included in the Draft EIR.

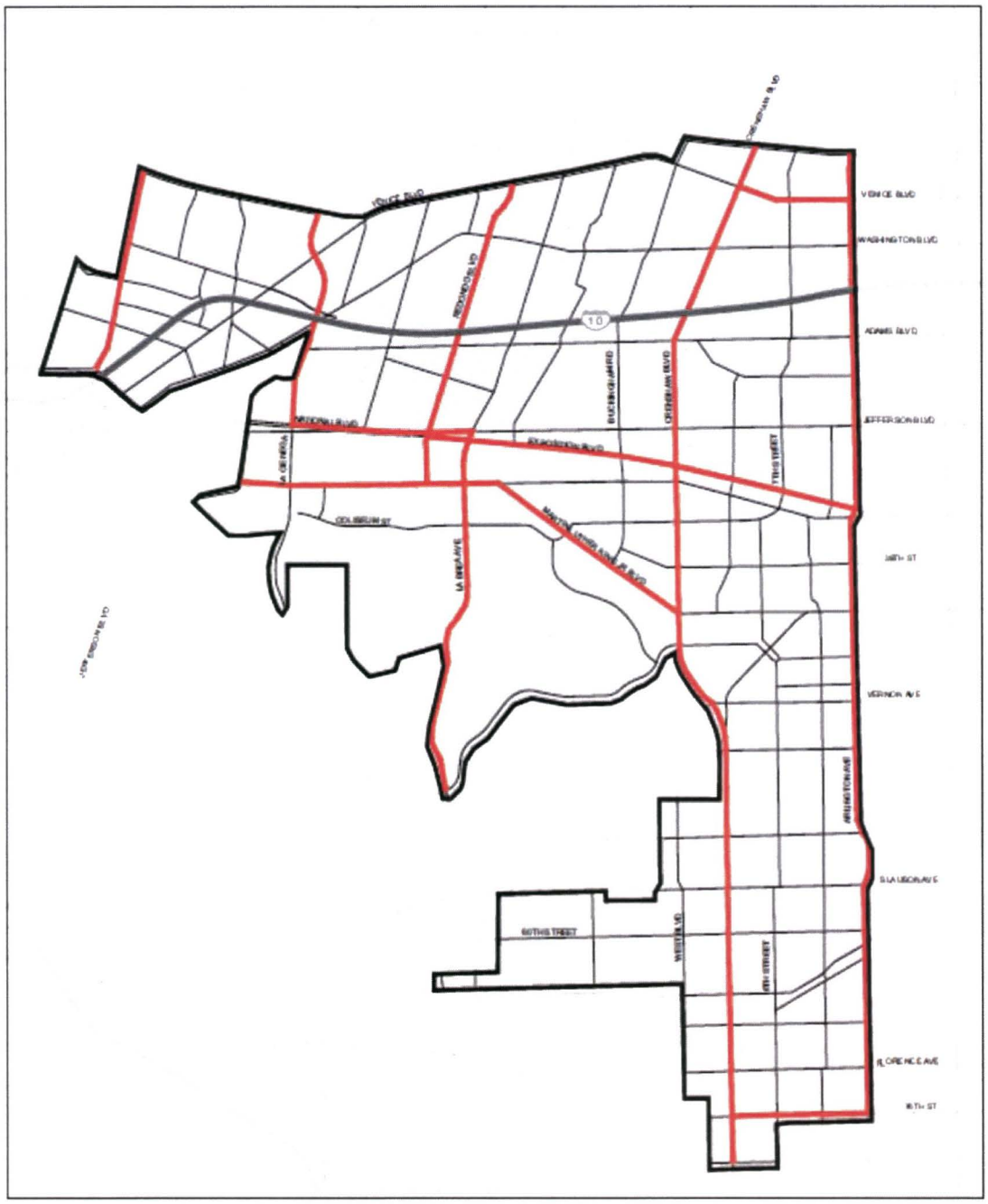

Figure C-10 - Bikeways Proposed in the West Adams Community Plan Areas

First Year of the First Five-Year Implementation Strategy and Figueroa Streetscape Project-Draft EIR – 2013

The City of Los Angeles selected approximately 39.5 miles of bikeways in the communities of Hollywood, Westside, Central Los Angeles, and Northeast Los Angeles as part of the first year of the Five-Year implementation Strategy discussed above. These bikeways include the study area for the Figueroa Streetscape Project, consisting of a three-mile stretch along Figueroa Street. The Figueroa Corridor Streetscape Project (My Fig) consists of 4.5 miles of roadways, of which three miles are along Figueroa Street through Downtown and South Los Angeles from 7th Street to Martin Luther King Jr. Boulevard, terminating 1.5 miles north of the Rail to River corridor. The projects that are nearby the Rail to River corridor and their proposed improvements are listed in **Table C-8**.

Table C-8 First Year Projects Near the Rail to River Corridor

Street	1st Cross Street	2nd Cross Street	Mileage
Vermont Avenue	Venice Boulevard to Wilshire Boulevard	1.2	City Center South
S. Figueroa (east side)	State Drive	Martin Luther King Jr. Boulevard	0.2
S. Figueroa Street	7th Street to Martin Luther King Jr. Boulevard	3.0	Southeast
Martin Luther King Jr. Boulevard	Marlton Avenue to Figueroa Street	3.2	City Center South

The Draft EIR states that some proposed projects would create significant and unavoidable impacts related to transportation. For significant and unavoidable transportation/traffic impacts, LADOT will adjust traffic signal timing after the implementation of the proposed projects (both along project routes and parallel roadways if traffic diversions have occurred as a result of the project). The City will also implement appropriate Transportation Demand Management (TDM) measures in the City of Los Angeles and in areas where implementation of bike lanes could potentially result in diversion of traffic to adjacent residential streets, LADOT will monitor traffic on identified residential streets to determine if traffic diversion occurs.

City of Los Angeles Mobility Element Update-Draft – 2013

The City of Los Angeles is currently updating the Mobility Element of its General Plan, and the Department of Planning has released draft network maps showing which roadways are proposed to receive enhancements for Automobiles, Transit, and Bicycles. The proposed Network Maps include 2 scenarios of enhancements along the same routes, varying in the degree of treatments being proposed. For instance, Moderate bicycle-related enhancements include buffered bicycle lanes that are not accompanied by traffic signal modifications, while Comprehensive enhancements on "Backbone" (i.e., Priority) streets include Wide Bicycle Lanes, Raised Bicycle Lanes, Protected Bicycle Lanes, Colored Bicycle Lanes in Conflict Area, and Two Stage Turn Queue Boxes.

BICYCLE ENHANCED NETWORK[2]

Scenarios 1 and 2 of the Bicycle Enhanced Network proposal designate the length of Slauson Avenue as part of the "Green Network", meaning the right-of-way is proposed to include an off-street bicycle/pedestrian path (see **Figure C-11 and Figure C-12**). This is a notable change from both the 2010 City of Los Angeles Bicycle Plan and January 2013 draft Bicycle Enhanced Network map of the Mobility Element update that did not include Slauson Avenue in any tier of improvements, but mostly consistent with the existing Non Motorized Transportation network map in the 1999 Transportation Element of the General Plan (see **Figure C-13**). The alignment of the proposed Class I bikeway along Slauson Avenue in the 1999 Transportation Element follows the Harbor Subdivision ROW and turns southwest near the intersection with Western Avenue, whereas the proposed Class I path in the draft Mobility Element update follows Slauson Avenue without diverting to the southwest.

Scenario 1 also targets Main Street and Central Avenue for Moderate bicycle enhancements and Vermont Avenue for Comprehensive improvements, and designates Budlong Avenue as a Neighborhood Street. Scenario 2 goes a step further and calls for Comprehensive bicycle enhancements on Main Street and Central Avenue

[2] The Bicycle Enhanced Network of the Mobility Element update does not necessarily correspond to the 2010 City of Los Angeles Bicycle Plan.

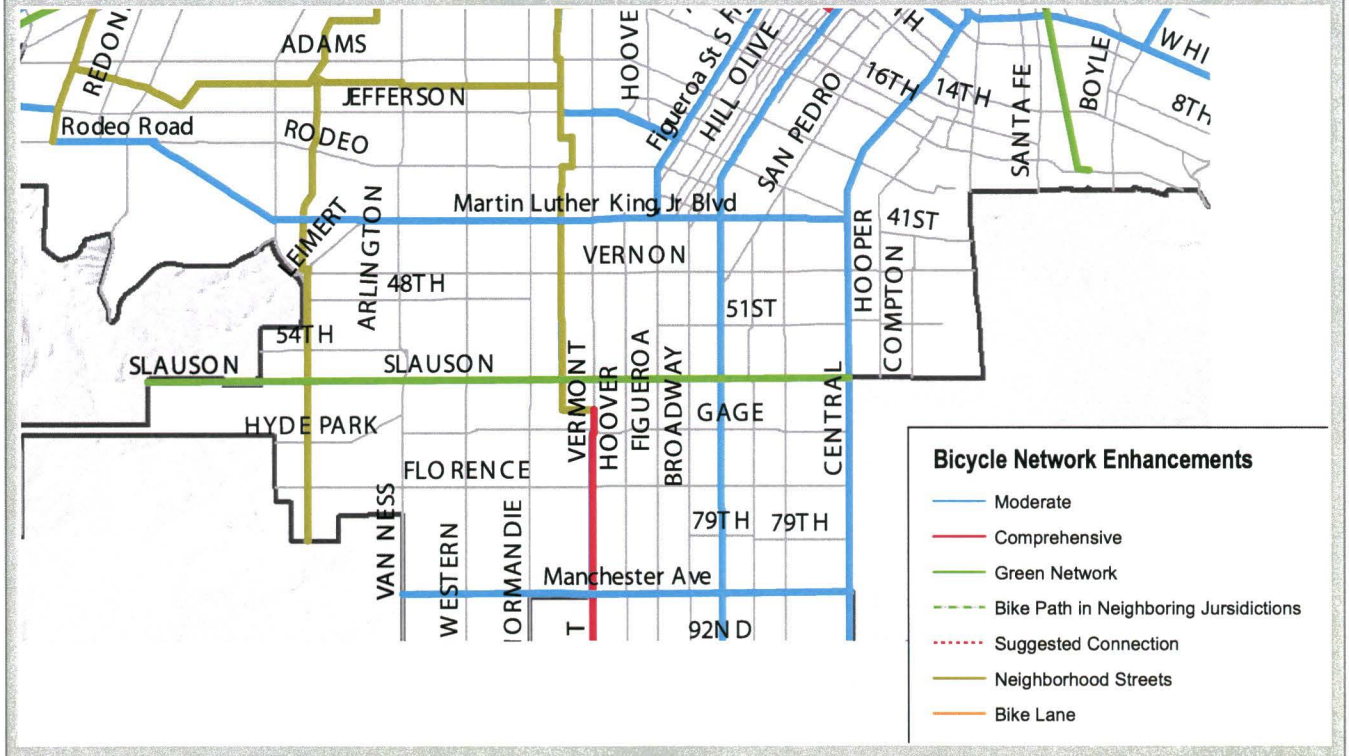

Figure C-11 - Bicycle Enhanced Network – Scenario 1

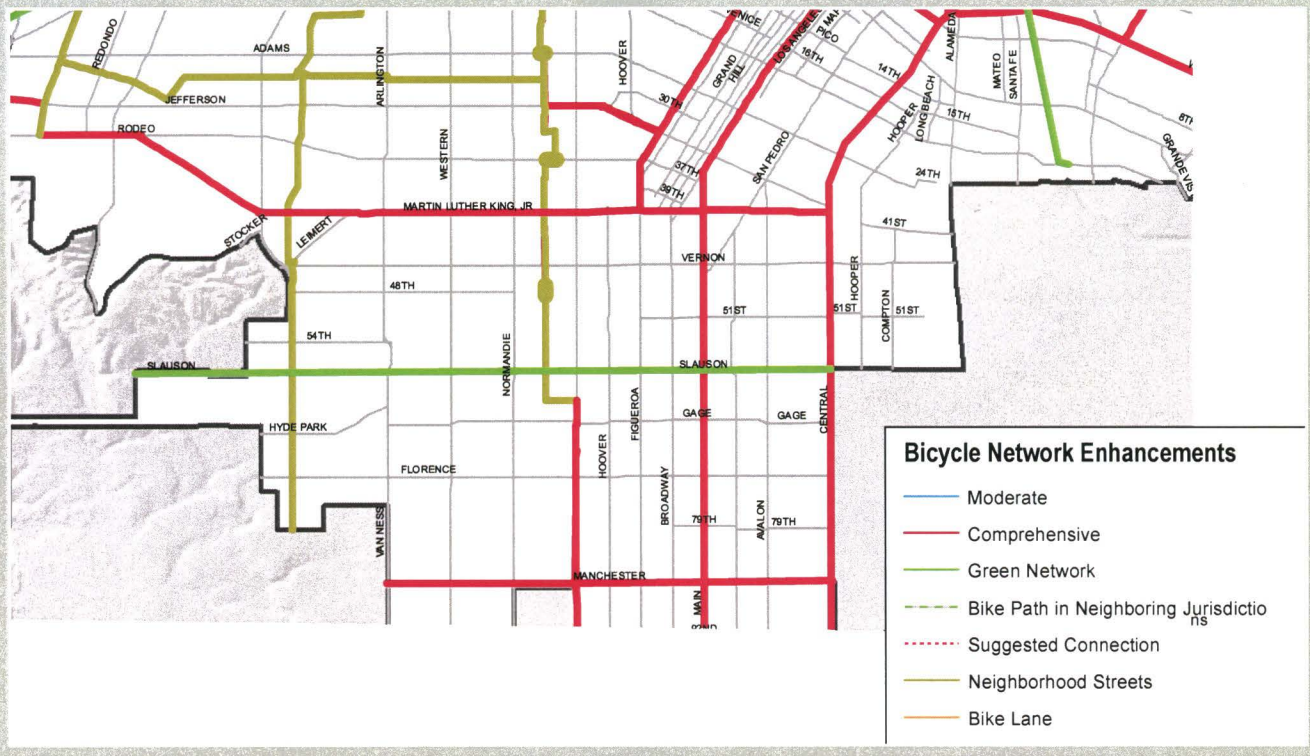

Figure C-12 - Bicycle Enhanced Network – Scenario 2

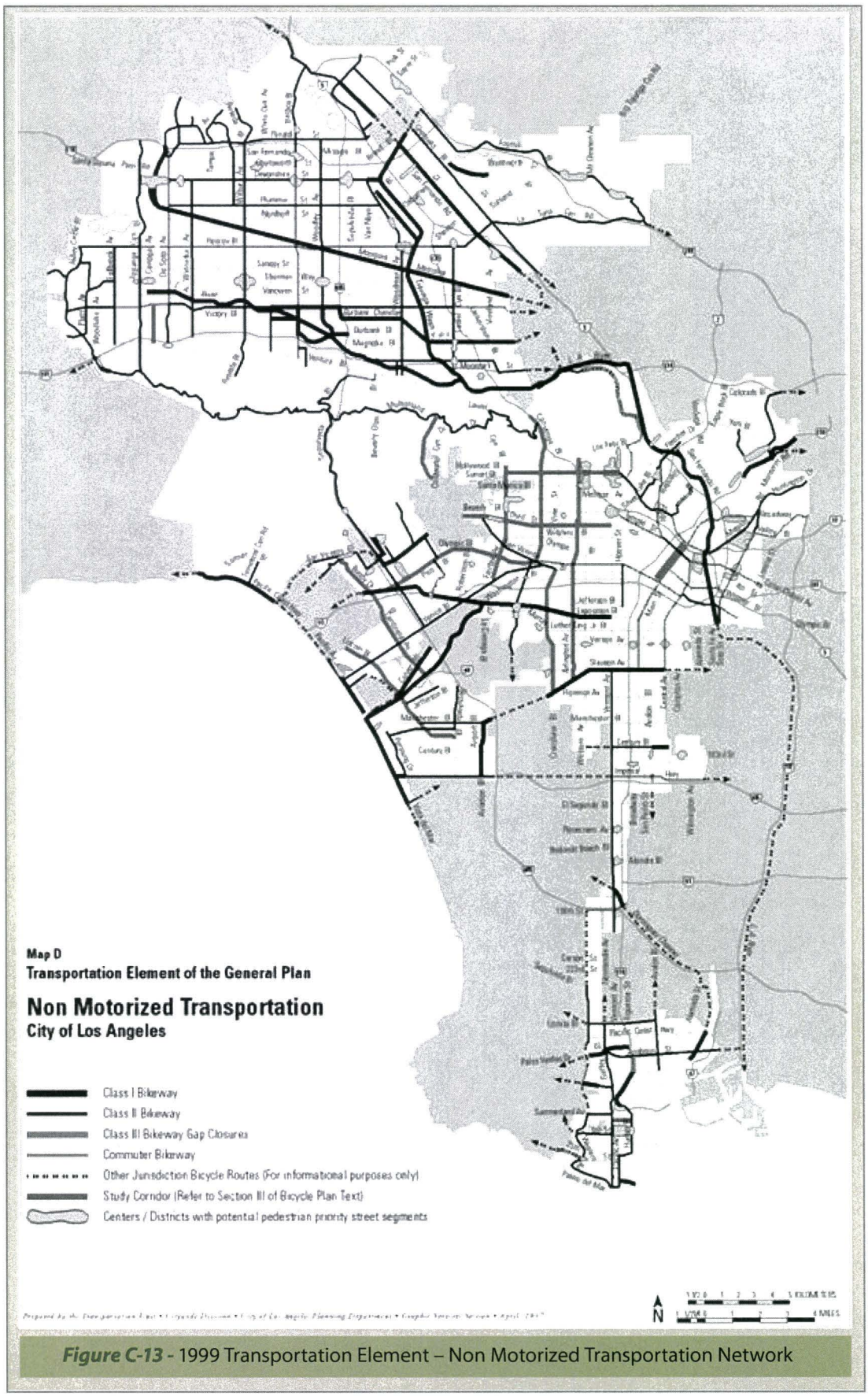

Figure C-13 - 1999 Transportation Element – Non Motorized Transportation Network

TRANSIT ENHANCED NETWORK

The Scenario 1 Transit Network of the draft Mobility Element prescribes Moderate transit enhancements (e.g., bus stop/station improvements and increased service, with vehicles still in mixed traffic) along Slauson Avenue between Crenshaw Boulevard and the Metro Blue Transit Line, as well as along Vernon Avenue, Florence Avenue, Western Avenue, and Vermont Avenue (north of Gage Avenue), and "Moderate Plus" enhancements (including an exclusive lane during the peak period only) along Broadway (see **Figure C-14**). Vermont Avenue south of Gage Avenue would receive Comprehensive enhancements, which include transit vehicle operation in an all-day exclusive lane.

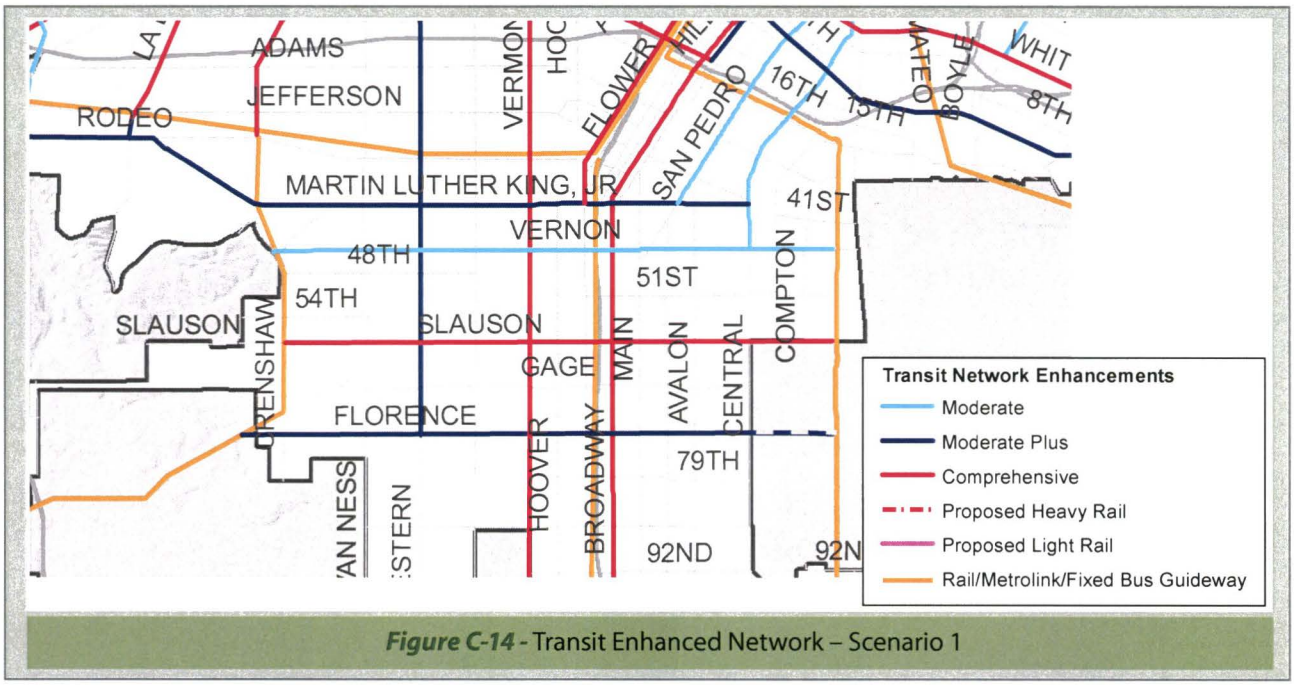

Figure C-14 - Transit Enhanced Network – Scenario 1

Transit Network Scenario 2 designates Slauson Avenue to receive Comprehensive Enhancements, along with Broadway and Vermont. Florence Avenue and Western Avenue would see Moderate Plus improvements, and Vernon Avenue would get Moderate enhancements (see **Figure C-15**).

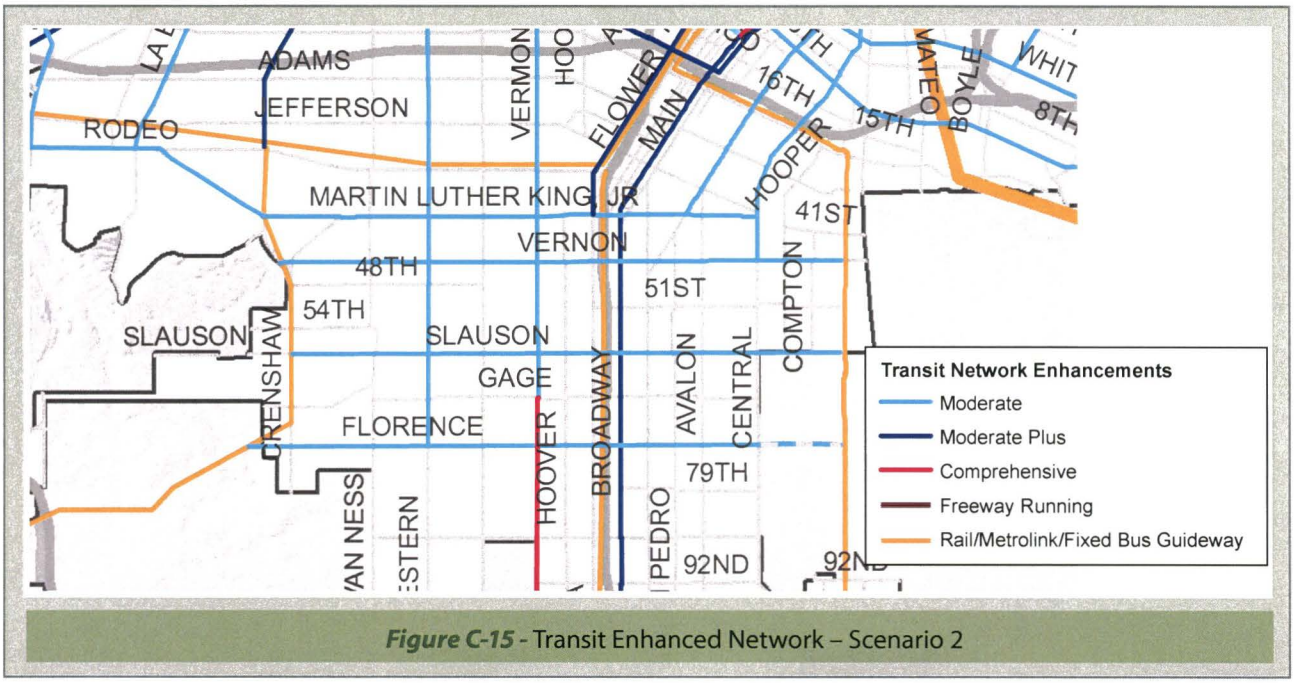

Figure C-15 - Transit Enhanced Network – Scenario 2

VEHICLE ENHANCED NETWORK

Scenario 1 of the proposed Vehicle Enhanced Network calls for Moderate enhancements along the full length of Slauson Avenue in Los Angeles. Moderate Vehicle Network improvements include technology enhancements and peak hour restrictions for parking and turning movements. Scenario 2 upgrades Slauson Avenue to Comprehensive enhancements, which include access management, all-day lane conversions of parking, and all-day turning movement restrictions or permanent access control.

No other roadways in the study area are designated as part of the Vehicle Enhanced Network in either scenario.

Health Atlas for the City of Los Angeles – 2013

The Health Atlas concludes: "Due to the connections between transit use, active transportation, and general health and wellness, mode share is an important indicator of a community's health. Commute modes, whether driving alone or riding a bike, affect the region's air quality, which in turn has implications for risk factors such as smog and pollution that have been shown to contribute to conditions such as chronic respiratory disease, lung cancer, and heart disease among others." The Health Atlas study calculated a Transportation Index to standardize transportation demand, transportation infrastructure, and injury variable, and then averaged them together to yield a score on a 0-100 scale, with higher values indicating worse transportation conditions. Variables include: percent walk and bike to work (2010), transit riders (2010), transit service frequency (2012), bicycle infrastructure (2012), intersection density (2012), and bike and pedestrian injuries per 10,000 residents (average between 2001-2010).

Figure 35 in the Health Atlas shows the percentage of Zero Vehicle Households by Community Plan Area (CPA) in 2010. The three CPAs through which the Rail to River corridor passes (West Adams-Baldwin Hills-Leimert, South Los Angeles, and Southeast Los Angeles) are all near the high end of this metric, with 7%, 11%, and 11%, respectively. This is significant, as households without a vehicle could benefit greatly from access to an attractive and safe active transportation corridor.

Draft Health and Wellness Element of the General Plan for the City of Los Angeles, 2014

The Draft Health and Wellness Element of the General Plan for the City of Los Angeles discusses access to increased transportation choices:

- Improving the safety and access to active transportation options and transit was noted as one of nine key areas that influence community health during community discussions and outreach.
- Promotion of job growth along transit corridors and in high-need communities that lack investment for increased economic development.
- Prioritization of access to health goods and services to enhance Angelenos' ability to make healthy choices and live healthy lives.
- The City can encourage greater access to healthy food outlets in low-income and underserved neighborhoods by attracting full-service grocery stores and capitalizing upon existing community resources such as healthy mobile or cart vendors.
- Policies to reduce air pollution, access workforce training, and access health care services through increased active transportation modes

OTHER PLANS AND POLICIES

City of Huntington Park General Plan – 1991 (Amended 1996)

The following Goals and Policies are pulled directly from the City's General Plan

Table C-12 Relevant Goals and Policies from the Land Use Element

Goals and Policies
Goal 4.0: Accommodate new development that is coordinated with the provision of infrastructure and public services.
Policy 4.6: Pursue alternative uses of the Southern Pacific Railroad right-of-way on Randolph Street, such as green space, parking areas, and bike paths, if the right-of-way is abandoned for rail use.
Goal 6.0: Improve urban design in Huntington Park to ensure development that is both architecturally and functionally compatible, and to create uniquely identifiable neighborhoods and commercial districts.
Policy 6.1: Require that residential, commercial, and light industrial development adjacent to pedestrian and recreational amenities: Focus on these amenities; Provide direct access;In the case of commercial development, provide visual penetration at ground level; Incorporate pedestrian-oriented ground-floor uses; and isolate on-site parking away from pedestrian-oriented areas.
Policy 6.4: Provide for the consistent use of street trees along all sidewalks and property frontages.
Policy 6.5: Establish a consistent design vocabulary for all public signage, including fixture type, lettering, colors, symbols, and logos.
Policy 6.6: Locate distinctive public signage and landscaping which identifies Huntington Park at key entry points into the City, including Pacific Boulevard, Florence Avenue, Slauson Avenue, Soto Street, State Street, Gage Avenue, and Randolph Street.
Policy 6.7: Require that signage on commercial structures be compatible and integrated with the structures' architecture and visible from pedestrian-oriented areas.

The General Plan states that, "Huntington Park, as a densely developed urban environment, has no sizable undeveloped lands. The potential for new parkland is severely limited."

CIRCULATION ELEMENT

Public Transportation

Table C-13 Relevant Public Transportation Goals and Policies from the Circulation Element

Goals and Policies
Goal 4.0: To Support the use of the public tranportation system to provide mobility to all City residents and encourage the use of public transportation as an alternative to automobile travel
Policy 4.2: Work with [Metro] to coordinate connections to the light rail Metro Blue Line running from Long Beach to Los Angeles west of Huntington Park

Bicycle and Pedestrian Facilities

"There are currently no off-street bike paths or on-street bike lanes in the City. The presence of on-street parking and relatively narrow street widths make bicycle riding difficult. The City is interested in pursuing the addition of designated bicycle lanes in its jurisdiction." A recent survey of the City using Google Earth shows that Huntington Park lacks bicycle facilities of any kind. In May 2013, however, the City Council agreed to work with the Los Angeles County Bicycle Coalition to develop a bicycle master plan for the City. Metro should coordinate with Huntington Park to ensure that the City's bicycle plan provides links to a future Rail to River active transportation corridor.

Table C-14 Relevant Bicycle and Pedestrian Facilities Goals and Policies from the Circulation Element

Goals and Policies
Goal 4.0: To protect and encourage non-motorized transportation such as bicycle and pedestrian travel.
Policy 5.1: Provide for safety of pedestrians and bicycle by adhering to national standards and uniform practices.
Policy 5.3: Ensure accessibility of pedestrian facilities to the elderly and disabled.
Policy 5.4: Work with adjacent jurisdictions and the Los Angeles County Transportation Commission to develop a network of on-street bike lanes or off-street bike paths where they can be implemented consistently with other circulation and land use policies.
Policy 5.7: Pursue alternative uses of the Southern Pacific Railroad right-of-way on Randolph.

Bicycle Facilities Plan

"The potential for development of a bicycle path exists along Randolph Street if the rail right-of-way is abandoned. The City of Bell has a bicycle path along Randolph Street which could link with a path through Huntington Park. This path could also connect to a potential trail along the Los Angeles River."

"The City will coordinate plans for new bicycle facilities with adjacent jurisdictions to ensure continuity."

OPEN SPACE AND CONSERVATION ELEMENT

Improved Air Quality

"The City will reduce vehicular travel and emissions… by encouraging alternative modes of circulation, such as walking, bicycling, and public transit. For example, bike paths might result from the reuse of portions of abandoned railroad right-of-ways."

Table C-15 Relevant Improved Air Quality Goals and Policies from the Open Space and Conservation Element

Goal and Policies
Goal 1.0: Reduce air pollution through land use, transportation, and energy use planning.
Policy 1.1: Endorse regional and local air quality and transportation management plans in order to reduce air pollution emissions and vehicular trips.
Policy 1.6: Encourage bike paths and lanes to reduce vehicular travel and air pollution. Bike paths could be developed along portions of the LADWP utility easement and along the Southern Pacific Railroad right-of-way on Randolph Street, should the right-of-way be abandoned. On-street bike lanes are encouraged in accordance with national standards and uniform practices. Cooperate and coordinate such efforts with the property owners and responsible jurisdictions.

Adequate and Balanced Park System

"Huntington Park is a densely developed urban environment with no sizable undeveloped lands. The public parks are heavily used, yet the City does not have the space or the funds available to create new, large public parks. The City's multi-family neighborhoods exhibit the most critical need for open space. Although new full-scale parks are not anticipated, the potential exists for new pocket parks or small playgrounds on vacant lots, corners of school sites, abandoned railroad right-of-ways, and in redevelopment areas where older buildings are removed." The Rail to River bicycle and pedestrian path would help address Huntington Park's relative lack of open space by providing linear recreational space for the City's residents, workers, and visitors.

Table C-15 Relevant Park System Goals and Policies from the Open Space and Conservation Element.

Goal and Policies
Goal 4.0: Develop and maintain a balanced system of open space, public parks, and recreational facilities.
Policy 4.1: Provide active and passive park and recreational facilities, based on the distribution of population within the City, to serve the needs of residents of all ages, economic levels, and physical conditions.
Policy 4.3: Utilize opportunities for joint use of public facilities for recreational purposes, such as schools, utility easements, and abandoned railroad right-of-ways.
Policy 4.4: Pursue opportunities for the creation of additional open space and parkland whenever available.
Policy 4.8: Increase access to all City open space and recreational areas, including for the disabled and those who depend on public transit.
Policy 4.9: Coordinate local open space development with regional open space opportunities to satisfy a wide range of recreational demands.

City of Inglewood General Plan Update Technical Background Report – 2006

The Circulation Element lists Crenshaw Boulevard as a Major Arterial that functions as a primary intercity route, "in addition to collecting and distributing a large portion of local traffic." At the time of the Report's publication, Metro was operating twenty-one transit routes within or through the City of Inglewood, including four routes on Crenshaw Boulevard.

The Report identifies Safety and Access as two major issues involving bicycle usage in the City of Inglewood. The increasing volume of motorized traffic on arterials and at intersections is a safety hazard for cyclists, and the lack of a comprehensive bicycle network requires cyclists to utilize high-volume roadways without dedicated bicycle facilities. In fact, there are currently no existing bicycle facilities within the City. The City's Public Works Department has developed a preliminary network of bicycle routes (See **Figure C-16**). One of these proposed routes along Florence Avenue would come close to linking with a potential Rail to River corridor terminus at Crenshaw Boulevard and 67th Street. According to the Report, "The class or type of bicycle facility has not been determined for any of these proposed alignments."

The Report refers to the Metro-owned rail ROW along Florence Avenue. "It is currently utilized by oil refineries and other industrial uses located in the South Bay region. At this time, there are twelve at-grade rail crossings along this corridor regulated by gate arms, lights, and warning bells. Traffic operations at many of the rail crossings require queued vehicles to extend across the rail tracks while waiting for traffic signals to change. Due to physical limitations associated with moving either the rail line or Florence Avenue, this issue will continue until this rail corridor is no longer utilized."

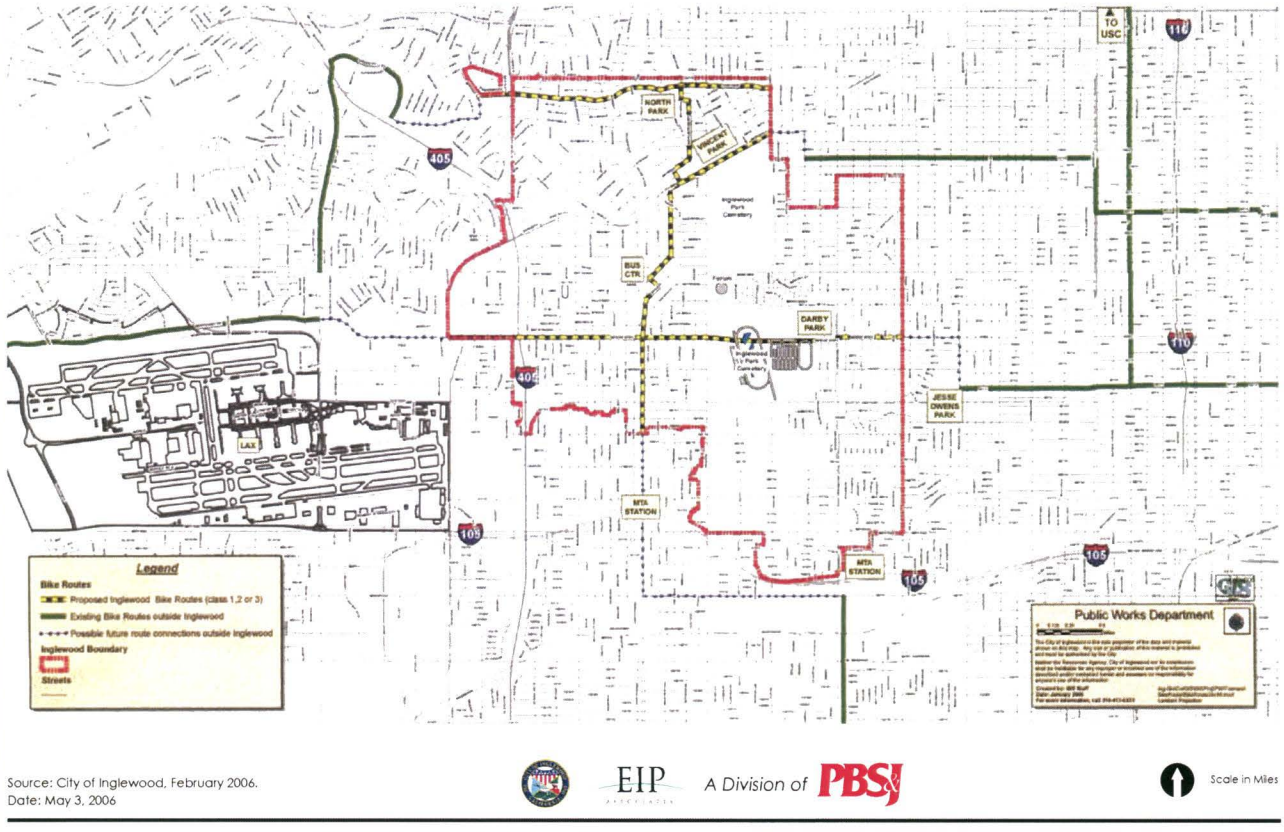

Figure C-16 - Proposed Bicycle Routes in Inglewood

City of Vernon General Plan – 2007 (amended 2009)

The General Plan's Circulation Element does not encourage bicycling on City streets:

While bicycles represent an additional mode of travel, biking is not encouraged on Vernon's streets due to the heavy truck traffic and narrow configuration of many streets, which would present dangers to cyclists. The City of Vernon will cooperate with the Metropolitan Transportation Authority and other local agencies in their efforts to complete a bicycle path along the levee of the Los Angeles River connecting downtown Los Angeles with the waterfront in Long Beach.

While the Rail to River path will pass through Vernon, providing safe and attractive on-street linkages will likely be a challenge in the City.

SCAG Regional Transportation Plan/ Sustainable Communities Strategy – 2012

The Regional Transportation Plan (RTP) has the primary goal of increasing mobility for the region's residents and visitors. The Sustainable Communities Strategy (SCS), part of the RTP, demonstrates the region's ability to attain and exceed the GHG emission-reduction targets set forth by the ARB. The 2012–2035 RTP/SCS includes a strong commitment to reduce emissions from transportation sources to comply with SB 375, improve public health, and meet the National Ambient Air Quality Standards as set forth by the federal Clean Air Act. Its emphasis on transit and active transportation will allow residents to lead a healthier, more active lifestyle.

The RTP/SCS contains a host of improvements to the region's multimodal transportation system, including

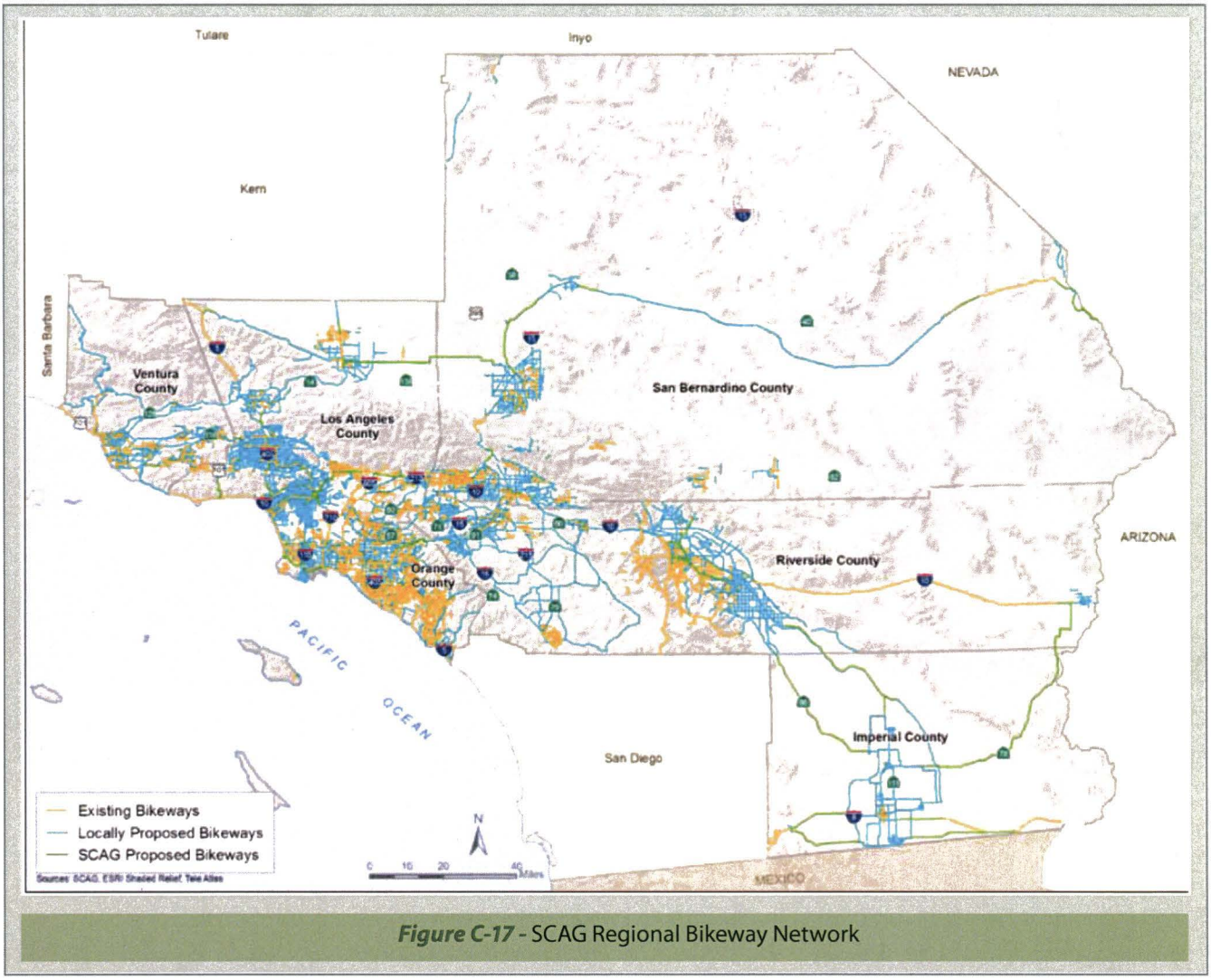

Figure C-17 - SCAG Regional Bikeway Network

increasing bikeways from 4,315 miles to 10,122 miles, bringing a significant amount of sidewalks into compliance with the Americans with Disabilities Act (ADA), safety improvements, and various other strategies. **Figure C-17** shows proposed bikeways in the SCAG planning region.

One goal and one policy are relevant to the Rail to River project:

- Policy 4: Transportation demand management (TDM) and non-motorized transportation will be focus areas, subject to Policy 1
- Goal: Encourage land use and growth patterns that facilitate transit and non-motorized transportation

City of Huntington Park Bicycle Transportation Master Plan – 2014

The City of Huntington Park recently adopted a Bicycle Transportation Master Plan (Final Draft, February 3, 2014) which proposes a Class I path along the entire Randolph Street right-of-way within the City, Class II bike lanes along Pacific Boulevard and State Street, and several Class III bike routes.

The City does not currently have any bike lanes/paths, however, the proposed network calls for 22.8 miles of bicycle facilities (See **Figure C-18**).

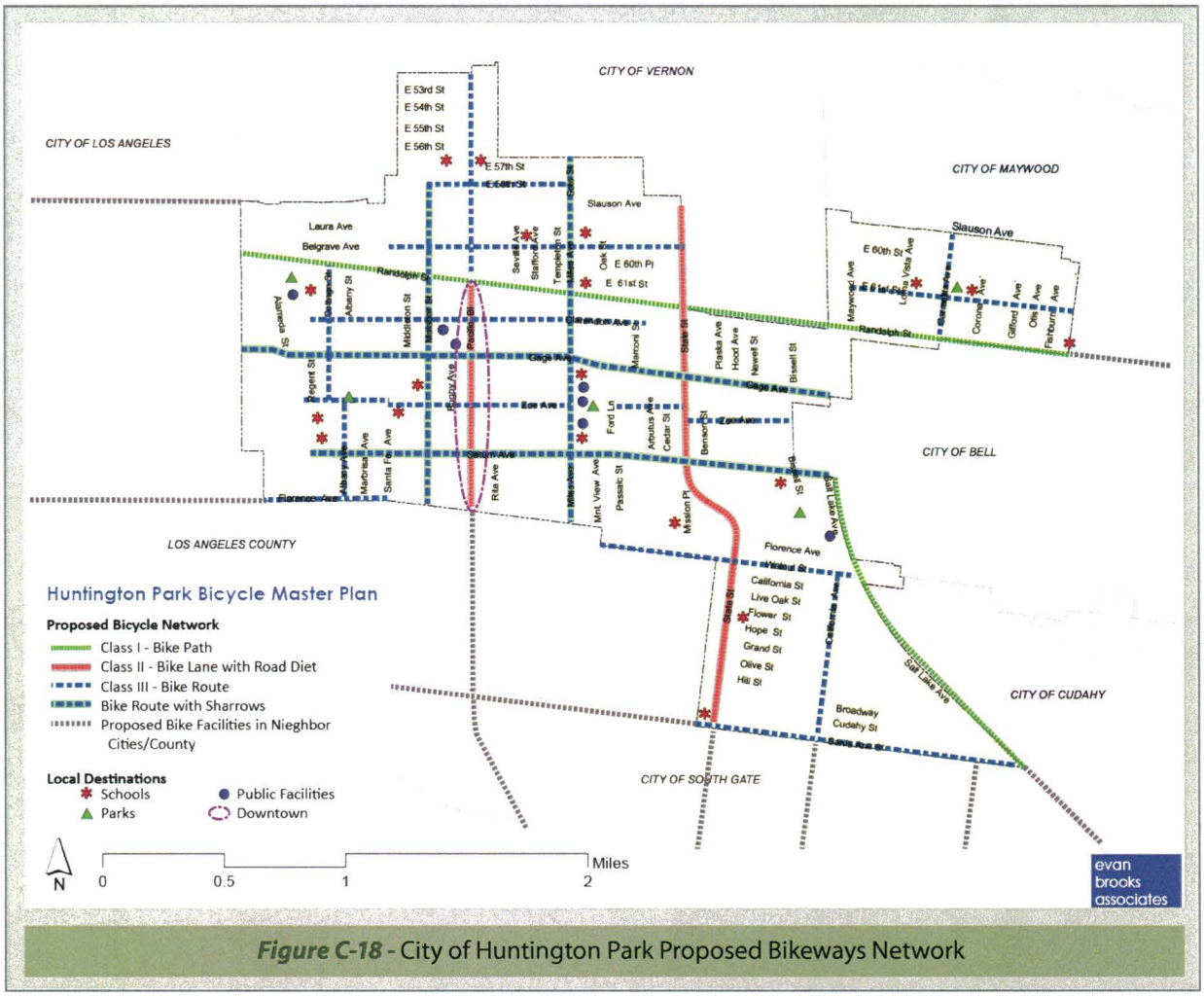

Figure C-18 - City of Huntington Park Proposed Bikeways Network

Army Corps ARBOR EIR Report - 2014

U.S. Army Corps of Engineers, Los Angeles District (USACE) is the leading Federal agency in The Los Angeles River Ecosystem Restoration Feasibility Study Draft Integrated Feasibility Report with the City of Los Angeles as the non-federal sponsor. The alternative plans primary purpose in the IFR is to restore approximately 11 miles of the Los Angeles River (extending from Griffith Park to downtown Los Angeles) by reestablishing riparian strand, freshwater marsh, and aquatic habitat communities; reconnecting the River to major tributaries, its historic floodplain, and the regional habitat zones of the Santa Monica, San Gabriel, and Verdugo Mountains, while maintaining existing levels of flood risk management.

The secondary purpose of the alternatives is to provide recreational opportunities consistent with the restored ecosystem within this 11-mile reach of the river. This study area is identified as the "Area with Restoration Benefits and Opportunities for Revitalization" reach, or ARBOR Reach. The various reaches of the study can be seen in **Figure C-19**.

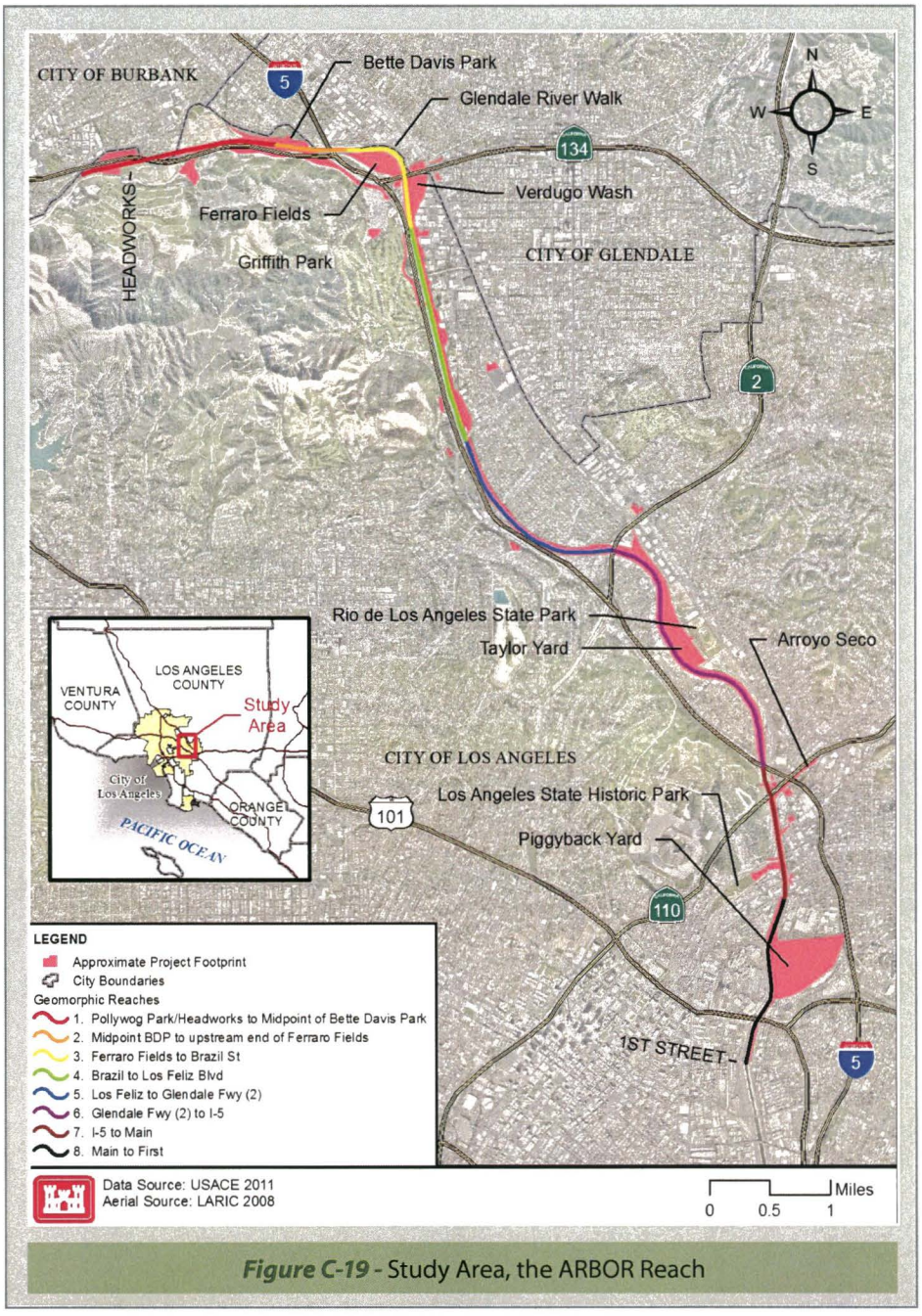

Figure C-19 - Study Area, the ARBOR Reach

Alternative 10 is called the *ART* (for ARBOR Riparian Transitions) is the minamally acceptable alternative. It provides some restoration in all reaches of the ARBOR Study area, providing transitions or connections between existing riparian corridors and concrete lined river reaches. This alternative includes an increase in habitat of 93 percent with 5,321 habitat units (HU) and increases aquatic habitat connectivity through riparian corridors and daylighted streams by restoring 528 acres at cost of $375 million.

Alternative 13 is named *ACE* (for ARBOR Corridor Extension) as it includes all the features in Alternative 10, including restoration of the historic wash at Piggyback Yard, terracing at the Bowtie Parcel, and restoration of side channels, riparian corridors, and daylighted streams. This alternative increases restored habitat by 104 percent, delivering about 600 more HUs (an increase of 104 % over no action and 11% above Alternative 10) and 60 additional acres, increasing nodal connections for wildlife by a significant 309 percent, and meeting objectives in all reaches for approximately $79 million more ($453 million total).

Alternative 16 is called *AND* (for ARBOR Narrows to Downtown). This alternative includes the features of Alternatives 10 and 13 but adds additional restoration in reaches 5 (widening along the west bank and addition of vegetated terracing along the east bank) and 8 (additional restoration through terracing upstreatm of Piggybank yard and on the west bank, as well as removal of east bank) and removes concrete from the bed of the river. The channel bed will be naturalized to support freshwater marsh in the river and another area of wetland through the restored Piggyback Yard adjacent to the river. The added features in Alternative 16 provide an increase in habitat value over no action of 114 percent (10% above Alternative 13) with about an additional 600 habitat units and 71 acres of added restoration. Nodal connections are increased above that provided in Alternative 13 by 85 percent. This added restoration is accomplished for an additional cost of approximately $350 million above Alternative 13 ($804 million total), nearly an 80 percent increase in cost for a 10 percent habitat increase and 85 percent habitat connectivity increase.

Alternative 20 is called *RIVER* (for Riparian Integration via Varied Ecological Reintroduction) as it includes all the elements of Alternatives 10, 13 and 16 and additional features in reaches 2 (widening of the west bank), 3 (softening the bed of the stream and widening the mouth of the Verdugo Wash) and 7 (daylighted stream and restoration of wetlands at the Los Angeles State Historic Park). This requires an added cost of approximately $276 million more than Alternative 16 ($1.08 billion total.) Habitat is increased over no action by 119 percent (5% more than Alternative 16) and 273 habitat units above alternative 16 with inclusion of 60 additional restored acres and an increase in nodal habitat connectivity over Alternative 16 of 120%.

AB-1922 Greenway Development and Sustainment Act. - In progress

Assembly Bill 1922 would enact the Greenway Development and Sustainment Act. This Act is intended to promote the development of greenways, defined as "a nonmotorized vehicle transporation and recreational travel corridor that meets specified requirements", along urban rivers in the state. This includes the development of a greenway along the Los Angeles River and its tributaries and would include greenways in the definition of "open-space land" for local planning purposes.

Certain entities and organizations, including a tax exempt nonprofit organization qualified to do business in this state that has as its primary purpose the preservation, protection, or enhancement of land in its natural, scenic, historical, agricultural, forested, or open-space condition or use, are authorized to acquire and hold conservation easements according to existing law. If a tax exempt, nonprofit organization has the development of greenways as its primary purpose, this bill would also authorize the organization to acquire and hold a conservation easement.

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APPENDIX D
EXISTING CONDITIONS DATA

Table D-1 - Existing Arterial Crossings

Arterial Crossing Location	Signalized / Unsignalized
Roadway Cross-Section Width: 60' – 100'	
Denker Avenue and Slauson Avenue	Signalized
Normandie Avenue and Slauson Avenue	Signalized
Budlong Avenue and Slauson Avenue	Signalized
Vermont Avenue and Slauson Avenue	Signalized
Hoover Avenue and Slauson Avenue	Signalized
Figueroa Avenue and Slauson Avenue	Signalized
Broadway Avenue and Slauson Avenue	Signalized
Main Street and Slauson Avenue	Signalized
Avalon Boulevard and Slauson Avenue	Signalized
Central Avenue and Slauson Avenue	Signalized
Compton Avenue and Slauson Avenue	Signalized
Holmes Avenue and Slauson Avenue	Signalized
Alameda Avenue and Slauson Avenue	Signalized
West Boulevard (terminus, north of Florence Avenue)	Unsignalized
Crenshaw Boulevard south of 67th Street	Unsignalized
Western Avenue south of Slauson Avenue	Unsignalized
Slauson Avenue at turn south to West Boulevard	Unsignalized
Santa Fe Avenue north of Slauson Avenue	Unsignalized
Pacific Boulevard (between Santa Fe Avenue and Soto Street)	Unsignalized
East 37th / 38th Streets (between Santa Fe Avenue and Soto Street)	Unsignalized
Roadway Cross-Section Width: 40'	
4th Avenue (between Hyde Park Boulevard and Southwest Drive)	Unsignalized
San Pedro Street and Slauson Avenue	Signalized
Towne Avenue and Slauson Avenue	Unsignalized
Paloma Avenue and Slauson Avenue	Unsignalized
McKinley Avenue and Slauson Avenue	Signalized
Hooper Avenue and Slauson Avenue	Signalized
Long Beach Avenue and Slauson Avenue	Unsignalized
2nd Street and Slauson Avenue	Unsignalized
4th Avenue (between Hyde Park Boulevard and Southwest Drive)	Unsignalized
Bryanhurst Avenue	Unsignalized
Victoria Avenue	Unsignalized
67th Street	Unsignalized
11th Avenue	Unsignalized
8th Avenue	Unsignalized
Van Ness Avenue	Unsignalized
58th Street	Unsignalized
57th Street	Unsignalized

Table D-1 - Existing Arterial Crossings (continued)

Arterial Crossing Location	Signalized / Unsignalized
56th Street	Unsignalized
55th Street	Unsignalized
54th Street	Unsignalized
53rd Street	Unsignalized
52nd Street	Unsignalized
Fruitland Avenue	Unsignalized
49th Street	Unsignalized
Vernon Avenue	Unsignalized
28th Street	Unsignalized
27th Street	Unsignalized
26th Street	Unsignalized
25th Street	Unsignalized
24th Street	Unsignalized

Table D-2 - Pedestrian and Bicycle Collision Data

Segment	Segment Length (mile)	Pedestrian Collisions		Bicycle Collisions	
		Total Collisions	Collisions per Mile per Year	Total Collisions	Collisions per Mile per Year
Western Options					
Slauson Avenue	1.41	310	24	128	10
59th Street	1.62	337	23	131	9
67th Street[1]	2.02	337	19	123	7
Central Segment					
Slauson Avenue[1]	3.61	684	21	360	11
Eastern Options					
Malabar[1]	2.79	137	5	104	4
Utility Corridor	3.05	108	4	108	4
Slauson Avenue	5.30	233	5	196	4
Randolph Street	4.34	381	10	295	8

Note[1]=*Metro owned ROW*
Source: *Statewide Integrated Traffic Records System (SWITRS), 2003 to 2011 retrieved from the transportation Injury Mapping System (TIMS): http://tims.berkely.edu/index.php*

As shown in **Table D-2**, pedestrian collisions per mile ranged from 4 to 24, and bicycle collisions per mile ranged from 4 to 11.

Table D-3 Bicycle Facility Type by Segment

Segment	Limits	Length By Facility Type			Total
		Class I (Off-Street Bike Trail)	Class II (On-Street Bike Lane)	Class III (Bike Route/ Boulevard)	
West Options					
Slauson Avenue	Metro owned ROW to Crenshaw Blvd	--	--	1.41 miles	1.41 miles
59th Street	Slauson Ave to Wilton Pl	0.52 miles	--	--	1.62 miles
	Wilton Pl to 59th St to Crenshaw Blvd	--	--	1.10 miles	
67th Street[1]	Slauson Ave to 67th St	1.55 miles	--	--	2.02 miles
	67th St to West Blvd to West Station	--	--	0.47 miles	
Central Segment					
Slauson Avenue[1]	Slauson Ave at ROW alignment change to Long Beach Ave	3.61 miles	--	--	3.61 miles
East Options					
Malabar[1]	Long Beach Ave to Washington Blvd	2.79 miles	--	--	2.79 miles
Utility Corridor	Long Beach Ave to Alameda St	0.32 miles	--		3.05 miles
	Alameda St to Utility ROW			1.76 miles	
	Slauson Ave to LA River	1.19 miles			
Slauson Avenue	Long Beach Ave to Alameda St	0.32 miles	--	3.77 miles	4.09 miles
Randolph Street	Long Beach Ave to LA River	4.34 miles	--	--	4.34 miles

Note [1]= *Metro owned ROW*

Table D-4 Forecast Weekday Pedestrian Trips

Segment	Segment Length (mile)	Forecast Pedestrian Trips			
		Weekday	Weekday Per Mile	Annually	Annually Per Mile
West Options					
Slauson Avenue	1.41	1,810	1,300	493,000	350,000
59th Street	1.62	2,660	**1,600**	**724,000**	**447,000**
67th Street[1]	2.02	2,160	1,100	588,000	291,000
Central Segment					
Slauson Avenue[1]	3.61	**4,650**	**1,300**	**1,266,000**	**351,000**
East Options					
Malabar[1]	2.79	950	300	260,000	93,000
Utility Corridor	3.05	1,740	600	473,000	155,000
Slauson Avenue	5.3	6,700	1,300	1,825,000	344,000
Randolph Street	4.34	**7,660**	**1,800**	**2,086,000**	**481,000**
Total for 3 Highest Segments	N/A	14,970	4,700	4,076,000	1,279,000

Table D-5 Forecast Weekday

Segment	Segment Length (mile)	Forecast Bicyclist Trips			
		Weekday	Weekday Per Mile	Annually	Annually Per Mile
West Options					
Slauson Avenue	1.41	210	150	108,000	77,000
59th Street	1.62	240	150	122,000	75,000
67th Street[1]	2.02	***330***	***160***	***171,000***	***85,000***
Central Segment					
Slauson Avenue[1]	3.61	***270***	***70***	***1,395,000***	***386,000***
East Options					
Malabar[1]	2.79	210	80	109,000	39,000
Utility Corridor	3.05	340	110	174,000	57,000
Slauson Avenue	5.3	2420	460	1,233,000	233,000
Randolph Street	4.34	***4680***	***1080***	***1,608,000***	***371,000***
Total for 3 Highest Segments	N/A	5,280	1,310	3,174,000	842,000

Note [1]=*Metro owned ROW. Italicized indicates highest forecast trips by segment.*

***Table D-6** - Daily Traffic Volumes*

Segment	Jurisdiction	Daily Volumes (vehicles)
8th Ave south of Hyde Park Blvd	City of Los Angeles	6,200
37th St east of BNSF railroad crossing	City of Vernon	13,900
Pacific Blvd east of Santa Fe Ave	City of Vernon	16,100
Randolph St west of Clarkson Ave	City of Bell	6,300
Randolph St west of Palm Ave	City of Bell	4,200
Santa Fe Ave north of Slauson Ave	City of Vernon	24,400
Slauson Ave east of Rimpau Blvd	County of Los Angeles	33,200
Slauson Ave west of Van Ness Ave	City of Los Angeles	27,500
Slauson Ave east of Western Ave	City of Los Angeles	30,300
Slauson Ave east of Central Ave	County of Los Angeles	29,100
Slauson Ave east of Hooper Ave	County of Los Angeles	33,200
Slauson Ave east of Compton Ave	County of Los Angeles	33,100
Slauson Ave west of Wilmington Ave	County of Los Angeles	31,700
Slauson Ave east of Miles Ave-Soto St	City of Vernon	31,000
Van Ness Ave south of Hyde Park Blvd	City of Los Angeles	18,100
Vernon Ave east of Santa Fe Ave	City of Vernon	7,000
Washington Blvd east of 23rd Street	City of Los Angeles	24,800
West Blvd between BNSF crossing and Florence Ave	City of Los Angeles	9,200
Western Ave north of 59th St	City of Los Angeles	36,200

Demographic Characteristics

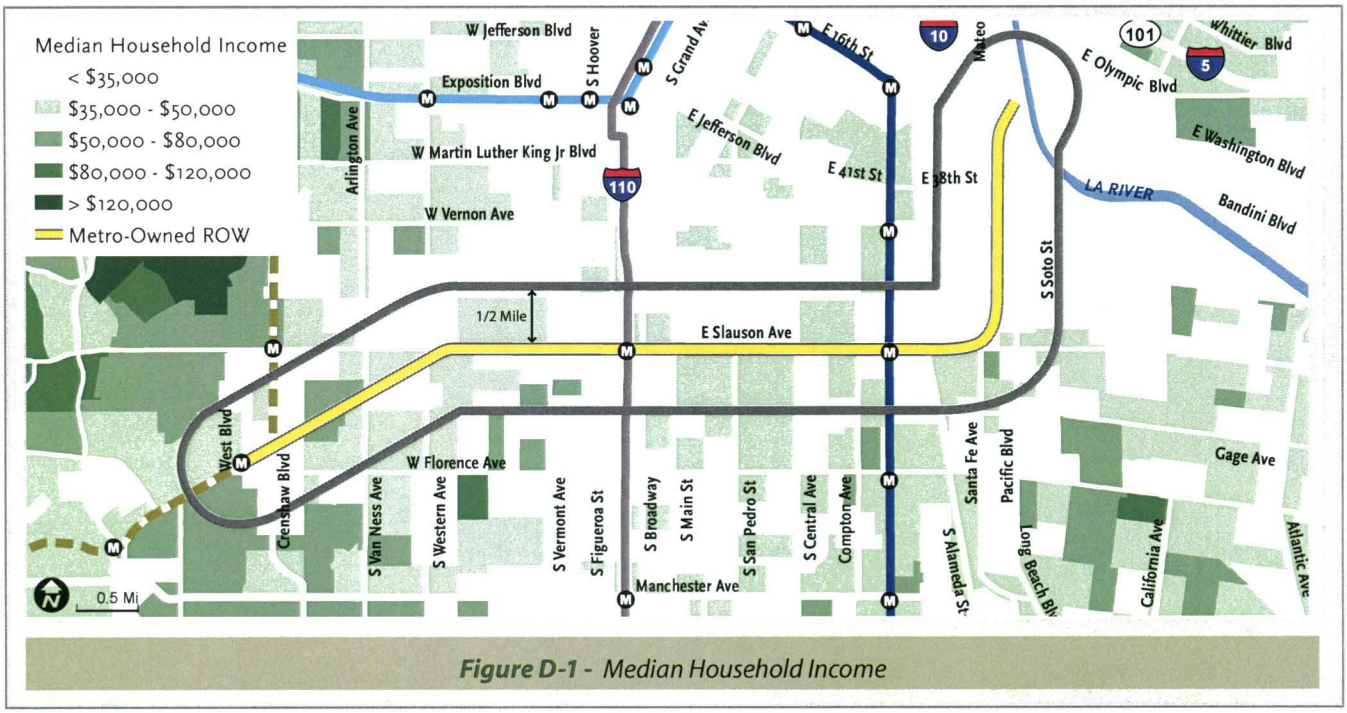

***Figure D-1** - Median Household Income*

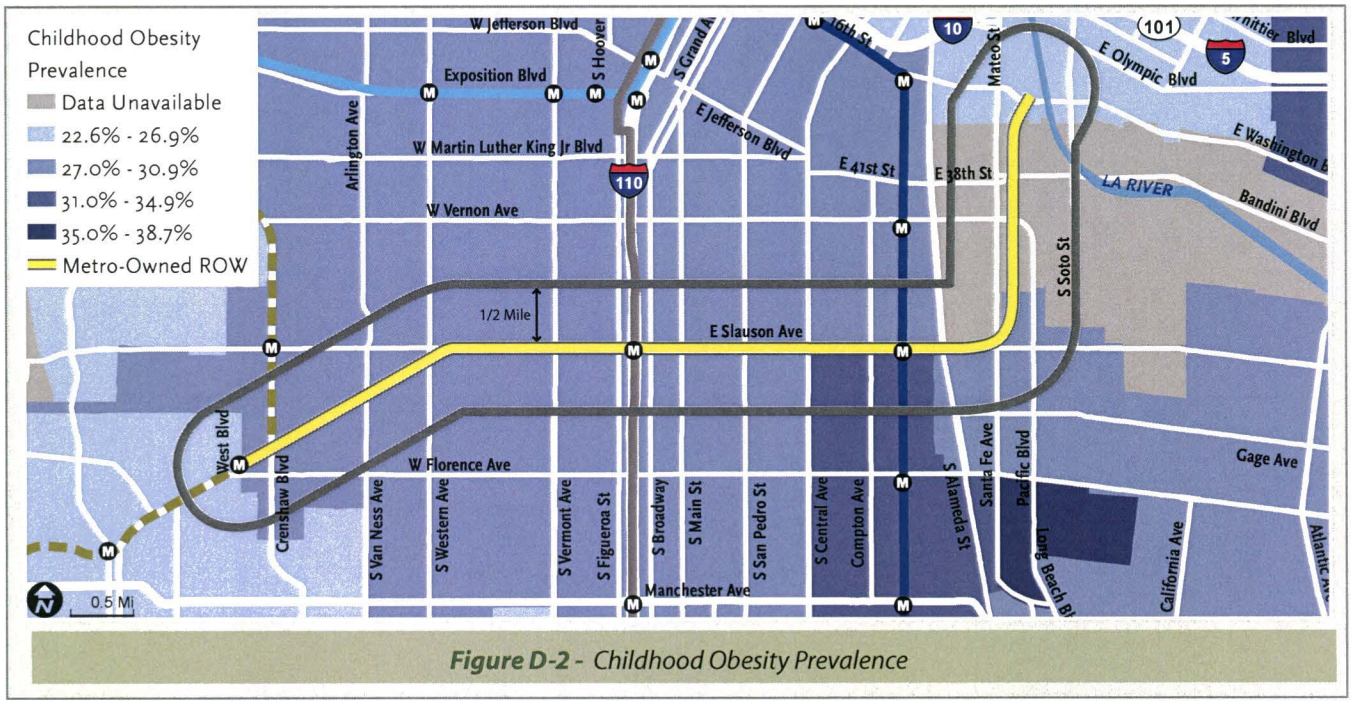

***Figure D-2** - Childhood Obesity Prevalence*

[1]SOURCES: American Community Survey 5-Year Estimates 2008-2012, Center for Disease Control, County Department of Public Health, Air Quality Management District, Southern California Association of Governments [SCAG] etc.

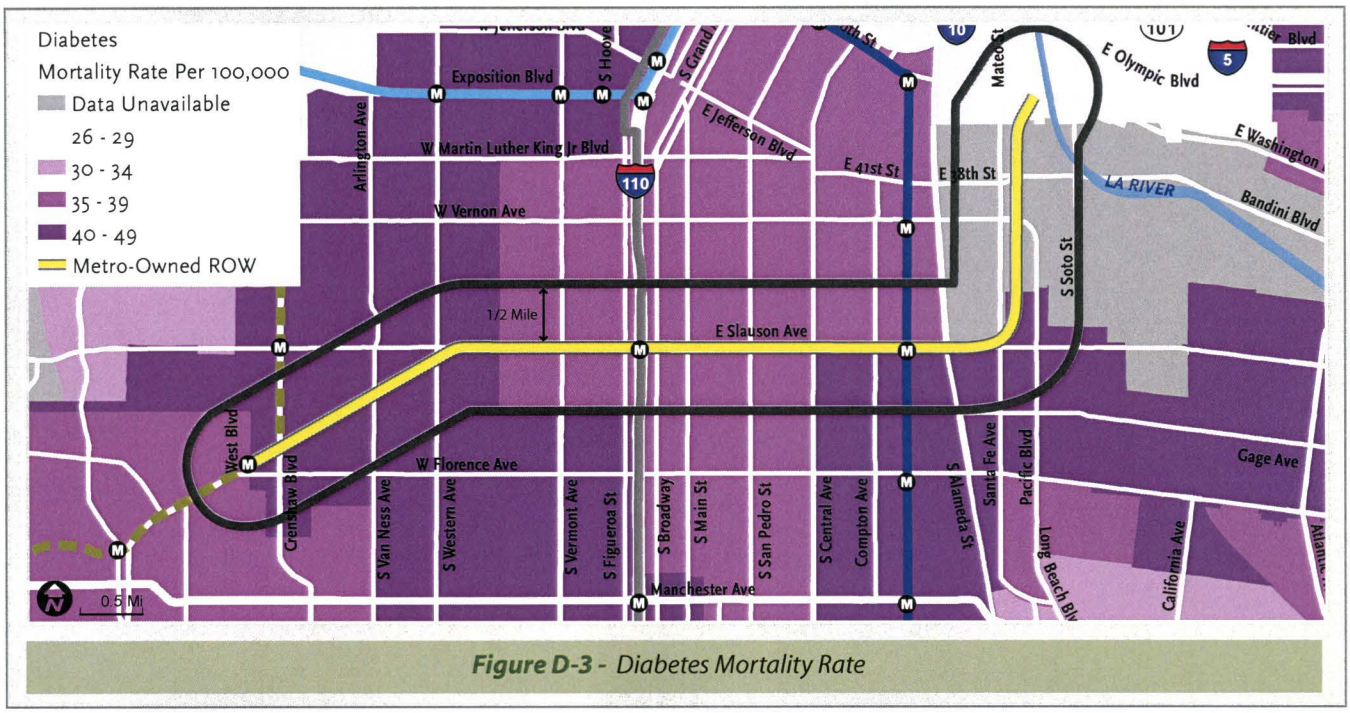

Figure D-3 - *Diabetes Mortality Rate*

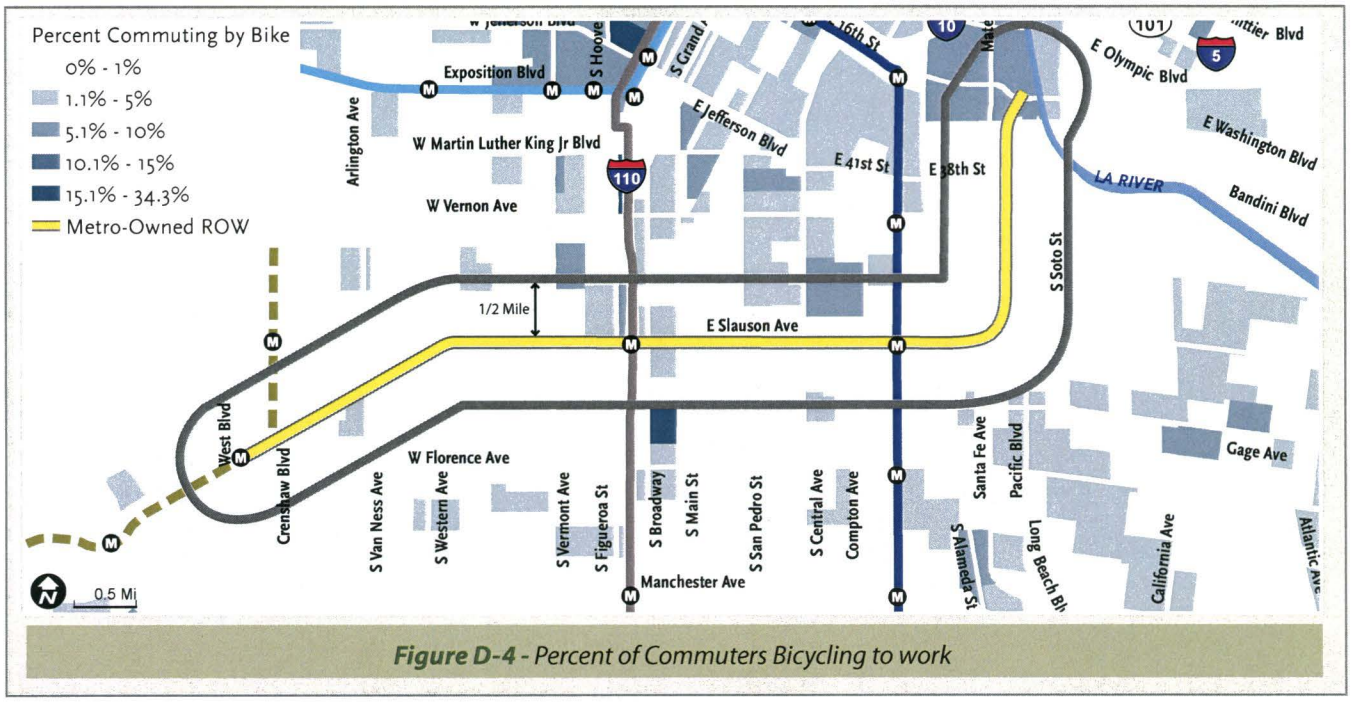

Figure D-4 - *Percent of Commuters Bicycling to work*

[1]SOURCES: American Community Survey 5-Year Estimates 2008-2012, Center for Disease Control, County Department of Public Health, Air Quality Management District, Southern California Association of Governments [SCAG] etc.

APPENDIX E
ADDITIONAL PUBLIC PARTICIPATION

IP STUDY BRIEFING 1: DECEMBER 11, 2013

Meeting Reminder

Rail to River

Intermediate Active Transportation Corridor Feasibility Study

Interested Parties Study Briefing - December 11, 2013
Reunión informativa para personas interesadas - 11 de diciembre de 2013

Improving Connections and Transportation Options in South Los Angeles

Mejorando las Conexiones y Opciones de Transporte en el Sur de Los Ángeles

The Rail to River Feasibility Study is currently underway. Join us for a Study Briefing.

Metro is leading the feasibility study for a non-motorized transportation corridor along the Metro owned Harbor Subdivision Right-of-way. The study would identify alternatives for an active transportation corridor in South Los Angeles. The corridor could provide safe dedicated walking and cycling transportation options to promote healthy neighborhoods and linkages between local communities, schools, shopping, employment centers, transit hubs and other key destinations.

The purpose of the Study Briefing is to provide an update on the feasibility study and next steps. We welcome your participation as we review the study goals and objectives and explore the corridor opportunities and constraints.

Estudio de Viabilidad de la Carrilera al Río está actualmente en marcha. Únase a nosotros para una reunión informativa.

Metro está liderando el estudio de viabilidad para un corredor de transporte no motorizado a lo largo del Derecho a la Vía de la Subdivisión Harbor, propiedad de Metro. El estudio permitiría identificar alternativas para un corredor de transporte activo en el sur de Los Angeles. El corredor podría proporcionar opciones dedicadas a transporte a pie y en bicicleta, las cuales sean seguras y promuevan vecindarios saludables y conexiones entre las comunidades locales, escuelas, tiendas, centros de empleo, centros de tránsito y otros destinos claves.

El propósito de la reunión informativa es proporcionar una actualización sobre el estudio de viabilidad y próximos pasos. Le agradecemos su participación para repasar los objetivos del estudio y explorar las oportunidades y limitaciones del corredor.

Meeting Details/ *detalles de la reunión*

Wednesday, December 11, 2013
Miércoles, 11 de diciembre de 2013
6-8 PM
Los Angeles Academy Middle School
Multi-purpose Room
644 E 56th St.
Los Angeles, CA 90011

Contact Us/ *Comuníquese con Nosotros*

Alice Tolar, Project Manager
Los Angeles County Metropolitan
Transportation Authority
One Gateway Plaza, 99-22-6
Los Angeles, CA 90012

213.922.2218

TolarA@Metro.net

Para información en español, por favor llame a
Maria Yañez-Forgash al 909.627.2974.

ADA REQUIREMENTS: Upon request, sign language interpretation, materials in alternative formats and other accommodations are available to the public for MTA sponsored meetings and events. LIMITED ENGLISH PROFICIENCY: Upon request, interpreters are available to the public for MTA sponsored meetings and events. Agendas and minutes will also be made available in other languages upon request. All requests for reasonable accommodations, interpretation services and materials in other languages must be made at least three working days (72 hours) in advance of the scheduled meeting date. Please submit requests by calling (213) 922-4600 between 8 a.m. and 5 p.m., Monday through Friday. Our TDD line is (800) 252-9040. Individuals with hearing or speech impairment may use California Relay Service 711 + Metro phone number.

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IP STUDY BRIEFING 1: POWERPOINT PRESENTATION:

Rail to River Intermediate Active Transportation Corridor Feasibility Study

alta PLANNING + DESIGN Metro

12/11/2013

Agenda

- Study Overview
- Traffic Context
- Linkages Concepts
- Area Socioeconomics
- Public Outreach
- Next Steps
- Tonight's Exercise

12/11/2013 alta Metro

Feasibility Study Area

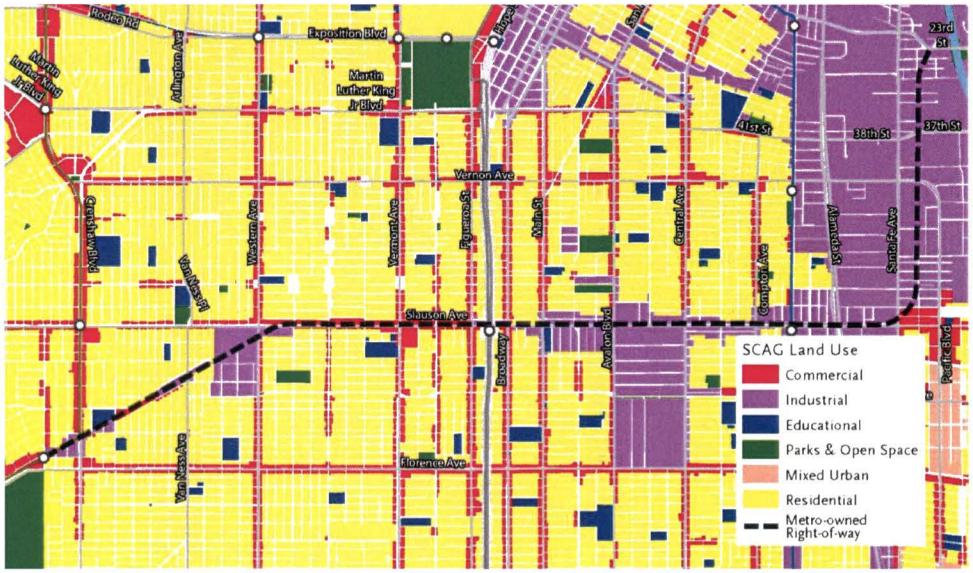
12/11/2013

Study Objectives

- Identify alternatives for successful integration of an intermediate active transportation corridor in South Los Angeles, an area characterized by higher transit use
- Explore options for providing greater countywide connectivity to the Los Angeles River
- Improve and enhance linkages between Metro Blue, Silver and Crenshaw/LAX transit lines
- Provide safe first and last mile options
- Include alternatives that provide improved and safe connectivity to surrounding communities
- Identify opportunities to create a healthy, aesthetically pleasing and safe active transportation corridor
- Promote collaboration among stakeholders to identify corridor opportunities and constraints

12/11/2013

Land Use Map



12/11/2013

Study Overview

Feasibility study for Harbor Subdivision:

- Intermediate Active Transportation Corridor
- Metro owns railroad right-of-way
- Existing rail easement
- No plans for major transit
- Funding for improvements not yet identified

12/11/2013

Slauson Ave Traffic Context

Vehicular traffic:

- 4-lanes, with painted center median
- Posted speed limit: 35 mph
- Daily volumes: 30,000-35,000 ADT

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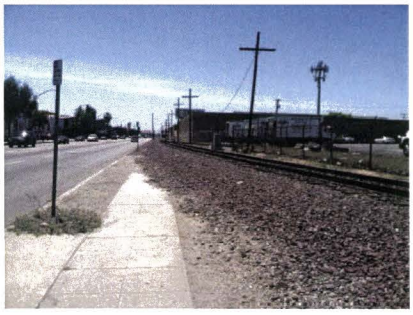
Slauson Ave Traffic Context

On-street parking

- South side intermittent
- North side majority prohibited



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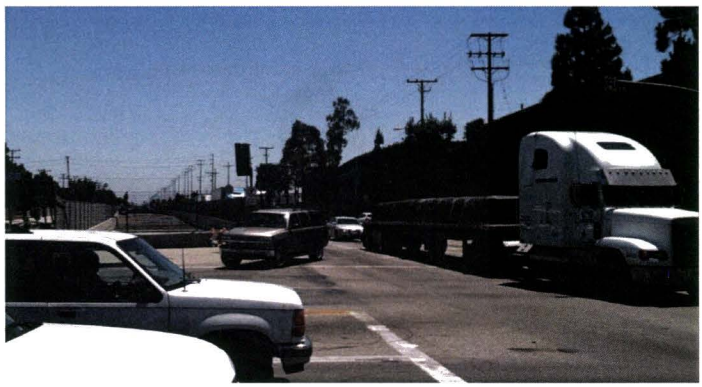
Slauson Ave Traffic Context

Bus & goods movement traffic:

- Heavy bus & truck activity



12/11/2013

Daily Bus Boardings

12/11/2013

Slauson Ave Traffic Context

Pedestrian accommodation:

- Sidewalk on south side only
- No mid-block crossings
- Bus stops/shelters

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Slauson Ave Traffic Context

Bicycle accommodation:

- No existing bicycle lanes
- County plan: proposed on-street bike lane
- City of LA: proposed off-street bike path

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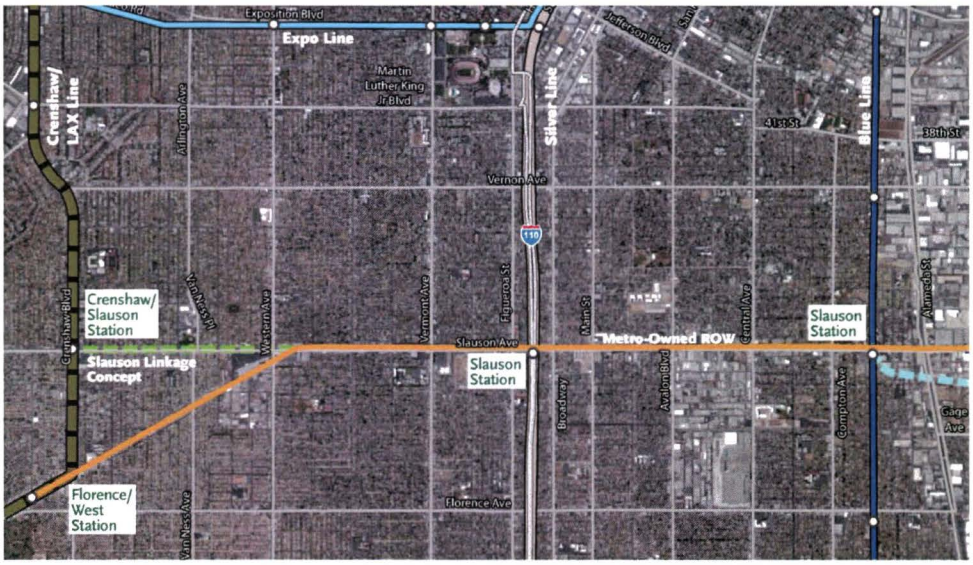
Rail Linkage Concepts



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River Linkage Concepts

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Area Socioeconomics

- Population density
- Median household income
- Percent biking to work
- Adult obesity rate
- Diabetes mortality rate
- Chronic heart disease mortality rate

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Next Steps

Interested Parties Study Briefing

- Draft Concepts and Recommendations
- Tentatively Scheduled February 2014

Feasibility Study

- Draft Study: March 2014
- Metro Adoption: Fall 2014

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Public Outreach

Technical Advisory Committee (TAC)

- City, County, and agency staff representatives

Stakeholder input from:

- Elected officials
- Neighborhood groups, large employers, environmental organizations, health advocates, CBO's
- Interested parties

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Tonight's Exercise

Use stickers to tell us your preferences on the following boards:

- Study Objectives
- User Types & Linkages
- Potential Outcomes
- Rail & River Linkage Concepts

Also provide input to study team members; thank you!

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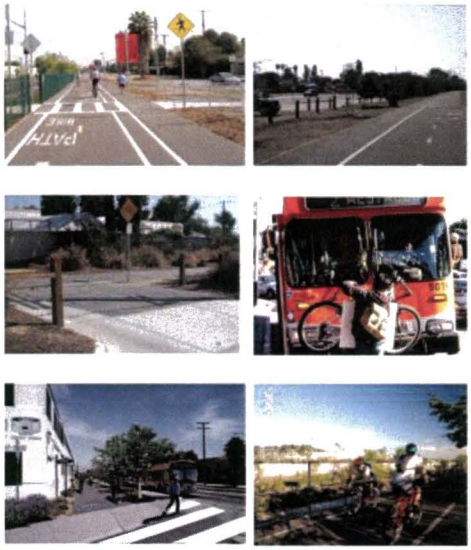
IP STUDY BRIEFING 1: STUDY BRIEFING BOARDS

Rail to River Intermediate Active Transportation Corridor Feasibility Study

Study Objectives

The Rail to River Feasibility Study will accomplish the following objectives:

- Identify alternatives for potential integration of an intermediate active transportation corridor in South Los Angeles, an area characterized by higher transit use
- Explore options for providing greater countywide connectivity to the Los Angeles River
- Improve and enhance linkages between Metro Blue, Silver and Crenshaw/LAX transit lines
- Provide safe first and last mile options
- Include alternatives that provide improved and safe connectivity to surrounding communities
- Identify opportunities to create a healthy, aesthetically pleasing and safe active transportation corridor
- Promote collaboration among stakeholders to identify corridor opportunities and constraints



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Rail to River Intermediate Active Transportation Corridor Feasibility Study

Context

- Feasibility study to consider options
- Metro owns railroad tracks
- Rail freight operation easement exists along corridor
- No Metro-planned transit using railroad corridor
- Future funding for improvements not yet identified

Metro

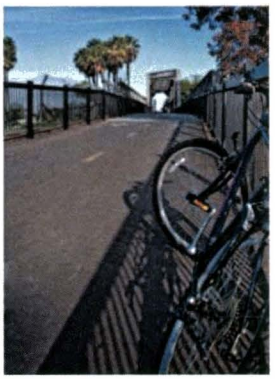
Rail to River Intermediate Active Transportation Corridor Feasibility Study

User Types

- Children (18 and under)
- Seniors
- Commuters
- Persons using wheelchairs or other mobility devices
- Residents
- Bicyclists
- Pedestrians

Potential Linkages to the Corridor

- Schools
- Local Services & Businesses
- Job Centers
- Community Centers
- Health Centers
- Parks
- Homes
- Public Transit
- LA River



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Rail to River Intermediate Active Transportation Corridor Feasibility Study

Potential Outcomes

- Improve visual appearance of Metro owned property
- Increase transportation choices
- Improve business opportunities
- Improve healthy options for residents
- Improve air quality through reduced vehicular travel
- Improve access to transit
- Maintain opportunity for future transit
- Reduce homeless encampments
- Reduce vandalism and graffiti

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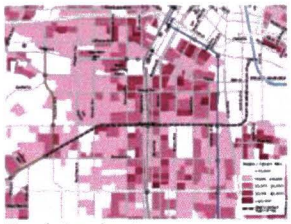
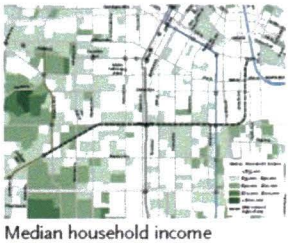
Rail to River Intermediate Active Transportation Corridor Feasibility Study

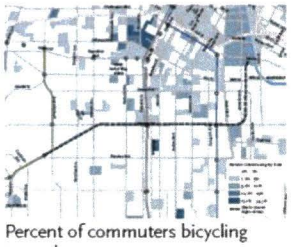
Socioeconomics



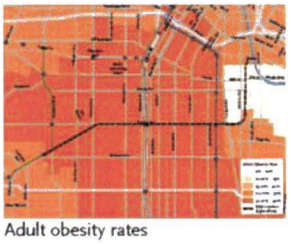
Population density



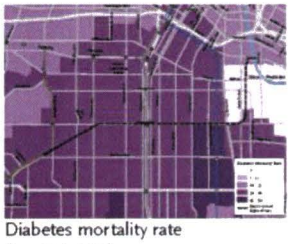
Median household income



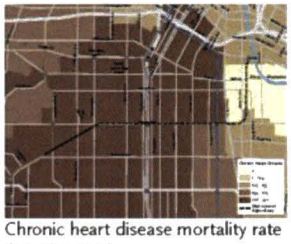
Percent of commuters bicycling to work



Adult obesity rates



Diabetes mortality rate (per 100,000)



Chronic heart disease mortality rate (per 100,000)

Metro

Rail to River Intermediate Active Transportation Corridor Feasibility Study

Land Use Map

Metro

Rail to River Intermediate Active Transportation Corridor Feasibility Study

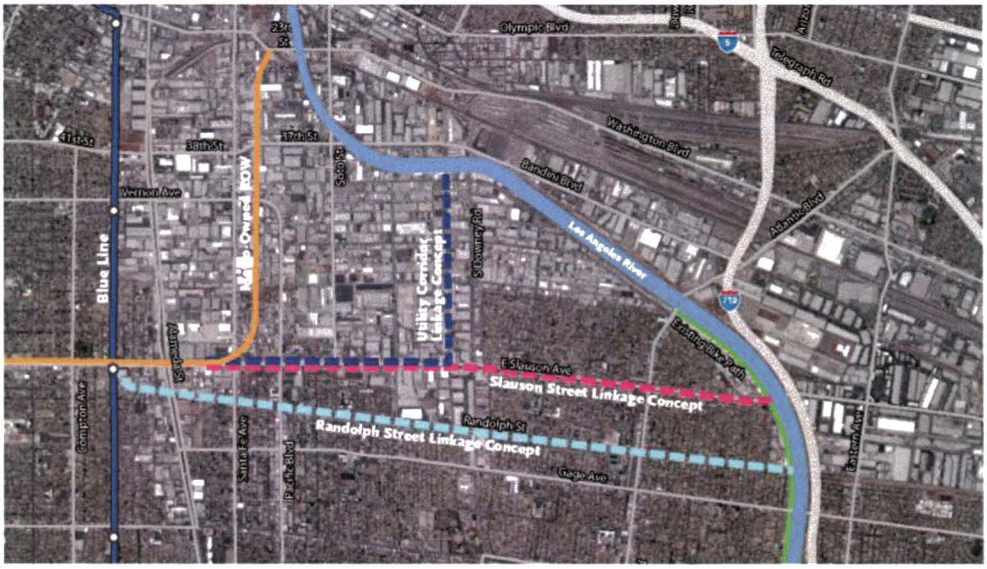
Rail Linkage Concepts

Metro

alta

Rail to River Intermediate Active Transportation Corridor Feasibility Study

River Linkage Concepts



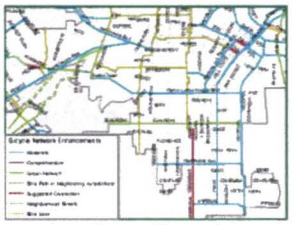
Metro

alta

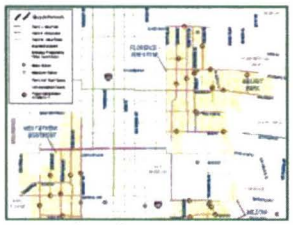
Rail to River Intermediate Active Transportation Corridor Feasibility Study

Bicycle and Pedestrian Conditions along Slauson Avenue

No existing on-street bike lane

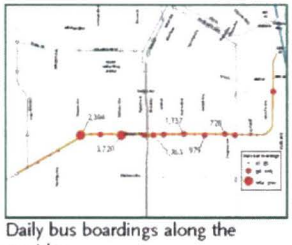


City plans: future off-street bike path (Green Network)



County plans: future on-street bike lanes

New Metro-built bus shelters



Daily bus boardings along the corridor

5-feet wide sidewalk provided on south side

Metro

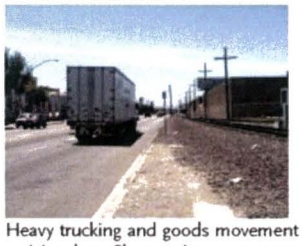
Rail to River Intermediate Active Transportation Corridor Feasibility Study

Motorized Traffic Conditions along Slauson Avenue

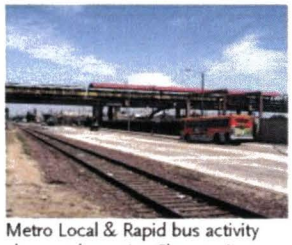
4 travel lanes + left-turn lane, no shoulders

Posted speed limit of 35 miles/hour. 30,000-35,000 daily vehicle trips

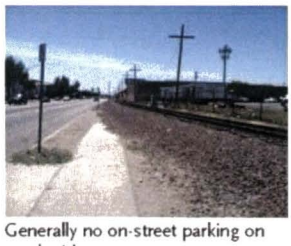
On-street parking intermittently on south side, minimal on north side



Heavy trucking and goods movement activity along Slauson Ave.



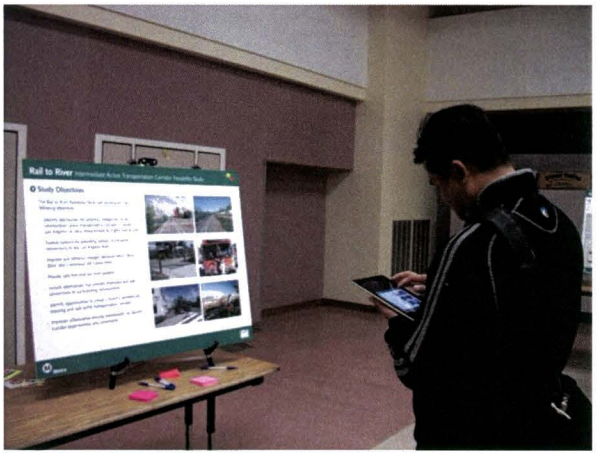
Metro Local & Rapid bus activity along and crossing Slauson Ave.

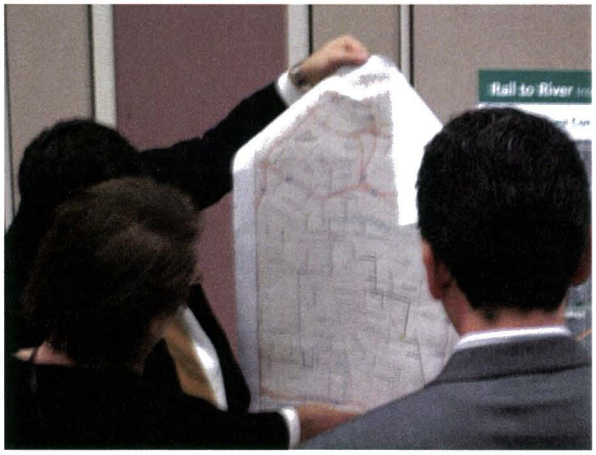


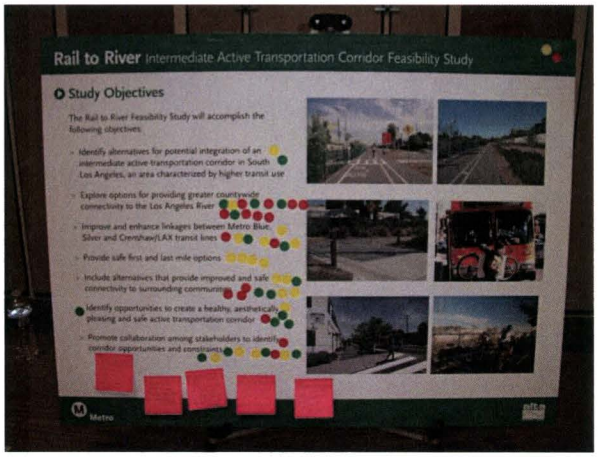
Generally no on-street parking on north side.

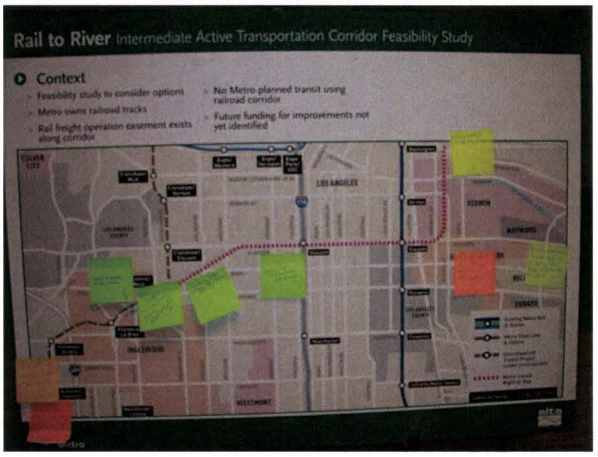
Metro

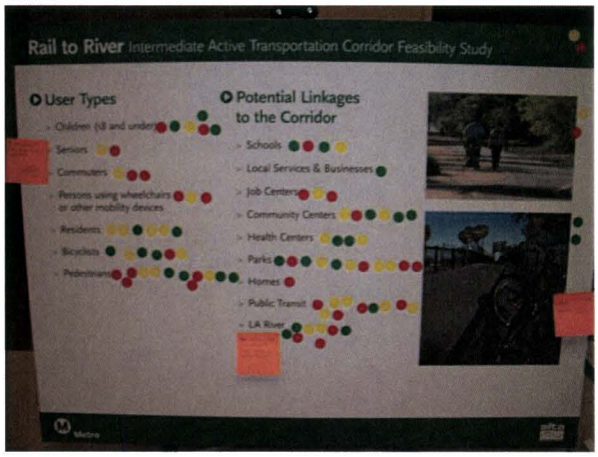
IP STUDY BRIEFING 1: PHOTOS

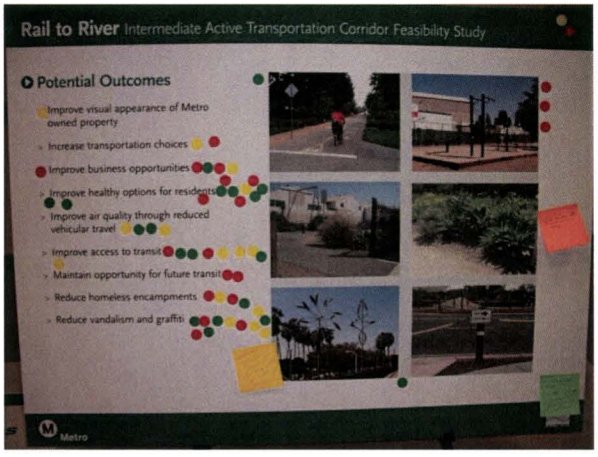


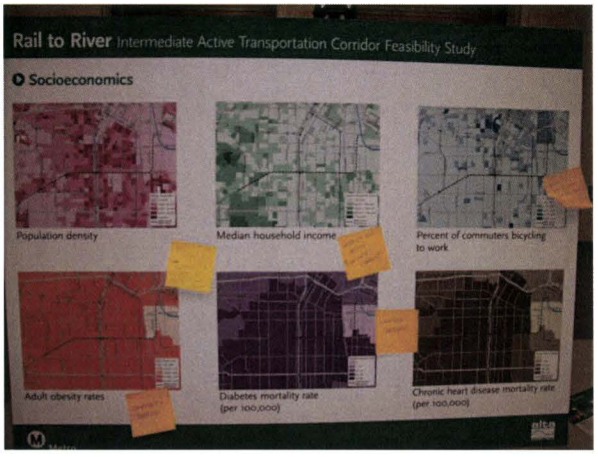



Rail to River Intermediate Active Transportation Corridor Feasibility Study
Study Objectives
The Rail to River Feasibility Study will accomplish the following objectives:
Identify alternatives for potential integration of an intermediate active transportation corridor in South Los Angeles, an area characterized by higher transit use
Explore options for providing greater countywide connectivity to the Los Angeles River
Improve and enhance linkages between Metro Blue, Silver and Crenshaw/LAX transit lines
Provide safe first and last mile options
Include alternatives that provide improved and safe connectivity to surrounding communities
Identify opportunities to create a healthy, aesthetically pleasing and safe active transportation corridor
Promote collaboration among stakeholders to identify corridor opportunities and constraints
Metro


Rail to River Intermediate Active Transportation Corridor Feasibility Study
Context
Feasibility study to consider options
Metro owns railroad tracks
Rail freight operation easement exists along corridor
No Metro-planned transit using railroad corridor
Future funding for improvements not yet identified
LOS ANGELES
VERNON
HAWTHORNE
HUNTINGTON PARK
CUDAHY
WESTMONT
Metro


Rail to River Intermediate Active Transportation Corridor Feasibility Study
User Types
Children (18 and under)
Seniors
Commuters
Persons using wheelchairs or other mobility devices
Residents
Bicyclists
Pedestrians
Potential Linkages to the Corridor
Schools
Local Services & Businesses
Job Centers
Community Centers
Health Centers
Parks
Homes
Public Transit
LA River
Metro


Rail to River Intermediate Active Transportation Corridor Feasibility Study
Potential Outcomes
Improve visual appearance of Metro owned property
Increase transportation choices
Improve business opportunities
Improve healthy options for residents
Improve air quality through reduced vehicular travel
Improve access to transit
Maintain opportunity for future transit
Reduce homeless encampments
Reduce vandalism and graffiti
Metro

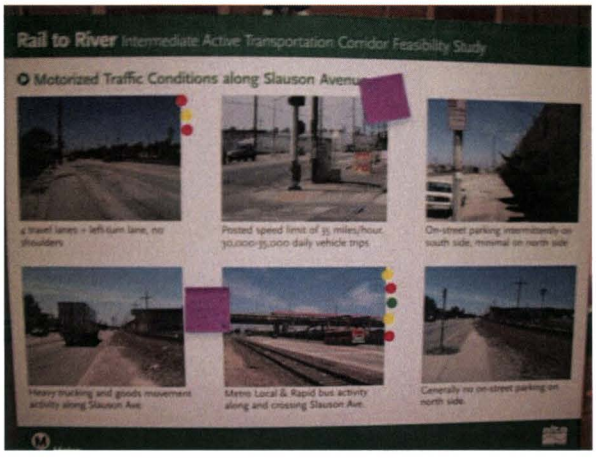

Rail to River Intermediate Active Transportation Corridor Feasibility Study
Socioeconomics
Population density
Median household income
Percent of commuters bicycling to work
Adult obesity rates
Diabetes mortality rate (per 100,000)
Chronic heart disease mortality rate (per 100,000)


Rail to River Intermediate Active Transportation Corridor Feasibility Study
Land Use Map
SCAG Land Use
Commercial
Industrial
Educational
Parks & Open Space
Mixed Urban
Residential
Metro


Opportunities and Constraints: Western Segment


Opportunities and Constraints: Middle Segment


Opportunities and Constraints: Eastern Segment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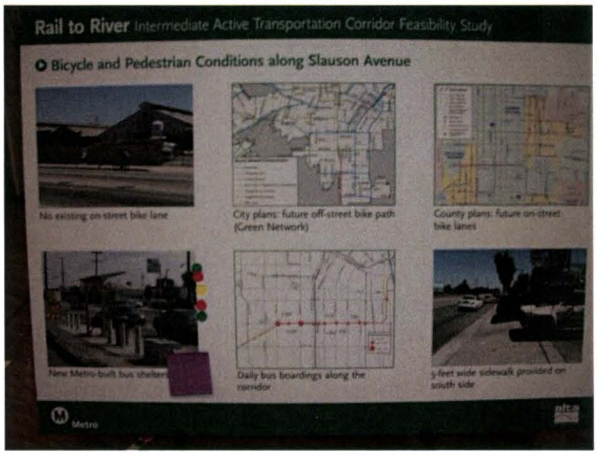
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County plans: future on-street bike lanes
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Daily bus boardings along the corridor
5-feet wide sidewalk provided on south side
Metro

IP STUDY BRIEFING 2: FEBRUARY 26, 2014

Meeting Reminder

Rail to River

Intermediate Active Transportation Corridor Feasibility Study

Interested Parties Study Briefing - February 26, 2014
Reunión informativa para personas interesadas - 26 de febrero de 2014

Improving Connections and Transportation Options in South Los Angeles

Mejorando las Conexiones y Opciones de Transporte en el Sur de Los Ángeles

The Rail to River Feasibility Study is currently underway. Join us for a Study Briefing.

Metro is leading the feasibility study for a non-motorized transportation corridor along the Metro owned Harbor Subdivision Right-of-way. The study would identify alternatives for an active transportation corridor in South Los Angeles. The corridor could provide safe dedicated walking and cycling transportation options to promote healthy neighborhoods and linkages between local communities, schools, shopping, employment centers, transit hubs and other key destinations.

The purpose of Study Briefing #2 is to present draft concepts for the corridor and recommended alignments for further review. We welcome your participation as we review key findings from the feasibility study and develop potential next steps.

Estudio de Viabilidad de la Carrilera al Río está actualmente en marcha. Únase a nosotros para una reunión informativa.

Metro está liderando el estudio de viabilidad para un corredor de transporte no motorizado a lo largo del Derecho a la Vía de la Subdivisión Harbor, propiedad de Metro. El estudio permitiría identificar alternativas para un corredor de transporte activo en el sur de Los Angeles. El corredor podría proporcionar opciones dedicadas a transporte a pie y en bicicleta, las cuales sean seguras y promuevan vecindarios saludables y conexiones entre las comunidades locales, escuelas, tiendas, centros de empleo, centros de tránsito y otros destinos claves.

El propósito de la reunión informativa #2 es presentar conceptos preliminares para el corredor y alineaciones recomendadas para obtener revisiones adicionales. Le agradecemos su participación para repasar las conclusiones principales del estudio y desarrollar posibles próximos pasos.

Meeting Details/ *detalles de la reunión*

Wednesday, February 26, 2014
Miércoles, 26 de febrero de 2014
6-8 PM

Los Angeles Academy Middle School
Multi-purpose Room
644 E 56th St.
Los Angeles, CA 90011

Served by Metro Bus Lines 51, 52, and 108. Free, underground school parking is available on site.

Contact Us/ *Comuníquese con Nosotros*

Alice Tolar, Transportation Planning Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, 99-22-6
Los Angeles, CA 90012

213.922.2218

TolarA@Metro.net

Para información en español, por favor llame a Maria Yañez-Forgash al 909.627.2974.

All Metro meetings are held in ADA accessible facilities. Spanish translation provided.

ADA and Title VI Requirements: Special accommodations are available to the public for Metro-sponsored meetings. All requests for reasonable accommodations and translation must be made at least three working days (72 hours) in advance of the scheduled meeting date; please call the project information line at 213.922.2218 or California Relay Service at 711.

323.466.3876
Español
한국어
中文
Հայերէն
Tiếng Việt
日本語
русский
ภาษาไทย
ហាងឆាយ

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IP STUDY BRIEFING 2: POWERPOINT PRESENTATION:

Rail to River Intermediate Active Transportation Corridor Feasibility Study

Interested Parties Meeting II
February 26, 2014

Metro

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Welcome

Metro 2/26/2014 alta

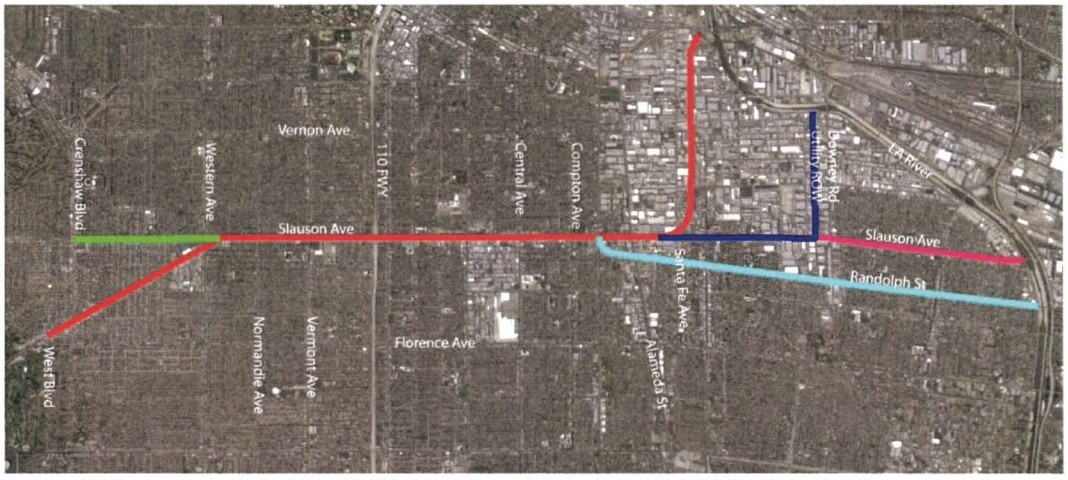
Agenda

- Introductions
- Prior Studies/Metro Rights-of-way (ROW) Preservation Guidelines
- Study Progress & Community Input
- Conceptual Designs
- Next Steps
- Study Boards Open House

Metro 2/26/2014 alta

Study Progress

- Feasibility Study Alignment Concepts



Metro 2/26/2014 alta

Community Input

Community Input Received December 2013

- High ranking objectives: Connectivity to LA River, neighborhoods, transit and parks
- Repeated Public Health interests: collaborate w/ health centers & improve public health
- Interest in pursuing an active transportation corridor while preserving the corridor for future transportation uses (including Light Rail Transit – LRT & Bus Rapid Transit –BRT)
- Repeated requests for parks, gathering areas, and open space opportunities
- Integrate vendors, gardens, farmers market

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Community Input

Community Input Received (continued...)

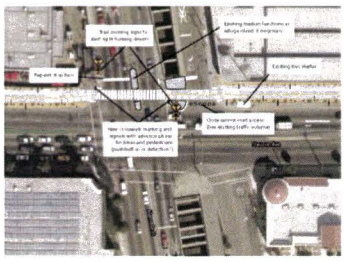
- Pedestrians: highest sticker total of user types
- Increase maintenance efforts on ROW
- Desire to link beyond the ROW to Commerce, Santa Fe Springs, Inglewood, LAX, transit
- Randolph Street Linkage Concept scored highly
- Continued interest in bicycle accommodation into Vernon for commute trips
- Safety concerns and improved transit access requested

Metro 2/26/2014 alta

Intersection Crossings

60'-100' Signalized Intersections

- Denker Avenue
- Normandie Avenue
- Budlong Avenue
- Vermont Avenue
- Hoover Avenue
- Figueroa Avenue
- Broadway Avenue
- Main Street
- Avalon Boulevard
- Central Avenue
- Compton Avenue
- Holmes Avenue
- Alameda Avenue



40' Intersections

- 4th Avenue (Between Hyde Park Boulevard and Southwest Drive)
- San Pedro Street and Slauson (signalized)
- Towne Avenue and Slauson
- Paloma Avenue and Slauson
- McKinley Avenue and Slauson (signalized)
- Hooper Avenue and Slauson (signalized)
- Long Beach Avenue and Slauson
- 2nd Street and Slauson
- 4th Avenue (Between Hyde Park Boulevard and Southwest Drive)
- San Pedro Street and Slauson (signalized)
- Towne Avenue and Slauson
- Paloma Avenue and Slauson
- McKinley Avenue and Slauson (signalized)

60'-100' Mid-Block Crossings

- West Boulevard (terminus, north of Florence Avenue)
- Crenshaw Boulevard south of 67th Street
- Western Avenue south of Slauson
- Slauson at turn south to West Boulevard
- Santa Fe Avenue north of Slauson
- Pacific Boulevard (between Santa Fe Avenue and Soto Street)
- East 57th / 58th Streets (between Santa Fe Avenue and Soto Street)
- West Boulevard (terminus, north of Florence Avenue)
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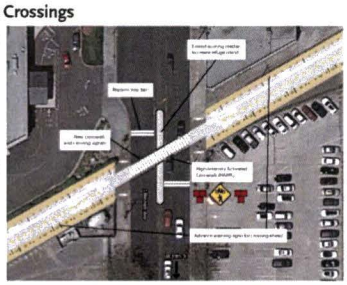
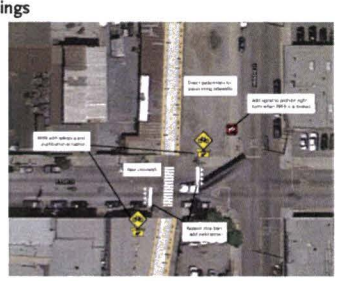


40' Mid-Block Crossings

- Bryanthurst Avenue
- Victoria Avenue
- 67th Street
- 11th Avenue
- 8th Avenue
- Van Ness Avenue
- 58th Street
- 57th Street
- 56th Street
- 55th Street
- 54th Street
- 53rd Street
- 52nd Street
- Fruitland Avenue
- 49th Street
- Vernon Avenue
- 28th Street
- 27th Street
- 26th Street
- 25th Street
- 24th Street



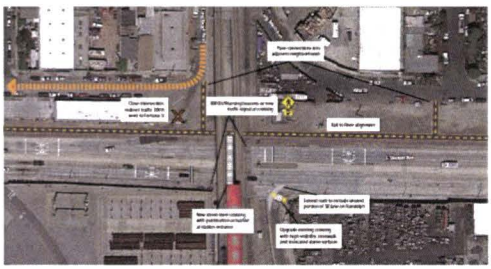
Metro 2/26/2014 alta

Transit Access

Metro Silver Line Slauson Station

Metro Crenshaw/LAX Line Crenshaw/Slauson Station

Metro Blue Line Slauson Station



Metro Crenshaw/LAX Line Florence/West Station

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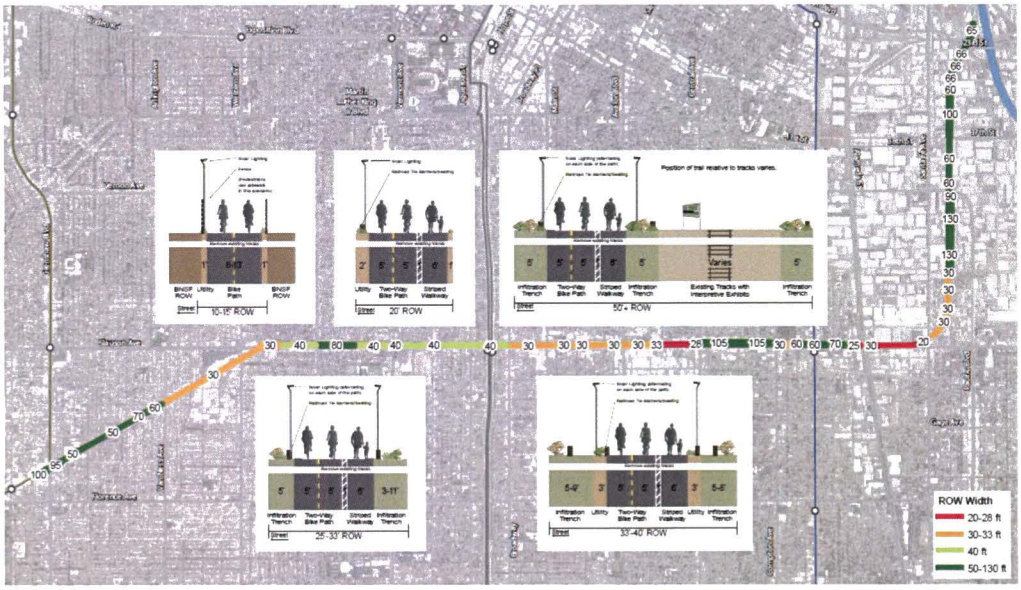
Metro Owned Right-of-Way



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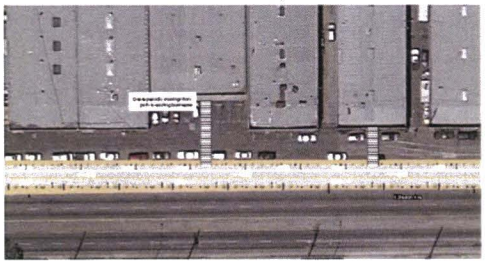
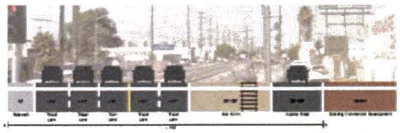
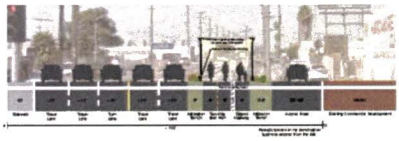
Alignment Details

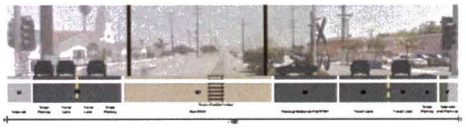
Slauson between Central and McKinley

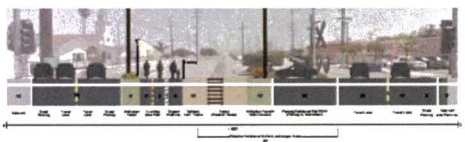






Randolph East of Atlantic





Metro 2/26/2014 alta

Next Steps

- Complete Draft Feasibility Study
- Finalize Feasibility Study
- Metro Board Review, September 2014

Metro 2/26/2014 alta

Thank you!

- Contact Us

Alice Tolar, Transportation Planning Manager
Los Angeles County Metropolitan Transportation Authority
One Gateway Plaza, 99-22-6
Los Angeles, CA 90012

(213) 922-2218
tolara@metro.net

Para información en español, por favor llame a Maria Yañez-Forgash al (909) 627-2974

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IP STUDY BRIEFING 2: STUDY BRIEFING BOARDS

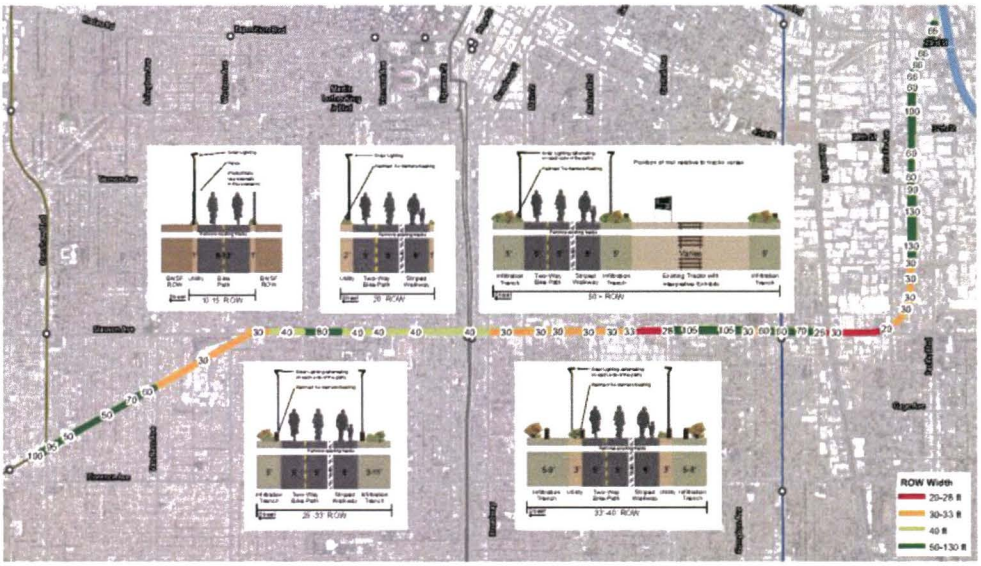
Rail to River Intermediate Active Transportation Corridor Feasibility Study

Rail Linkage Concepts

Metro

Rail to River Intermediate Active Transportation Corridor Feasibility Study

Metro-Owned Right-of-Way



Metro

Rail to River Intermediate Active Transportation Corridor Feasibility Study

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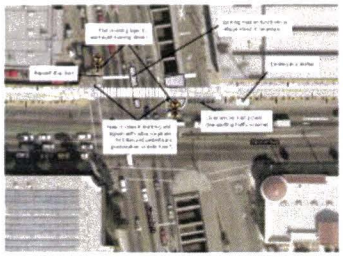

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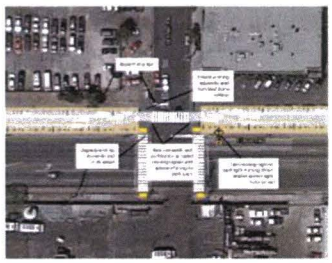
- Paloma Avenue and Slauson
- McKinley Avenue and Slauson (signalized)



60'-100' Mid-Block Crossings

- West Boulevard (between north of Hoover Avenue)
- Crenshaw Boulevard south of 67th Street
- Western Avenue south of Slauson
- Slauson at turn south to West Boulevard
- Santa Fe Avenue north of Slauson
- Pacific Boulevard (between Santa Fe Avenue and 50th Street)
- East 57th / 58th Streets (between Santa Fe Avenue and 50th Street)
- West Boulevard (between north of Hoover Avenue)
- Crenshaw Boulevard south of 67th Street
- Western Avenue south of Slauson
- Slauson at turn south to West Boulevard
- Santa Fe Avenue north of Slauson
- Pacific Boulevard (between Santa Fe Avenue and 50th Street)

40' Mid-Block Crossings

- Bryant Avenue
- Victoria Avenue
- 67th Street
- 54th Avenue
- 8th Avenue
- Van Ness Avenue
- 58th Street
- 57th Street
- 56th Street
- 55th Street
- 54th Street
- 53rd Street
- Fruitland Avenue
- 49th Street
- Vernon Avenue
- 28th Street
- 27th Street
- 26th Street
- 25th Street
- 24th Street

Metro

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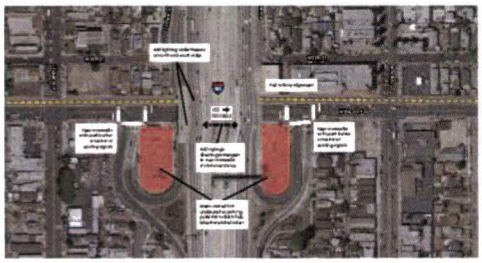
Rail to River Intermediate Active Transportation Corridor Feasibility Study

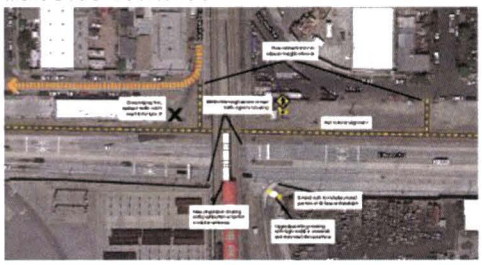
Transit Access

Metro Silver Line Slauson Station



Metro Crenshaw/LAX Line Crenshaw/Slauson Station

Metro Blue Line Slauson Station



Metro Crenshaw/LAX Line Florence/West Station

Metro

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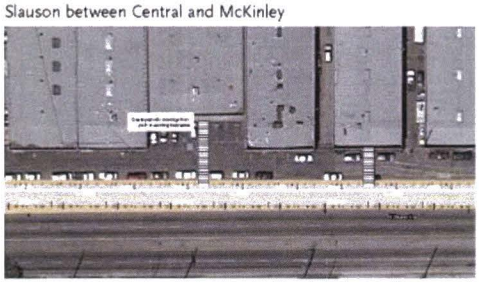
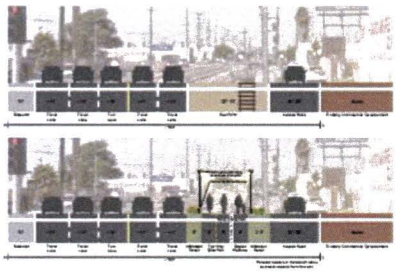
Rail to River Intermediate Active Transportation Corridor Feasibility Study

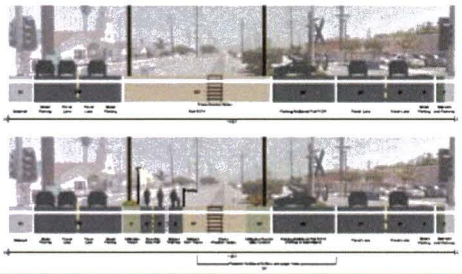
Alignment Details

Slauson between Central and McKinley





Randolph East of Atlantic



Metro

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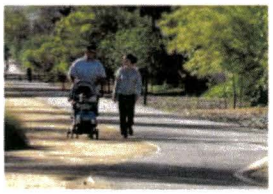
Rail to River Intermediate Active Transportation Corridor Feasibility Study

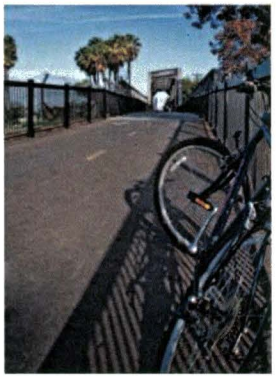
User Types

- Children (18 and under)
- Seniors
- Commuters
- Persons using wheelchairs or other mobility devices
- Residents
- Bicyclists
- Pedestrians

Potential Linkages to the Corridor

- Schools
- Local Services & Businesses
- Job Centers
- Community Centers
- Health Centers
- Parks
- Homes
- Public Transit
- LA River





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Rail to River Intermediate Active Transportation Corridor Feasibility Study

Potential Outcomes

- Improve visual appearance of Metro owned property
- Increase transportation choices
- Improve business opportunities
- Improve healthy options for residents
- Improve air quality through reduced vehicular travel
- Improve access to transit
- Maintain opportunity for future transit
- Reduce homeless encampments
- Reduce vandalism and graffiti






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Rail to River Intermediate Active Transportation Corridor Feasibility Study

Study Objectives

The Rail to River Feasibility Study will accomplish the following objectives:

- Identify alternatives for potential integration of an intermediate active transportation corridor in South Los Angeles, an area characterized by higher transit use
- Explore options for providing greater countywide connectivity to the Los Angeles River
- Improve and enhance linkages between Metro Blue, Silver and Crenshaw/LAX transit lines
- Provide safe first and last mile options
- Include alternatives that provide improved and safe connectivity to surrounding communities
- Identify opportunities to create a healthy, aesthetically pleasing and safe active transportation corridor
- Promote collaboration among stakeholders to identify corridor opportunities and constraints






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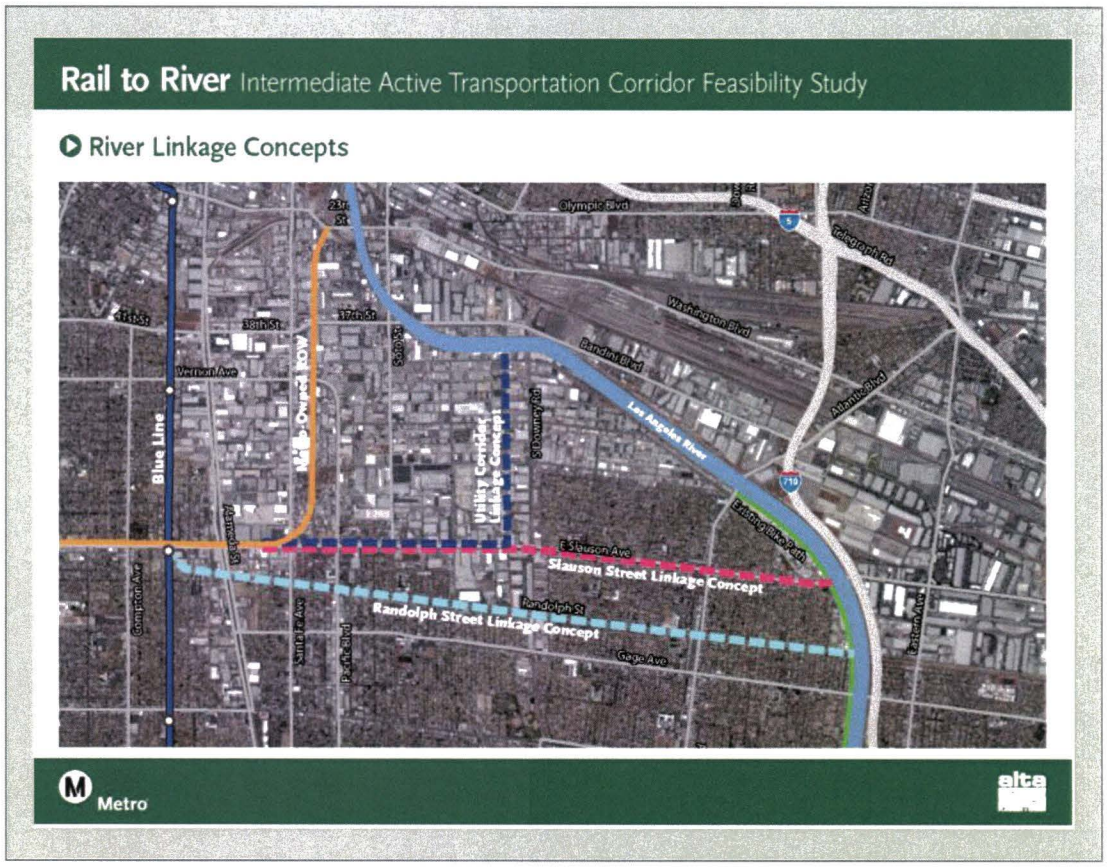
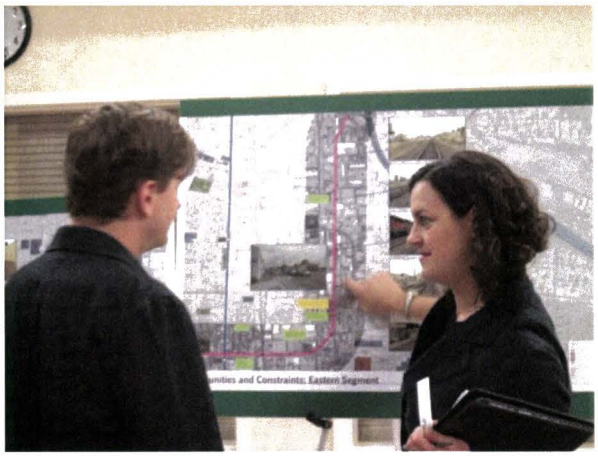

Rail to River Intermediate Active Transportation Corridor Feasibility Study
River Linkage Concepts
Olympic Blvd
Washington Blvd
Randolph St
Vernon Ave
38th St
37th St
Slauson Ave
Gage Ave
Blue Line
Alameda St
Compton Ave
Santa Fe Ave
Soto St
Mateo St
Utility Corridor Linkage Concept
Los Angeles River
Existing Bike Path
Slauson Street Linkage Concept
Randolph Street Linkage Concept
Atlantic Blvd
Eastern Ave
Metro

IP STUDY BRIEFING 2: PHOTOS




Community Input


Rail to River
Transit Access

Rail to River Feasibility Study Media Log

No.	Type of Publication	Publication Source	Publication Name	Publication Date	Article Title	Publication Language	PDF/Image Availa	Article
1	Online Article- with Video	LA County Supervisor, Mark Ridley-Thomas	Top Stories	12/5/2013	Rail to River: A vision - Supervisor Mark Ridley -Thomas	English	Yes - Use link for video	Link
2	Online Article	Curbed Los Angeles	Active Discussions/Newest Posts	12/9/2013	Abandoned South LA Rail Tracks Could Become a Greenbelt	English	Yes	Link
3	Blog	BikinginLA Blog		12/10/2014	Rail-to-River comes to South LA, important meeting in BH, and e-bikes to help the recently homeless	English	Yes	Link
4	Blog - Image	LA2050		12/16/2014		N/A	Yes	Link
5	Online Article	LA Streets Blog		12/17/2013	Dear Santa, Please Bring Us an Active Transportation Corridor Along Slauson. But Don't Forget the Community in the Process.	English	Yes	Link
6	Online Article	Los Angeles Wave	Opinion: Bottom Line	12/31/2013	Officials hope to link rail lines to river along Slauson	English	Yes	Link
7	Online Article	Los Angeles Time		12/24/2013	A greenbelt future for South L.A. - The proposed Rail to River project along the Slauson Avenue corridor is a good start.	English	Yes	Link
8	E-blast	The Transit Coalition	Weekly Transit E-Newsletter	1/21/2014	Transportation Facilities Related to the Los Angeles River	English	Yes	
9	Blog	Empower LA		1/24/2014	Rail to River Study Briefing	English	Yes	Link
10	Blog	LA Metro	The Source	1/27/2014	How Metro is studying the Rail-to-River proposal	English	Yes	Link
11	Online Article	Safe Routes to School in California	Safe Routes to School National Partnership	2/2/2014	Metro considers 8 plus mile walking and bicycling path in South LA	English	Yes	Link
12	Online Article	City Watch		2/18/2014	The Next Great Airport-to-Downtown Rail Line	English	Yes	Link
13	Online Article	LA Streets Blog		3/5/2014	Feasibility Study on Slauson Corridor Rail-to-River Project Takes Another Step Forward	English	Yes	Link
14	Blog	UrbDeZine Los Angeles		3/6/2014	Feasiubility Study on Slauson corridor Rail-to-River Project Takes Another Step Forward|StreetsBlog Los Angeles	English	No - Content is same as line above.	Link
15	Online Article- with Video	LA County Supervisor, Mark Ridley-Thomas Home Page		3/14/2014	Slauson Residents See Rail to River Vision	English	Yes - Use link for video	Link
16	Online Article	City Watch		3/14/2014	Rails-To-River' Fails to Prevail On The Scales of Justice	English	Yes	Link
Related								
1	Online Article	KCRW	Which Way LA?	1/29/2014	Can South LA alleys become pedestrian-friendly parks?	English	Yes	Link
2	Online Article	Curbed Los Angeles		1/30/2014	South LA Alleys To BE Turned Into Mini-Parks	English	Yes	Link

Last Updated 03/19/14

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APPENDIX F
COST ESTIMATE DETAILS

Table F-1 Built-Up Unit Costs (including Design & Contingency)

Description	Unit Cost	Unit	Notes
Typical Alignment			
15' ROW - Exclusive	$480.00	LF	13' trail width, one striped line, symbols, signage, lighting
20' ROW -Exclusive	$564.00	LF	17' trail width, three striped lines, symbols, signage, benches, lighting
25'-33' ROW - Street-Adjacent	$635.00	LF	17' trail width, three striped lines, symbols, signage, 14' landscaping width, benches, remove track, lighting
25'-33' ROW - Exclusive	$804.00	LF	17' trail width, three striped lines, symbols, signage, 14' landscaping width, benches, fencing, remove track, lighting
33'-40' ROW - Street-Adjacent	$647.00	LF	17' trail width, three striped lines, symbols, signage, 20' landscaping width, benches, remove track, lighting
> 40' ROW - Street Adjacent	$647.00	LF	17' trail width, three striped lines, symbols, signage, 20' landscaping width, benches, remove track, lighting
> 40' ROW - Exclusive	$816.00	LF	17' trail width, three striped lines, symbols, signage, 20' landscaping width, benches, fencing, remove track, lighting

Table F-2 Built-Up Unit Costs (including Design & Contingency) (continued)

Description	Unit Cost	Unit	Notes
180' ROW - Randolph St	$679.00	LF	17' trail width, three striped lines, symbols, signage, 15' landscaping width, benches, fencing, lighting
Class II Bike Lanes	$8.28	LF	Assume signing/striping only
Bicycle Boulevard	$5.66	LF	Assume signing/striping only
Bike Blvd + Widen Sidewalk	$66.08	LF	Assume signing/striping + 5' of sidewalk widening on one side of street (no curb/gutter mods)
Crossings			
< 60' Unsignalized	$17,200	EA	New stop lines, 8 new pavement markings, 8 new signs, 1 new crosswalk, 2 new curb cuts, remove tracks
60'-110' Signalized	$40,000	EA	New stop line, 8 new pavement markings, 8 new signs, 4 new crosswalks & curb cuts, 1 new push-button ped signal, remove tracks
60'-110' Mid-Block HAWK	$104,400	EA	New stop lines, 8 new pavement markings, 8 new signs, 1 new crosswalk, 2 new curb cuts, 1 new HAWK, remove tracks

Table F-3 Operations and Maintenance Costs (Annual)

Description	Unit Cost	Unit	Notes
Typical Alignment			
Bicycle Path	$15,000	mi	
Bicycle Lane/Route	$5,000	mi	
Unit Cost Sources: South Bay Metro Green Line Extension - Capital Cost Estimate. RCTC Perris Valley Line - Capital Cost Estimate County of Los Angeles - Bicycle Master Plan - Engineering Cost Estimate			

Table F-4 Cost Detail Sheet - West Segment - Slauson Ave Option, April 28, 2014

Start Point	End Point	Length (ft)	ROW Width (ft)	Signal	Unit Cost	Unit	Total Cost
Crenshaw/Slauson Station							
Crenshaw Ave	Harbor Sub ROW	7,270	Bike Blvd + Sidewalk		$66	LF	$480,394
Total LF		**7,270**	**LF**		**$66**	**LF**	**$480,394**
Total - mi		**1.4**	**mi**		**$348,897**	**mi**	

Table F-5 Annual O&M Cost

Type of Improvement	Length	Unit Cost	Unit	Total Cost
Bicycle Path	0.0 mi	$15,000	mi	$0
Bicycle Lane/Route	1.4 mi	$5,000	mi	$6,884
Total	**1.4 mi**	**$5,000**	**mi**	**$6,884**

Table F-6 Cost Detail Sheet - West Segment - 59th Street Option, April 28, 2014 (Capital Costs)

Start Point	End Point	Length (ft)	ROW Width (ft)	Signal	Unit Cost	Unit	Total Cost
Crenshaw/Slauson Station							
Slauson Ave	59th St	210	Class II		$8	LF	$1,739
Crenshaw/59th Intersection		150		HAWK	$104,400	EA	$104,400
Crenshaw Blvd	Wilton Pl	4,770	Blvd		$6	LF	$27,005
59th St	Harbor Sub ROW	610	Blvd		$6	LF	$3,454
Wilton Pl	Western Ave	1,980	30		$804	LF	$1,591,920
Western Ave		95		HAWK	$104,400	EA	$104,400
Western Ave S	lauson Ave	760	30		$804	LF	$611,040
Total - LF		**8,575**	**LF**		**$285**	**LF**	**$2,443,958**
Total - mi		**1.6**	**mi**		**$1,504,851**	**mi**	

Table F-7 Annual O&M Cost

Type of Improvement	Length	Unit Cost	Unit	Total Cost
Bicycle Path	0.5 mi	$15,000	mi	$8,054
Bicycle Lane/Route	1.1 mi	$5,000	mi	$5,436
Total	**1.6 mi**	**$8,306**	**mi**	**$13,490**

Table F-8 Annual O&M Cost

Type of Improvement	Length	Unit Cost	Unit	Total Cost
Bicycle Path	1.5 mi	$15,000	mi	$23,153
Bicycle Lane/Route	0.5 mi	$5,000	mi	$2,290
Total	**2.0 mi**	**$12,712**	**mi**	**$25,443**

Table F-9 Cost Detail Sheet - West Segment- 67th Street Option, April 28, 2014 (Capital Costs)

Start Point	End Point	Length (ft)	ROW Width (ft)	Signal	Unit Cost	Unit	Total Cost
Florence/West Station							
Redondo Blvd	67th St	833	Class II		Already Planned along West		
West Blvd	Crenshaw Blvd	1,250	Blvd		$6	LF	$7,077
Crenshaw Blvd		105		Yes	$40,000	EA	$40,000
Crenshaw Blvd	Harbor Sub ROW	230	Blvd		$6	LF	$1,302
67th St		120		No	$17,200	EA	$17,200
67th St	11th Ave	90	50		$816	LF	$73,440
11th Ave		75		No	$17,200	EA	$17,200
11th Ave	8th Ave	940	50		$816	LF	$767,040
8th Ave		70		HAWK	$104,400	EA	$104,400
8th Ave	4th Ave	1,620	30		$804	LF	$1,302,480
4th Ave		65		No	$17,200	EA	$17,200
4th Ave	Van Ness Ave	1,320 80			$816	**LF**	$1,077,120
Van Ness Ave		65		HAWK	$104,400	EA	$104,400
Van Ness Ave	Wilton Pl	950	30		$804	LF	$763,800
Wilton Pl	Western Ave	1,980	30		$804	LF	$1,591,920
Western Ave		95		HAWK	$104,400	EA	$104,400
Western Ave	Slauson Ave	760	30		$804	LF	$611,040
Total-LF		10,568	LF		$625	LF	$6,600,019
Total- mi		2.0	**mi**		$3,297,511	**mi**	

Table F-10 Cost Detail Sheet - Central Segment, April 28, 2014 (Capital Costs)

Start Point	End Point	Length (ft)	ROW Width (ft)	Signal	Unit Cost	Unit	Total Cost
Slauson Ave		80		HAWK		EA	$104,400
Slauson Ave	Danker Ave	410	45		$647	LF	$265,270
Danker Ave		90		Yes	$40,000	EA	$40,000
Danker Ave	Normandie Ave	1,200	45		$647	LF	$776,400
Normandie Ave		90		Yes	$40,000	EA	$40,000
Normandie Ave	Budlong Ave	1,250	80		$647	LF	$808,750
Budlong Ave		65		Yes	$40,000	EA	$40,000
Vermont Ave	Hoover St	1,250	40		$647	LF	$808,750
Hoover St		80		Yes	$40,000	EA	$40,000
Hoover St	Figueroa St	1,250	40		$647	LF	$808,750
Figueroa St		105		Yes	$40,000	EA	$40,000
Budlong Ave	Vermont Ave	1,250	40		$647	LF	$808,750
Vermont Ave		90		Yes	$40,000	EA	$40,000
Figueroa St	Broadway	1,230	40	I-110 Xings	$647	LF	$875,810
Broadway		100		Yes	$40,000	EA	$40,000
Broadway	Main St	1,230	30		$635	LF	$781,050
Main St		90		Yes	$40,000	EA	$40,000
Main St	San Pedro St	1,080	30		$635`	LF	$685,800
San Pedro St		65		Yes	$40,000	EA	$40,000
San Pedro St	Towne Ave	770	30		$635	LF	$488,950
Towne Ave		60		No	$17,200	EA	$17,200
Towne Ave	Avalon Blvd	580	30		$635	LF	$368,300
Avalon Blvd		100		Yes	$40,000	EA	$40,000
Avalon Blvd	Paloma Ave	870	30		$635	LF	$552,450
Paloma Ave		50		No	$17,200	EA	$17,200
Paloma Ave	McKinley Ave	325	30		$635	LF	$206,375
McKinley Ave		60		No	$17,200	EA	$17,200
McKinley Ave	Central Ave	1,250	30		$635	LF	$793,750
Central Ave		80		Yes	$40,000	EA	$40,000
Central Ave	Hooper Ave	1,250	105		$647	LF	$808,750
Hooper Ave		60		Yes	$40,000	EA	$40,000
Hooper Ave	Compton Ave	1,250	30		$635	LF	$793,750
Compton Ave		80		Yes	$40,000	EA	$40,000
Compton Ave	Metro Blue Line	1,250	30		$635	LF	$793,750
Metro Blue Line		80		HAWK	$104,400	EA	$104,400
Total - LF		**19,120**	**LF**		**$638**	**LF**	**$12,205,805**
Total- mi		**3.6**	**mi**	**$3,370,641**	**mi**		

Table F-11 Annual O&M Cost

Type of Improvement	Length	Unit Cost	Unit	Total Cost
Bicycle Path	3.6 mi	$15,000	mi	$54,318
Bicycle Lane/Route	0.0 mi	$5,000	mi	$0
Total	**3.6 mi**	**$15,000**	**mi**	**$54,318**

Table F-12 Cost Detail Sheet - East Segment, Malabar Option, April 28, 2014 (Capital Costs)

Start Point	End Point	Length (ft)	ROW Width (ft)	Signal	Unit Cost	Unit	Total Cost
Metro Blue Line	Holmes Ave	620	60		$647	LF	$401,140
Holmes Ave		100		Yes	$40,000	EA	$40,000
Holmes Ave	Alameda St	880	60		$647	LF	$569,360
Alameda St		190		Yes	$40,000	EA	$80,000
Alameda St	2nd St	850	30		$635	LF	$539,750
2nd St		70		No	$17,200	EA	$17,200
2nd St	Santa Fe Ave	1,240	30		$635	LF	$787,400
Santa Fe Ave		90		HAWK	$104,400	EA	$104,400
Santa Fe Ave	58th St	50	30		$804	LF	$40,200
58th St		90		No	$17,200	EA	$17,200
58th St	57th St	380	30		$804	LF	$305,520
57th St		75		No	$17,200	EA	$17,200
57th St	56th St	300	30		$804	LF	$241,200
56th St		70		No	$17,200	EA	$17,200
56th St	55th St	280	30		$804	LF	$225,120
55th St		65		No	$17,200	EA	$17,200
55th St	54th St	270	30		$804	LF	$217,080
54th St		65		No	$17,200	EA	$17,200
54th St	53rd St	270	30		$804	LF	$217,080
53rd St		65		No	$17,200	EA	$17,200
53rd St	52nd St	270	30		$804	LF	$217,080
52nd St		65		No	$17,200	EA	$17,200
52nd St	Fruitland Ave	150	30		$804	LF	$120,600
Fruitland Ave		60		No	$17,200	EA	$17,200
Fruitland Ave	49th	St	960	20	$564	LF	$541,440
49th St		65		No	$17,200	EA	$17,200
49th St	Pacific Blvd	1,680	20		$564	LF	$947,520
Pacific Blvd		125		HAWK	$104,400	EA	$104,400
Pacific Blvd	Vernon Ave	400	20		$564	LF	$225,600
Vernon Ave		60		HAWK	$104,400	EA	$104,400
Vernon Ave	38th St	1,190	60		$816	LF	$971,040
37th/38th St		140		HAWK	$104,400	EA	$104,400

Table F-13- Cost Detail Sheet - East Segment, Malabar Option, April 28, 2014 (Capital Costs) (continued)

Start Point	End Point	Length (ft)	ROW Width (ft)	Signal	Unit Cost	Unit	Total Cost
37th St	28th St	1,020	60		$816	LF	$832,320
28th St		65		Yes	$40,000	EA	$80,000
28thSt	27thSt	280	60		$816	LF	$228,480
27th St		65		Yes	$40,000	EA	$80,000
27th St	26th St	480	60		$816	LF	$391,680
26th St		65		HAWK	$104,400	EA	$104,400
26th St	25th St	320	60		$816	LF	$261,120
25th St		65		Yes	$40,000	EA	$80,000
25th St	Harriet St	630	60		$816	LF	$514,080
Harriet St		40		Yes	$40,000	EA	$80,000
Harriet St	LA River	680	60		$816	LF	$554,880
Total - LF		14,895	LF		$704	LF	$10,483,690
Total - mi		2.8	mi		$3,716,273	mi	

Table F-14 Annual O&M Cost

Type of Improvement	Length	Unit Cost	Unit	Total Cost
Bicycle Path	2.8 mi	$15,000	mi	$42,315
Bicycle Lane/Route	0.0 mi	$5,000	mi	$0
Total	**2.8 mi**	**$15,000**	**mi**	**$42,315**

Table F-15 Cost Detail Sheet - East Segment, Utility Corridor Option, April 28, 2014 (Capital Costs)

Start Point	End Point	Length (ft)	ROW Width (ft)	Signal	Unit Cost	Unit	Total Cost
Metro Blue Line	Holmes Ave	620	60		$647	LF	$401,140
Holmes Ave		100		Yes	$40,000	EA	$40,000
Holmes Ave	Alameda St	880	60		$647	LF	$569,360
Alameda St		190		Yes	$40,000	EA	$80,000
Alameda St	2nd St	850	30		$635	LF	$539,750
2nd St		70		No	$17,200	EA	$17,200
2nd St	Albany St	570	30		$635	LF	$361,950
Albany St	Utility ROW	7,660	Bike Blvd + Sidewalk		$66	LF	$506,165
Slauson Ave	RR Tracks	910	180		$679	LF	$617,890
RR Tracks		25		HAWK	$104,400	EA	$104,400
RR Tracks	Fruitland Ave	1,700	180		$679	LF	$1,154,300
Fruitland Ave		60		HAWK	$104,400	EA	$104,400
Fruitland Ave	50th St	605	180		$679	LF	$410,795
50th St		50		No	$17,200	EA	$17,200

Table F-15 Cost Detail Sheet - East Segment, Utility Corridor Option, April 28, 2014 (Capital Costs) (continued)

Start Point	End Point	Length (ft)	ROW Width (ft)	Signal	Unit Cost	Unit	Total Cost
50th St	Leonis Blvd	595	180		$679	LF	$404,005
Leonis Blvd		80		HAWK	$104,400	EA	$104,400
Leonis Blvd	Packers Ave	715	180		$679	LF	$485,485
Packers Ave		60		No	$17,200	EA	$17,200
Packers Ave	44th St	480	180		$679	LF	$325,920
44th St		50		No	$17,200	EA	$17,200
44th St	RR Tracks	290	180		$679	LF	$196,910
RR Tracks		55		HAWK	$104,400	EA	$104,400
RR Tracks	Vernon Ave	260	180		$679	LF	$176,540
Vernon Ave		60		HAWK	$104,400	EA	$104,400
Vernon Ave	RR Tracks	225	180		$679	LF	$152,775
RR Tracks		40		HAWK	$104,400	EA	$104,400
RR Tracks	LA River	30	180		$679	LF	$20,370
Total - LF		**17,230**	**LF**		**$414**	**LF**	**$7,138,555**
Total - mi		**3.3**	**mi**		**$2,187,555**	**mi**	

Table F-16- Annual O&M Cost

Type of Improvement	Length	Unit Cost	Unit	Total Cost
Bicycle Path	1.8 mi	$15,000	mi	$27,188
Bicycle Lane/Route	1.5 mi	$5,000	mi	$7,254
Total	**3.3 mi**	**$10,554**	**mi**	**$34,441**

Table F-17 Cost Detail Sheet - East Segment, Slauson Ave Option, April 28, 2014 (Capital Costs)

Start Point	End Point	Length (ft)	ROW Width (ft)	Signal	Unit Cost	Unit	Total Cost
Metro Blue Line	Holmes Ave	620	60	HAWK	$647	LF	$401,140
Holmes Ave	Alameda St	880	60		$647	LF	$569,360
Alameda St		190		Yes	$40,000	EA	$80,000
Alameda St	2nd St	850	30		$635	LF	$539,750
2nd St		70		No	$17,200	EA	$17,200
2nd St	Albany St	570	30		$635	LF	$361,950
Albany St	LA River	18,310	Bike Blvd + Sidewalk		$66	LF	$1,209,906
Total - LF		21,590	LF		$149	LF	$3,219,306
Total - mi		4.1	mi		$787,306 mi	EA	$17,200
44th St	RR Tracks	290	180		$679	LF	$196,910

Table F-18 Annual O&M Cost

Type of Improvement	Length	Unit Cost	Unit	Total Cost
Bicycle Path	1.8 mi	$15,000	mi	$27,188
Bicycle Lane/Route	1.5 mi	$5,000	mi	$7,254
Total	**3.3 mi**	**$10,554**	**mi**	**$34,441**

Table F-19 Cost Detail Sheet - East Segment, Randolph St. Option, April 28, 2014 (Capital Costs)

Start Point	End Point	Length (ft)	ROW Width (ft)	Signal	Unit Cost	Unit	Total Cost
Metro Blue Line	Holmes Ave	990	180		$679	LF	$672,210
Holmes Ave		100		Yes	$40,000	EA	$40,000
Holmes Ave	Wilmington Ave	590	180		$679	LF	$400,610
Wilmington Ave		55		Yes	$40,000	EA	$40,000
Wilmington Ave	Alameda St	440	180		$679	LF	$298,760
Alameda St		190		Yes	$40,000	EA	$80,000
Alameda St	Regent St	600	180		$679	LF	$407,400
Regent St		55		Yes	$40,000	EA	$40,000
Regent St	Albany St	640	180		$679	LF	$434,560
Albany St		50		Yes	$40,000	EA	$40,000
Albany St	Santa Fe Ave	620	180		$679	LF	$420,980
Santa Fe Ave		100		Yes	$40,000	EA	$40,000
Santa Fe Ave	Malabar St	690	180		$679	LF	$468,510
Malabar St		70		Yes	$40,000	EA	$40,000
Malabar St	Rugby Ave	320	180		$679	LF	$217,280
Rugby Ave		65		Yes	$40,000	EA	$40,000
Rugby Ave	Pacific Blvd	310	180		$679	LF	$210,490
Pacific Blvd		130		Yes	$40,000	EA	$40,000
Pacific Blvd	Rita Ave	320	180		$679	LF	$217,280
Rita Ave		65		Yes	$40,000	EA	$40,000
Rita Ave	Seville Ave	320	180		$679	LF	$217,280
Seville Ave		65		Yes	$40,000	EA	$40,000
Seville Ave	Miles Ave	970	180		$679	LF	$658,630
Miles Ave		100		Yes	$40,000	EA	$40,000
Miles Ave	Arbutus Ave	1,270	180		$679	LF	$862,330
Arbutus Ave		50		Yes	$40,000	EA	$40,000
Arbutus Ave	Randolph Ave	370	180		$679	LF	$251,230
Randolph Ave		70		Yes	$40,000	EA	$40,000
Randolph Ave	State St	150	180		$679	LF	$101,850
State St		85		Yes	$40,000	EA	$40,000
State St	San Pedro Sub.	2,540	180		$679	LF	$1,724,660

Table F-19- Cost Detail Sheet - East Segment, Randolph St. Option, April 28, 2014 (Capital Costs) (continued)

Start Point	End Point	Length (ft)	ROW Width (ft)	Signal	Unit Cost	Unit	Total Cost
San Pedro Sub.		30		Yes	$40,000	EA	$40,000
San Pedro Sub.	Maywood Ave	440	180		$679	LF	$298,760
Maywood Ave		55		Yes	$40,000	EA	$40,000
Maywood Ave	Carmelita Ave	1,530	180		$679	LF	$1,038,870
Carmelita Ave		50		Yes	$40,000	EA	$40,000
Carmelita Ave	Gifford Ave	1,280	180		$679	LF	$869,120
Gifford Ave		55		Yes	$40,000	EA	$40,000
Gifford Ave	Pine Ave	1,330	180		$679	LF	$903,070
Pine Ave		55		Yes	$40,000	EA	$40,000
Pine Ave	Atlantic Blvd	600	180		$679	LF	$407,400
Atlantic Blvd		100		Yes	$40,000	EA	$40,000
Atlantic Blvd	King Ave	580	180		$679	LF	$393,820
King Ave		55		Yes	$40,000	EA	$40,000
King Ave	Heliotrope Ave	1,350	180		$679	LF	$916,650
Heliotrope Ave		55		Yes	$40,000	EA	$40,000
Heliotrope Ave	Alamo Ave	1,350	180		$679	LF	$916,650
Alamo Ave		55		Yes	$40,000	EA	$40,000
Alamo Ave	LA River	1,560	180		$679	LF	$1,059,240
Total- LF		22,920	LF		$670	LF	$15,367,640
Total - mi		4.3	mi		$3,540,189	mi	

Table F-20 Annual O&M Cost

Type of Improvement	Length	Unit Cost	Unit	Total Cost
Bicycle Path	4.3 mi	$15,000	mi	$65,114
Bicycle Lane/Route	0.0 mi	$5,000	mi	$0
Total	**4.3 mi**	**$15,000**	**mi**	**$65,114**

APPENDIX G
ADDITIONAL POTENTIAL FUNDING OPPORTUNITIES

Grant Source	Remarks
Federal	
Bus Livability Initiative	Can be used for bicycle and pedestrian support facilities, such as bicycle parking, bike racks on buses, pedestrian amenities, and educational materials
CDC – Partnerships to Improve Community Health	This is a 3-year, $50 million/year initiative to improve health and reduce the burden of chronic diseases through evidence- and practice-based strategies to create or strengthen healthy environments that make it easier for people to make healthy choices and take charge of their health. An estimated 30 to 40 cooperative agreements will be awarded to governmental agencies and non-governmental organizations to reduce tobacco use and exposure, improve nutrition, increase physical activity, and improve access to chronic disease prevention, risk reduction, and management opportunities. Projects will serve three types of geographic areas: large cities and urban counties, small cities and counties, and American Indian tribes and Alaska Native villages
CDC – Racial and Ethnic Approaches to Community Health (REACH)	This 3-year, $35 million/year project will support policy, system, and environmental improvements in those communities to reduce tobacco use and exposure, improve nutrition, **increase physical activity**, and improve access to chronic disease prevention, risk reduction, and management opportunities. An estimated 15 to 20 organizations will be funded for basic implementation activities to strengthen their infrastructure, activate coalitions and partners, and prepare and implement a focused community action plan. An additional 30 to 40 organizations will receive comprehensive awards to support immediate implementation of activities addressing an expanded scope of work to improve health and reduce health disparities.
CDC – State and Local Public Health Actions to Prevent Obesity, Diabetes and Heart Disease	This 4-year, $70 million/year program intensifies work in 18 to 22 state and large city health departments to prevent obesity, diabetes, heart disease, and stroke and reduce health disparities among adults through a combination of community and health system interventions. States will sub-award half of their funds to support implementation activities in 4-8 communities in their states. Community strategies will build support for lifestyle change, particularly for those at high risk, to support diabetes and heart disease and stroke prevention efforts.
Community Development Block Grants	Available for low-income neighborhoods to improve land use and transportation infrastructure. Can be used for accessibility improvements citywide.
Federal Transit Act	Typical funded projects have included bike lockers at transit stations and bike parking near major bus stops. Guideline for the use of 10% of the annual CMAQ funds starting in fiscal year 2012-2013 for bike/pedestrian projects through a competitive call to local agencies.
Land and Water Conservation Fund	Federal fund provides matching grants to state and local governments for the acquisition and development of land for outdoor recreation use. Lands acquired through program must be retained in perpetuity for public recreational use. Individual project awards are not available. Recent call deadline was February 2014.
MAP-21 – Surface Transportation Program	A wide variety of bicycle and pedestrian improvements are eligible, including on-street bicycle facilities, off-street trails, sidewalks, crosswalks, bicycle and pedestrian signals, parking, and other ancillary facilities.
MAP-21 – Highway Safety Improvement Program (HSIP)	Projects must address a safety issue and may include education and enforcement programs. This program includes the Railroad-Highway Crossings and High Risk Rural Roads programs.

Grant Source	Remarks
MAP-21 – Pilot Transit-Oriented Development Planning Program	Provides funding to advance planning efforts that seek to increase access to transit hubs for pedestrian and bicycle traffic.
MAP-21 – Congestion Mitigation and Air Quality Improvement Program (CMAQ)	The amount of CMAQ funds depends on the state's population share and on the degree of air pollution. Recent revisions were made to bring CMAQ in line with the new MAP-21 legislation. There is a broader emphasis on projects that are proven to reduce PM-2.5. Eligible projects include: "Constructing bicycle and pedestrian facilities (paths, bike racks, support facilities, etc.) that are not exclusively recreational and reduce vehicle trips; (and) non-construction outreach related to safe bicycle use." Studies that are part of the project development pipeline (e.g., preliminary engineering) are eligible for funding. "An assessment of the project's expected emission reduction benefits should be completed prior to project selection."
National Center for Environmental Health – Health Impact Assessment for Improved Community Design	The grant program aims to increase the capacity of public health departments to include health considerations in transportation and land use planning decisions. The grant will provide an average of $145,000 per year for 3 years to 6 awardees. The Letter of Intent Deadline for 2014 is March 28, 2014. It appears that the grant is available every 3 years.
National Endowment for the Arts – Art Works Grants	Grants generally will range from $10,000 to $100,000; The Art Works category provides design support for projects that address the following outcomes: engagement, innovation, and livability.
National Endowment for the Arts – Our Town Grants	NEA provides a limited number of planning and design grants, ranging from $25,000 to $200,000, for creative and innovative projects in which communities improve their quality of life, encourage greater creative activity, foster stronger community identity and a sense of place, and revitalize economic development
New Opportunities for Bicycle and Pedestrian Infrastructure Financing Act	A proposed bill in Congress to set aside 1% of TIFIA's $1 billion for bicycle and pedestrian infrastructure projects, such as the conversion of abandoned rail corridors for trails, bicycle signals, and path lighting. For these projects, TIFIA's minimum project cost would be $2 million. Eligible costs include: planning & feasibility studies, construction, and land acquisition. The bill reserves 25% of project funding for low-income communities.
Rivers, Trails, and Conservation Assistance Program	RTCA staff provides technical assistance to communities so they can conserve rivers, preserve open space, and develop trails and greenways.
Transportation Investments Generating Economic Recovery (TIGER) Program	Can be used for innovative, multimodal and multi-jurisdictional transportation projects that promise significant economic and environmental benefits to an entire metropolitan area, a region, or the nation. These include bicycle and pedestrian projects. Project minimum is $10 million.
U.S. Environmental Protection Agency – Brownfields Program	Assessment grants provide funding for a grant recipient to inventory, characterize, assess, and conduct planning and community involvement related to brownfields sites. Revolving Loan Fund (RLF) grants provide funding for a grant recipient to capitalize a revolving loan fund and to provide sub-grants to carry out cleanup activities at brownfield sites. Cleanup grants provide funding for a grant recipient to carry out cleanup activities at brownfield sites.

Grant Source	Remarks
State	
California Active Transportation Program (ATP)	Funds construction, planning, and design of facilities for pedestrians, bicyclists, and other non-motorized forms of transportation. Draft program guidelines are currently being revised and are expected to be finalized by the end of March 2014.
Clean Water State Revolving Fund Program	The CWSRF program offers low interest financing agreements for water quality projects, which can include "implementation of nonpoint source projects or program." Annually, the program disburses between $200 and $300 million. Stormwater management components of the Rail to River project may be eligible for this funding source. Applications are accepted on a continuous basis.
Climate Ready Grant Program	Climate Ready grants are available for projects located along the coast and coastal watersheds. Multi-use trails are eligible. $1.5 million total; $50,000 minimum grant; $200,000 maximum. Managed by California Coastal Conservancy. More information is available at: http://scc.ca.gov/2013/06/21/announcing-climate-ready-grant-opportunities/
Community Based Transportation Planning Grants	Eligible projects that exemplify livable community concepts including enhancing bicycle and pedestrian access. Administered by Caltrans. $3 million, each project not to exceed $300,000.
Environmental Enhancement and Mitigation Program (EEMP)	Funds may be used for land acquisition. Individual grants limited to $350,000.
Environmental Justice: Context-Sensitive Planning	Funds projects that foster sustainable economies, encourage transit-oriented and mixed use development, and expand transportation choices, including walking and biking. Projects can be design and education, as well as planning. Administered by Caltrans. $3 million, each grant not to exceed $250,000.
Habitat Conservation Fund	Provides funds to local entities to protect threatened species, to address wildlife corridors, to create trails, and to provide for nature interpretation programs which bring urban residents into park and wildlife areas. $2 million available annually. Application deadline is typically in October.
Office of Traffic Safety (OTS) Grant Program	Funds safety improvements to existing facilities, safety promotions including bicycle helmet giveaways and studies to improve traffic safety. The grant cycle typically begins with a Request for Proposals in October, which are due the following January. In 2009, OTS awarded $82 million to 203 agencies.
Petroleum Violation Escrow Account (PVEA)	Funds programs based on public transportation, computerized bus routing and ride sharing, home weatherization, energy assistance and building energy audits, highway and bridge maintenance, and reducing airport user fees.
Public Access Program	Funds the protection and development of public access areas in support of wildlife-oriented uses, including helping to fund construction of ADA trails.
Recreational Trails Program	Administered in California as part of the ATP. $5.8 million guaranteed set-aside. Managed by State Parks.
Safe Routes to School	The federal SRTS funds will be rolled into the State's ATP to streamline grant allocation. $24 million combined in ATP for state and federal Safe Routes to School projects. SR2S is primarily a construction program to enhance safety of pedestrian and bicycle facilities near schools. A small percentage of funds can be used for programmatic improvements. Improvements can be made to target students of all grade levels.

Grant Source	Remarks
State Gas Tax (local share)	Local jurisdictions must apply. Allocated by State Auditor/Controller. No match required. Can fund construction of commuter bikeways and safety/education programs. Major Projects (>$300,000).
Sustainable Communities Planning Grant and Incentives Program	Funded by Prop 84 bond funds, this grant program funds the development and implementation of plans that lead to significant reductions in greenhouse gas emissions, such as rehabilitation of existing infrastructure and the enhancement of recreational resources. The minimum grant award is $50,000; the maximum award is $500,000, unless the application is a joint proposal, in which case the maximum award is $1 million. The 10% local match requirement is waived for a proposal that qualifies for the Environmental Justice set-aside.
Watershed Protection Program (Proposition 13)	Grants to municipalities, local agencies, or nonprofit organizations to develop local watershed management plans (maximum $200,000 per local watershed plan) and/or implement projects (maximum $5 million per project) consistent with watershed plans. Sixty percent of the funds will be allocated to projects in the Counties of Los Angeles, Orange, Riverside, San Diego, San Bernardino, and Ventura. Administered by the Division of Financial Assistance.
Regional	
Clean Air Fund (AB 434/2766 – Vehicle Registration Fee Surcharge)	Administered by SCAQMD. Local jurisdictions and transit agencies can apply. Funds can be used for projects that encourage biking, walking, and/or use of public transit. For bicycle-related projects, eligible uses include: designing, developing and/or installing bikeways or establishing new bicycle corridors; making bicycle facility enhancements/improvements by installing bicycle lockers, bus bike racks; providing assistance with bike loan programs (motorized and standard) for police officers, community members and the general public. Matching requirement: 10-15%.
Healthy Eating Active Living grant program (LA County Dept. of Public Health)	Cities or non-profit organizations in LA County are eligible for up to $125,000 per year for approximately three years. They will consider plans or policies that create an environment where it is convenient, safe and easy for community members to eat healthfully and participate in physical activity every day.
Metro Call for Projects	This annual Call is a competitive process that distributes discretionary capital transportation funds to regionally significant projects.
Metro ExpressLanes Net Toll Revenues	40% of net toll revenues will be allocated each year for "System Connectivity/ Active Transportation" projects within 3 miles of the I-110 and I-10 corridors where the ExpressLanes demonstration is in effect. This allocation is estimated to be $4.2-5.2 million for the period ending February 2014. Metro will issue a Call for Projects to access these funds sometime in early 2014.
Metro Transit-Oriented Development (TOD) Planning Grants	$5 million fund to spur the adoption of transit-supportive land use and other regulatory plans around station areas in order to increase access to and utilization of public transit. Eligibility is for LA County jurisdictions with land use authority within one-half mile of existing, planned, or proposed transit stations. Application package will be available in late April 2014, due in mid-July 2014.
SCAG Sustainability Program	SCAG provides assistance to member agencies for integrated land use and transportation planning. More information is available at: http://sustain.scag.ca.gov/Pages/Grants%20and%20Local%20Assistance/GrantsLocalAssistance.aspx

Grant Source	Remarks
Southern California Edison Rule 20A Funds	Rule 20A funds are allocated by Southern California Edison by County Supervisorial District to help local governments "underground" utility lines for aesthetic purposes. For more information: https://www.sce.com/wps/portal/home/regulatory/distribution-manuals/underground-structures/!ut/p/b0/04
TDA Article 3 funds	Administered by SCAG. Provides grants to states and local agencies, individuals and nonprofit organizations for projects that incorporate urban design, historic preservation, planning, architecture, landscape architecture and other community improvement activities, including greenway development. Grants to organizations and agencies must be matched by a 50% local contribution. Agencies can receive up to $50,000.
Private	
Community Action for a Renewed Environment (CARE)	EPA grant program to help community organize and take action to reduce toxic pollution in its local environment.
Health Foundations	Focus pedestrian improvements for an obesity prevention strategy. Examples include California Wellness Foundation, Kaiser, and the California Endowment.
PeopleForBikes	PeopleForBikes (formerly Bikes Belong) provides grants for up to $10,000 with a 50% match that recipients may use towards the engineering, design, and construction of bike paths, lanes, bridges, and end-of-trip facilities, as well as programs.
Rails to Trails Conservancy	Provides technical assistance for converting abandoned rail corridors to use as multi-use trails.
Surdna Foundation	The Surdna Foundation makes grants to nonprofit organizations in the areas of environment, community revitalization, effective citizenry, the arts, and the nonprofit sector.