





Multimodal Mobility:

Linking the Westside Cities to the Future Venice/Robertson Light Rail Station





WESTSIDE CITIES

- · BEVERLY HILLS
- · CULVER CITY
- · SANTA MONICA
- WEST HOLLYWOOD

Federal Transit Administration – under provisions of the Transportation Equity Act of the 21st Century. The preparation of this was a collaborative work by the Westside Cit Beverly Hills, Culver City, Santa Monica, and West Hollywood. The contents of this report reflect the views of the author, who is responsible for the facts and accuracy of the presented herein. The contents do not necessarily reflect the official views or policies of SCAG or U.S.DOT or the Westside Cites. This report does not constitute a standard contents.		Federal Transit Administration – under provisions of the Transportation Equity Act of the 21st Century. The preparation of this was a collaborative work by the Westside Cit. Beverly Hills, Culver City, Santa Monica, and West Hollywood. The contents of this report reflect the views of the author, who is responsible for the facts and accuracy of the presented herein. The contents do not necessarily reflect the official views or policies of SCAG or U.S.DOT or the Westside Cites. This report does not constitute a standard	Federal Transit Administration – under provisions of the Transportation Equity Act of the 21st Century. The preparation of this was a collaborative work by the Westside Cit. Beverly Hills, Culver City, Santa Monica, and West Hollywood. The contents of this report reflect the views of the author, who is responsible for the facts and accuracy of the presented herein. The contents do not necessarily reflect the official views or policies of SCAG or U.S.DOT or the Westside Cites. This report does not constitute a standard	Federal Transit Administration – under provisions of the Transportation Equity Act of the 21st Century. The preparation of this was a collaborative work by the Westside Cit. Beverly Hills, Culver City, Santa Monica, and West Hollywood. The contents of this report reflect the views of the author, who is responsible for the facts and accuracy of the presented herein. The contents do not necessarily reflect the official views or policies of SCAG or U.S.DOT or the Westside Cites. This report does not constitute a standard	Federal Transit Administration – under provisions of the Transportation Equity Act of the 21st Century. The preparation of this was a collaborative work by the Westside Cit Beverly Hills, Culver City, Santa Monica, and West Hollywood. The contents of this report reflect the views of the author, who is responsible for the facts and accuracy of the presented herein. The contents do not necessarily reflect the official views or policies of SCAG or U.S.DOT or the Westside Cites. This report does not constitute a standard	Federal Transit Administration – under provisions of the Transportation Equity Act of the 21st Century. The preparation of this was a collaborative work by the Westside Cit. Beverly Hills, Culver City, Santa Monica, and West Hollywood. The contents of this report reflect the views of the author, who is responsible for the facts and accuracy of the presented herein. The contents do not necessarily reflect the official views or policies of SCAG or U.S.DOT or the Westside Cites. This report does not constitute a standard	
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What is the purpose of this document?

This document aims to identify multimodal mobility interface opportunities for the Westside Cites in the area around the proposed Expo light rail station at Venice/Robertson and the I-10/Robertson interchange. The document therefore seeks to:

- Explore and expand a recommendation in the adopted Westside Mobility Study (October 2003)
- Identify services and solutions for improving multimodal access between the Expo light rail and a range of destinations around the Westside and Southern California
- Highlight features that can enhance linkages between different modes of transportation that converge at the Venice/Robertson station

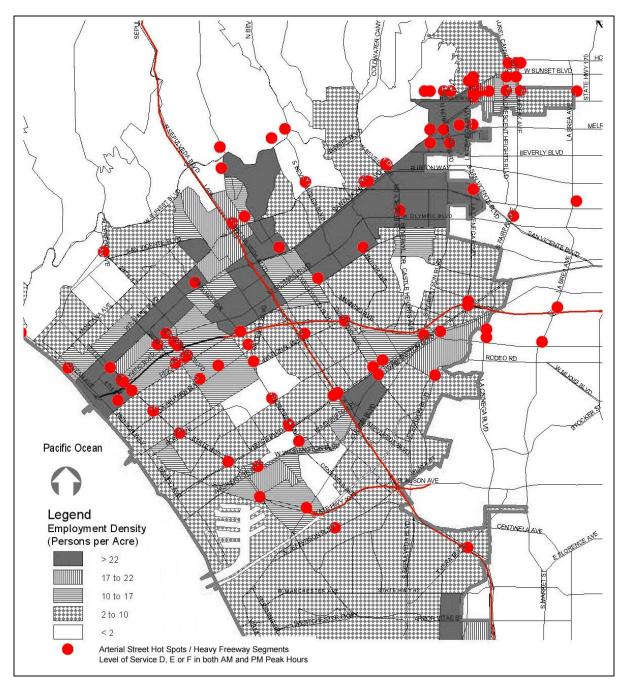
- Assess street functions and conditions to identify solutions to address limited street capacity or public right-of-way
- Identify options for encouraging land use development that will support multimodal mobility at the new transit hub.

How can this document be used?

Different stakeholders may use this document for a variety of purposes:

- Elected officials and decisionmakers can understand issues surrounding the new Expo light rail station at Venice/Robertson and advocate for solutions that enhance multimodal mobility
- Transit agencies can focus future improvements on actions that will enhance overall multimodal mobility in the area
- City and transportation planners can prioritize project efforts and plan developments that will enhance multimodal mobility

- The recommendations can inform the planning process for possible geometric changes to I-10/Robertson interchanges and the preliminary engineering and station planning of the future Expo light rail station
- Community members can become more informed about multimodal mobility and available options for the Venice/Robertson area.



Multimodal mobility is a crucial issue in the Westside Cities due to high population, employment densities and limited road space. The above figure shows numerous all-day congestion hot spots superimposed over some of the highest employment densities in Southern California.

Source: Westside Mobility Study Final Report, Kaku Associates, October 2003.

What is multimodal mobility?

Multimodal mobility involves moving people and goods by two or more modes of transportation. It considers how all modes of transportation interface to allow people to access employment opportunities, goods, services and places of recreation. It is about making non-automotive modes more attractive and effective and giving people a choice in how they get from place to place.

Improving multimodal mobility involves:

- Developing transportation networks such as sidewalks, bike ways and rail lines
- Maximizing transit efficiency to facilitate the movement of people
- Balancing the use of public right-of-way to accommodate multiple modes
- Linking facilities and coordinating services between buses, trains, cars, bikes and pedestrians.

Why is it important?

As cities grow and roads become more congested, multimodal mobility is crucial to

Rail Transit

Saela Metro Stue Line

Metro Green Line

Metro Green Line

Metro Orange Line

Metro Future Exposition Light Rail Line

Future Gold Line Foothill Extension

Metrolink and Stations (Commuter Rail)

The Westside Cities are chronically underserved by regional rail transit services, especially in light of current and future housing and employment demand.

maximize system capacity, regional efficiency and social equity. Where traffic conditions are at or near capacity, fitting any more cars on the road network without causing breakdown conditions in traffic flow is impossible.

If people can reach some of their destinations by walking, biking or using convenient public transit for at least a portion of their trip, increased travel demand mav accommodated without worsening traffic impacts or destroying areas to widen roads. It takes less road space to increase mobility by high occupancy vehicles than by single occupant vehicles. When people use multimodal transportation, less parking is needed at their destinations. Less land dedicated to roadways and parking saves money and allows for better regional economic performance.

On an individual level, the cost of car ownership and maintenance consumes a high percentage of disposable income. Many cannot afford to own a vehicle, while others are unable to drive due to age or disability. Reliable multimodal services are therefore essential for equitable access to transportation in the community.

Why is it important to the Westside?

Multimodal mobility is important to the Westside Cities of Beverly Hills, Culver City, Santa Monica and West Hollywood due to their disproportionate share of people, jobs and traffic; lack of space for road expansion; and need for high-capacity public transit facilities, as compared to other regions of Southern California.

The Westside Cities and West Los Angeles have some of the highest population and employment densities in Southern California and are projected to grow further over the next 20 years. In aggregate, the four cities are 24 times denser the rest of the Southern California region, with job/housing ratios that are well above the regional average.

The sub-region is chronically underserved by high-capacity transit, particularly rail transit. There is no rail access to the Westside Cities at all and bus services are severely degraded by widespread congestion. Driving and biking conditions are also poor due to clogged intersections and roadways throughout the Westside Cities.

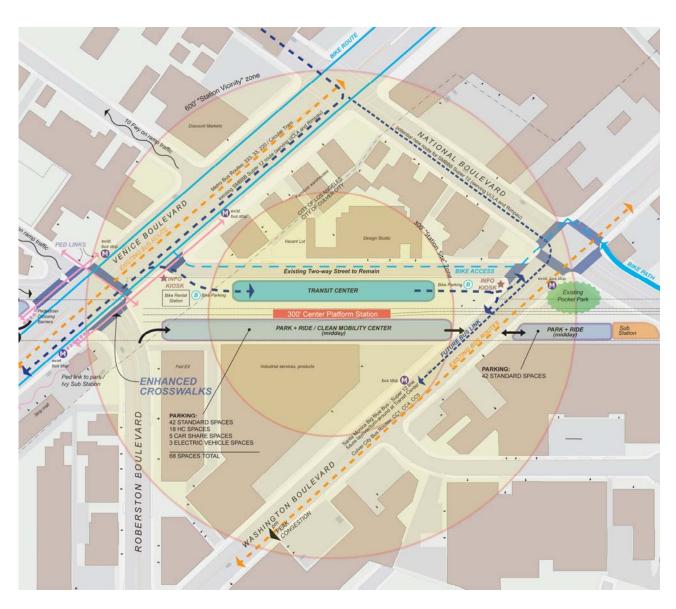
Given the area's development, roadways are already completely built out and cannot be expanded to accommodate more traffic.

Why is it important to the Westside right now?

Heavy traffic, area wide congestion and a lack of high-capacity transit services indicate that improved multimodal mobility is overdue on the Westside. With rapid anticipated growth and several key projects being planned, now is the time to consider how to improve multimodal mobility in the area:

- The Exposition light rail line between Los Angeles and Culver City with an interim end-of-the line station at Venice and Robertson Boulevards is in the planning process. Because this will be the first and only rail station to serve one of the Westside Cities, it is important to maximize the potential for multimodal connections to all of the Westside Cities. To ensure that opportunities are not lost in the project's technical analyses, planning for multimodal access should occur around all Expostations and particularly at this first station for a Westside City.
- The Westside Cities adopted the Westside Mobility Study, which includes the Robertson/I-10 interchange project as a first priority.

- The Culver City Redevelopment Agency is developing a project in conjunction with a development firm on land adjacent to the proposed Venice/Robertson station. This project is being designed as a transit oriented development (TOD) to complement the future light rail station and enhance multimodal mobility in the area.
- Metro is identifying and planning potential bike transit hubs throughout the Westside, including the Venice/Robertson station.
- The recommended improvements for the Venice/Robertson station will remain functional even when the Exposition light rail line is extended to Santa Monica.



The Exposition Light Rail is proposed to have an interim terminus station at Venice/Robertson.



Poor intersection and urban design, such as at Robertson and National Boulevards, makes pedestrian access difficult, time-consuming and unpleasant. (Photo location: freeway underpass at the Robertson/National intersection)

What are existing barriers to multimodalism at Expo?

Effective multimodal mobility addresses factors that otherwise degrade transportation performance and interaction.

Around the Expo light rail line one such factor is the I-10 freeway, which creates a physical barrier between communities on either side and limits the flow of pedestrians and bicyclists from one side to the other. In the half-mile radius area around the proposed Venice/Robertson interim terminus station, buses and non-motorized transportation users are channeled into just three freeway undercrossings at Robertson/National Boulevards, Cattaraugus Avenue, and Bagley Heavy traffic and dark, unpleasant Avenue. at these crossings further conditions discourage pedestrian and bicycle movement from one side to the other. These conditions highlight the need for better multimodal access below the I-10 freeway.

A second factor to address is the inhospitable pedestrian environment created by the wide boulevards and fast, heavy vehicular traffic. Currently the area lacks adequately designed pedestrian facilities. For example, crosswalks

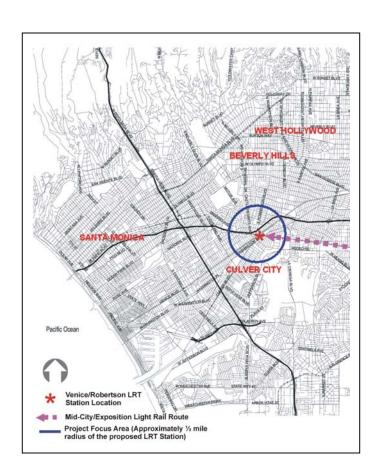


Lack of bicycle facility maintenance discourages novice cyclists, reduces driver awareness of cyclists, and can result in parked cars encroaching on the bicycle right-of-way. (Photo location: bike lane on Venice Boulevard)

on one or more approaches are absent at many signalized intersections in the immediate vicinity. This forces people to spend more time crossing the street, which increases their exposure to traffic safety hazards and makes walking less desirable. Also, a number of intersections need improvements to protect pedestrians from vehicles making right-turn movements.

Comprehensive bike facilities such as bicycle ways, lockers and racks are encouraged around the Venice/Robertson station. Key bicycle routes to the proposed Venice/Robertson station require continuous and well-planned network facilities that would improve multimodal connections. Additionally, direct and safe north-south routes to the station are not currently present.

Traffic congestion also inhibits multimodal mobility throughout the Westside Cities and could be addressed in the area around the Venice/Robertson station. Many intersections and road or freeway segments have levels of service (LOS) D, E or F during the morning and/or evening peak periods, which reflect unacceptable conditions throughout the subregion (LOS F being a worst case scenario on a scale of A-F).



The Expo light rail line provides great opportunities for enhancing multi-modal mobility and transit supportive development in the Westside.

Heavy traffic delays people not only in private cars, but also in buses and shuttles. Using quality of service (QOS) standards, all bus routes in the vicinity of the Venice/Robertson station were identified as having lengthy headways and poor on-time performances. In addition, most routes have unacceptable to very poor average travel speeds. Severe traffic congestion in the Westside Cities and throughout Los Angeles degrades bus service reliability and travel speeds in the vicinity of the Venice/Robertson station.



Throughout the Westside Cities traffic congestion and signal delays at intersections degrades transit service reliability and speed.

What are multimodal mobility solutions at Expo and across the Westside?

Much can be done to improve multimodal mobility to the Expo light rail line and across the Westside Cities.

Some strategies identified by cities and communities on the Westside include improvements in pedestrian, bicycle and bus access in and around the station area, a grade separated alignment at the Venice/Robertson station, transit-supportive development and other amenities within the station area(s).

These strategies are categorized into six functional groups as implementation guidelines for multimodal mobility around the proposed Expo light rail line and across the Westside Cities. Group I strategies call for treatments to improve pedestrian safety and access around the station; Group II addresses bicycle access and facilities; Group III identifies transit service extensions to the station; Group IV focuses on provision of a Clean Mobility Center with better amenities for all users and visitors of the proposed Venice/Robertson station; Group V lists potential geometrical changes to the proposed light rail station and the I-

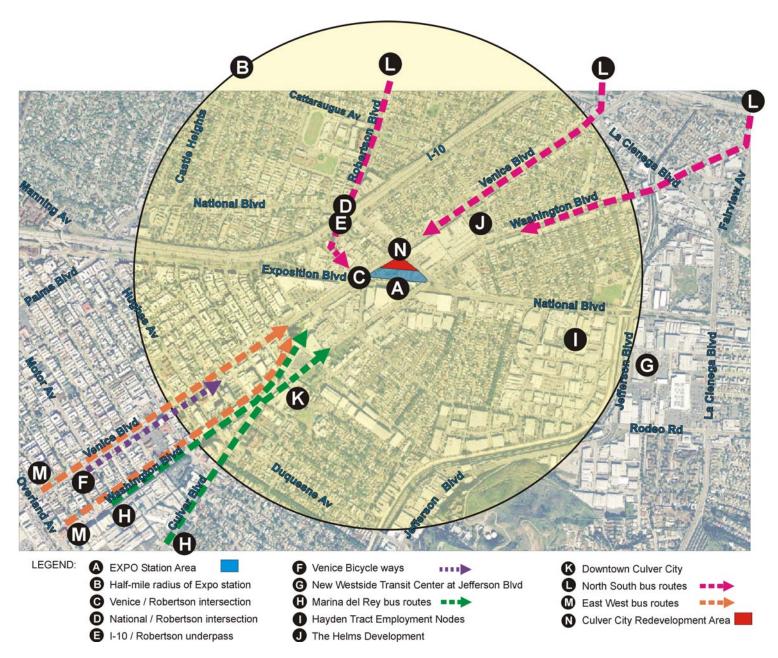
10/Robertson interchange. Finally, Group VI lists other multimodal strategies that will further encourage alternative transportation modes in the Westside Cities.

I. Pedestrian safety and access around the Expo Station

Group 1 strategies are immediate recommendations to create a positive environment for pedestrian movement around the proposed Expo light rail and the Westside Cities. These strategies were identified through a walkability audit conducted between the future Venice/Robertson station and key local destinations.

Creating pedestrian-friendly areas

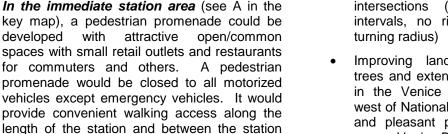
Creating a pedestrian-oriented district is key to the success of the station area and its surroundings. Direct and safe pedestrian pathways within the station and between modes (rail-bus, bus-bus, bus-parking) must be promoted.



Key map - locations for multimodal mobility solutions for the Westside Cities and Expo light rail station.



Sidewalk cafes and small retail outlets contribute to a pleasant pedestrian environment. (Photo location: Downtown Culver City)



facilities and bus or paratransit services. The promenade would provide a vibrant walking environment with cafes, shops and other commercial activities as well as upper level housing to provide a sense of community and

and multimodal services, such as park-n-ride

"eyes on the street."

Within a half-mile radius of the station (see

B in the key map), the pedestrian environment could be enhanced through:

- Installing pedestrian crossings at all approaches to all signalized intersections
- Ensuring that all signalized pedestrian crossings have audible pedestrian signals and bi-directional curb cuts to guide pedestrians in the appropriate direction
- Ensuring that right-turning vehicles do not encroach upon safe and convenient pedestrian movements at signalized

intersections (e.g., leading pedestrian intervals, no right turn on red, smaller turning radius)

- Improving landscaping, planting shade trees and extending the row of palm trees in the Venice Boulevard median to the west of National Boulevard to create a safe and pleasant pedestrian stopover island across Venice Boulevard from the station
- Improving bus stop visibility and sidewalk access for those with disabilities.

In the same area, long-term land use development decisions could also reflect the pedestrian-oriented nature of the area and encourage transit-supportive land uses, urban design features and increased land use intensity. Specifically, all activities and building entrances along pedestrian main streets could provide 100 percent street frontage, with no setback or strip parking in front of shop windows.

The Venice/Robertson intersection (see C in the key map) will be the key pedestrian intersection following development of the Expo light rail. Currently, however, this intersection is unpleasant for pedestrians and ought to be improved through a number of measures. These include:



Setback stop lines and raised, painted and/or paved crosswalks improve pedestrian capacity, visibility and safety at intersections. (Photo location: Third Street Promenade in Santa Monica)

- Increasing crosswalk visibility through use of raised crosswalks, overhead signage and setback stop lines (where stop lines are positioned to provide more space for pedestrians to cross comfortably)
- Installing pedestrian signals at the west approach with a pedestrian scramble phase or a leading pedestrian interval in the signal cycle
- Installing "no right turn on red" signs for vehicular movements at all legs of the intersection
- Unifying pedestrian signals and implementing ADA compliance across the north approach and two traffic islands.

The National/Robertson intersection (see D in the key map) could also be upgraded to encourage walking. Needed improvements include:

- Increasing crosswalk visibility in the same way as at the Venice/Robertson intersection
- Introducing a signalized pedestrian crossing and setback stop lines at the National Boulevard south approach
- Ensuring that all pedestrian signals are automatic rather than pedestrian actuated



Bike parking facilities could be secure, suitable for a range of bicycle types and conveniently located. (Photo location: Culver Boulevard near Downtown Culver City)

The I-10/Robertson interchange (See E in the key map) could be reconfigured to provide a more amenable environment for pedestrians. Needed improvements include:

- Using paint and lighting to create a brighter pedestrian environment within the underpass
- Improving the pedestrian crossing at National and the eastbound on-ramp to the I-10.

II. Bicycle access and amenities around the Venice/Robertson station

Group 2 includes a number of strategies focusing on bicycle access and amenities around the Venice/Robertson station. These strategies aim to improve conditions for existing cyclists, as well as making bicycle access safer and more attractive for potential riders.

Planning bicycle access

Los Angeles is a nearly ideal location to encourage bicycle usage thanks to the excellent climate and what is essentially a flat landscape. In some parts of the region, especially along the coastline, there are outstanding bike paths. Around the study area, however, bicycling is not a common means of transportation. To promote multimodal mobility, bicycle access could be encouraged around the Venice/Robertson station. This would enable current bicycle commuters to safely access the station as well as providing modal choice to those who would be willing to access the station by bicycle if it were safer and more convenient.

Within three miles of the station, a bicycle access plan could be developed and implemented to make it more convenient and comfortable to reach the station by bicycle from all directions. The boundary of the bicycle plan could extend to or even beyond Beverly Boulevard to the north, La Brea Avenue to the east. Slauson Avenue to the south, and Centinela Avenue to the west. Sections of the Exposition Bikeway are already funded in West Los Angeles and Santa Monica, with the intent that it will be a continuous facility from Santa Monica to downtown Los Angeles. The station at Venice/Robertson is a key intercept point to provide the option of parking a bike and riding transit.

In the network of roads and pathways



Interesting main street shop frontages with no setbacks or strip parking enhance pedestrian and transit-oriented development. (Photo location: Main Street, Santa Monica)

radiating from the Expo station, bicycle facilities could be upgraded to make them safe, convenient and attractive to cyclists. This includes:

- Restriping bike lanes along Venice Boulevard including separation striping and bicycle logos (See F in the key map)
- Providing bicycle lanes and/or routes along untreated portions of Culver Boulevard
- Improving north-south linkages from the proposed Venice/Robertson station such as better bicycle amenities and restriping Robertson Boulevard
- Implementing "bicycle boulevards" along neighborhood streets such as Higuera Street. Lucerne Avenue, Duquesne Avenue and Castle Heights Avenue. boulevards include roadway Bicycle bicvclists' modifications that enhance safety and convenience. For example, streets could be calmed to discourage nonlocal traffic and create a distinctive ambiance, intersections treated to allow for free flow of bicycles, and traffic controls changed to help bicycles cross arterials.



Enhanced bike-on-bus facility to bring bicycle motorists to the proposed Venice/Robertson station

III. Westside transit extensions to the Venice/Robertson LRT station

Providing Expo bus extensions

Group 3 identifies transit service extensions to the station. Expo light rail bus extensions could include rapid, high frequency services with relatively direct routes to major destinations on the Westside, including the ultimate Expo terminus at Santa Monica. At present, however, many bus routes in the area have insufficient reliability, speed and frequency to act as extensions of the Expo light rail. These issues need to be resolved for true multimodal mobility to occur in connection with the Expo light rail and the Venice/Robertson station.

In the Venice/Robertson station area, transit service schedules should be coordinated with the future light rail services and other bus services in order to achieve effective bus extensions. Service rerouting in the vicinity of the station could also facilitate smooth transfers and minimize traffic impacts.

Bus routes and service restructuring

In addition to the proposed Expo light rail station, Metro has proposed relocation of the existing West Los Angeles Transit Center at Fairfax Avenue/Washington Boulevard. Following relocation, bus services to the current West LA Transit Center may be distributed between the Venice/Robertson and La Cienega stations, however, details of this reconfiguration have not yet been finalized.

Transit services operated by Metro and all Westside transit agencies must be restructured to provide connections to the new Expo terminus and the La Cienega station. Interagency workshops between Metro and all Westside Cities will be necessary to coordinate the transit access and schedules at both new transit terminals.

Transit service rerouting could reduce passenger inconvenience and travel time on local streets by employing dedicated bus lanes between freeway on/off ramps and local transit stops at Venice/Robertson station.

Bus service restructuring is also necessary to achieve acceptable transit quality of service between the Expo light rail line and the rest of the Westside Cities. This restructuring

includes:

- Encouraging service improvements to achieve better than 15-minute headways between services for all buses (e.g. Santa Monica's Big Blue Bus 10 and 12; Culver CityBus (CCB) 4 and 5; LADOT 437; and Metro 33, 220, 430, 434 and 439) and services to Marina del Rey and Playa del Rey (see H in the key map)
- Supporting the service restructure plan outlined in the December 2004 draft of the Expo Environmental Impact Statement
- Increasing the hours of operation for CCB 1, LADOT 437, and Metro 220.

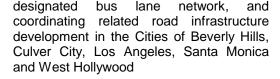
In addition, potential shuttle services could provide easy, convenient access between the proposed Expo station at Venice/Robertson and nearby destinations including park-n-ride lots, the Hayden Tract employment node (see I in the key map), the Helms District (see J) and downtown Culver City (see K).

Bus rapid transit, express services and priority systems are also needed to improve multimodal reliability and bring bus travel times closer to travel times for cars. These could be supported by:

· Extending the signal priority treatment and



Real time information improves customer service.



- Expanding rapid bus services by Metro Rapid, Culver CityBus, Santa Monica's Big Blue Bus, LADOT's Commuter Express and other transit providers, especially for north-south routes that serve Beverly Hills and West Hollywood residents (e.g., Metro 105–La Cienega, 220–Robertson, and 217–Fairfax – see L in the key map) and for the major east-west routes (e.g., CCB 1–Washington – see M in the key map)
- Fitting transit vehicles and intersections along primary transit routes with transponders for signal priority to improve travel times for both local and rapid transit services along these corridors.

IV. Creating a Clean Mobility Center (CMC)

To further enhance multimodal mobility involving bicycles, transit, and pedestrians, a number of facilities could be developed at the Expo Venice/Robertson station.

A comprehensive *Clean Mobility Center* could be developed at the Expo Venice/Robertson station. A Clean Mobility Center is a transit facility that offers a variety of travel choices to encourage clean trips such as biking, walking, using public transit, and driving shared and/or low-emissions vehicles. The Venice/Robertson CMC could include:

- A station attendant
- Restrooms for the public and secure restrooms for bus drivers
- A bicycle station with bicycle valet parking in a secure area, bicycle repairs, bike rentals, showers and change rooms
- An information kiosk with guides to using clean mobility options, maps, schedules, fare information, real time information signs that show arrival times, service schedule and fare information, and accessible bus shelters to protect riders from the sun and rain



Long Beach Clean Mobility Center provides multimodal amenities including a bike station and car-share pod at a transit interchange. Source: www.visitlongbeach.com

 Car-sharing facilities with designated parking locations for shared vehicles and access to car-sharing services including electric bike and scooter rentals at reasonable rates. At the Long Beach Clean Mobility Station, members pick up a Flexcar vehicle and pay for just the time they use the car and the miles they drive without incurring the large out of pocket costs associated with owning a car of their own.

Other bicycle facilities in the station area should include an abundant supply of secure bicycle racks and lockers at a variety of convenient locations, such as near shops and schools, as well as a bike accessories shop.

In addition, all **buses serving the station** should have the capacity to accommodate bicycles. This is particularly important for buses traversing Robertson Boulevard, which currently has no bicycle lane to provide safe and direct bicycle access. Bus bicycle racks would allow cyclists to combine bicycling with bus riding, thus avoiding heavy traffic conditions along Robertson Boulevard.

Exposition Light Rail Transit at Washington & National Boulevards Potential Traffic Issues



Grade separating Venice/Robertson Station could reduce the safety hazard by avoiding transit buses and autos waiting in front of the railroad gates to cross the tracks. Grade-separated station would also ensure the pedestrian and biking safety around the railroad tracks.

V. Grade separating Venice/Robertson station & reconfiguring the I10/Robertson interchange

Group 5 lists the potential geometrical changes that could be made to the proposed light rail station and the I-10/Robertson interchange:

Grade separating Expo station

Grade separation of the Venice/Robertson station is fundamental to the achievement of multimodal mobility within the Westside Cities in both the short and long term. It also ensures that safety concerns stemming from different modes are reduced.

In conjunction with a grade-separated station, traffic flow and transit access should be facilitated around the station to give priority to pedestrian and bicycle movements.

If the station were elevated, a pedestrian bridge would be needed to reach the light rail platform. Such a bridge would require a full complement of accessibility requirements including elevators or ramps. It may also provide pedestrian access to both sides of





Existing Robertson/I-10 interchange and freeway access points need to be reconfigured to avoid loading traffic into the future Expo station.

(Photo location: I-10 eastbound off-ramp at Venice/Robertson intersection, Aerial source: Culver City)

Venice Boulevard thereby connecting the light rail platform to on-street transit stops and the park-n-ride lot. A pedestrian bridge would complement rather than replace the street-level pedestrian network and environment as discussed previously.

In the long term, the grade separated station is also needed to facilitate the future extension of the Expo Light Rail to Santa Monica as referenced in the 2004 Regional Transportation Plan and supported through a policy intent resolution made by the Metro Board.

Reconfiguring the Robertson/I-10 interchange

A reconfiguration of the I-10 Robertson freeway ramp locations would rationalize traffic movements around the I-10/Robertson interchange and reduce conflicting movements with other non-auto modes. This could include the following options:

 Improve traffic signal coordination at National Boulevard, Robertson Boulevard and Venice Boulevard to facilitate the traffic flow while giving special attention to heavy pedestrian movement and transit service access at the proposed Venice/Robertson Station

- Reconfigure the Venice/Robertson intersection to better accommodate the heavy northbound right-turn movement to Venice Boulevard
- Relocate the existing I-10 eastbound off-ramp at Exposition Boulevard to avoid loading traffic into Venice/Robertson intersection
- Construct a new I-10 eastbound offramp to access Robertson Boulevard northbound
- Construct a new eastbound on-ramp access at National northbound and a westbound on-ramp to provide access for Robertson southbound
- Acquire related right-of-way by Caltrans and LADOT.

Finally, interagency workshops on any proposed reconfiguration should include participation by Caltrans, Metro, the City of Culver City, Culver CityBus, LADOT, the City of Los Angeles and Santa Monica's Big Blue Bus to develop alternatives that would improve the convenience of transit access, facilitate transit service rerouting and prioritize pedestrian amenities around Venice/Robertson station. Any such proposed reconfiguration of

the I-10 ramps would require Caltrans and LADOT approval in concept.

VI. Other multimodal strategies

Group 6 addresses wider strategies to enhance transit ridership and amenity through patterns of land use development and implementation of transportation demand management (TDM) by developers, employers and landlords.

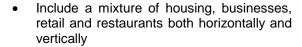
Encouraging transit-supportive development

Certain types of land use development are conducive to multimodal mobility in and to the local area. Transit-supportive developments have a number of features including a diversity of land use types, urban design elements that promote pedestrian and bicycle access, transit access to regional destinations, and appropriate land use densities.

In the vicinity of the Expo light rail station, transit-supportive projects could be developed that:



Existing industrial use and previous railroad tracks on Exposition Boulevard



- Feature safe, convenient pedestrian and bicycle access throughout the development area
- Ensure that all activities and building entrances along main streets provide maximum street frontage, with no setbacks or strip parking in front of shop windows and with limited blank walls
- Provide for parking requirement reductions
- Prohibit new auto-oriented uses such as auto repairs, gas stations, drive-thrus and retail with strip parking

These and other transit-supportive development features could be specifically applied to the adjacent *redevelopment site* (see N in the key map) being undertaken by the Culver City Redevelopment Agency in order to optimize transit ridership and other environmental benefits of this project.

Implementing Transportation Demand Management (TDM)

Throughout the Westside, current and future employers, developers and landlords have







Transit supportive land uses include tastefully designed multi-family housing in close proximity to Venice/Robertson station. For example, the photo to the right shows a TOD project around Fruitvale BART station in San Francisco. In addition, convenient and safe pedestrian and bike access would also encourage the multimodal connection to the future Expo Station. Photos to the left and in the middle show another TOD example around a grade-separated station in Broadway--Commercial in Vancouver, BC

implemented Transportation Demand Management (TDM) strategies to promote the use of multimodal mobility options. Additional strategies could be implemented in the area adjacent to the Venice/Robertson station, as well as at other strategic locations on the Westside.

Potential TDM strategies include:

- Providing a parking cash-out program that provides a daily financial incentive to employees who do not drive alone to work
- Unbundling the cost of parking from the cost to lease or purchase properties within the development
- Negotiating an eco-pass program with transit providers to allow all employees and residential/commercial tenants to ride transit for free
- Providing all employees and/or tenants with membership to Flexcar car-share services
- Providing carpool matching assistance for employees
- Providing on-site facilities for cyclists such as secure parking and changing rooms

 Implementing marketing, education and other strategies to encourage employees and/or tenants to access the site by a variety of modes.

What can we do next?

There are a number of steps towards improving multimodal mobility at and around the Expo Venice/Robertson station and the I-10/Robertson interchange.

To implement the strategies recommended in this document, the following outlines several programs or studies that would shape the multimodal environment on the Westside:

- Pedestrian circulation and bicycle access improvements for the future Venice/Robertson Light Rail Station – for the Venice/Robertson, National/Robertson, and Washington/National intersections
- "Safe Routes to School" program from the Venice/Robertson Light Rail Station
- Transit signal priority programs for Venice and Washington Boulevard Corridors

- Study of transit linkages from Beverly Hills to Venice/Robertson station
- Implementation of Real Time passenger information systems for Culver CityBus and Santa Monica's Big Blue Bus
- Cost estimates for a Clean Mobility Center the Exposition Light Rail Venice/Robertson Station
- Implementation of bicycle priority corridors on Venice Boulevard, Culver Boulevard and Washington Boulevard
- Implementation of more demanding Transportation Demand Management programs on the Westside
- Implementation of transit-oriented development around the Exposition Light Rail Venice/Robertson station.

As the issues associated with the above projects or studies would extend beyond the boundaries of individual jurisdictions, multijurisdictional planning approaches would be necessary across the Westside Cites and other regional or local agencies.

In addition, implementing the improvements listed above would require capital investments from associated agencies. Possible funding

sources would include:

- Metro's Call for Projects
- Metro's future circulation and access study for the Venice/Robertson Light Rail Station
- Metro's mitigation measures to the Final Environmental Report (FEIR) for the Venice/Robertson Light Rail Station
- General Education Funds for "Safe Routes to School"
- Los Angeles Countywide Bicycle Transportation Strategic Plan (BTSP) by Los Angeles County Bicycle Coalition (LACBC)
- Other grant sources from SCAG, US Federal Transit Administration (FTA), and other public agencies.

Finally, in order to improve multimodal mobility effectively, the action items provided in this document should be refined and promoted through a process of community outreach, marketing and education.

Multimodal mobility options may also be publicized and promoted through internetbased solutions that provide links to transit

guides and interactive mapping systems such as www.bikemetro.com for bicycle access and http://latranstar.tann.com/ for transit trip planning.

Project Funding Agencies

Caltrans

Southern California Association of Governments Westside Cities

Project Steering Committee

City of Beverly Hills

City of Culver City City of Santa Monica

City of West Hollywood

Project Consultant Team

Kaku Associates, Inc.

Nelson\Nygaard Consulting Associates