

CITY OF BEVERLY HILLS MASS TRANSIT COMMITTEE



FINAL REPORT

JANUARY 2007

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Honorable Mark Egerman

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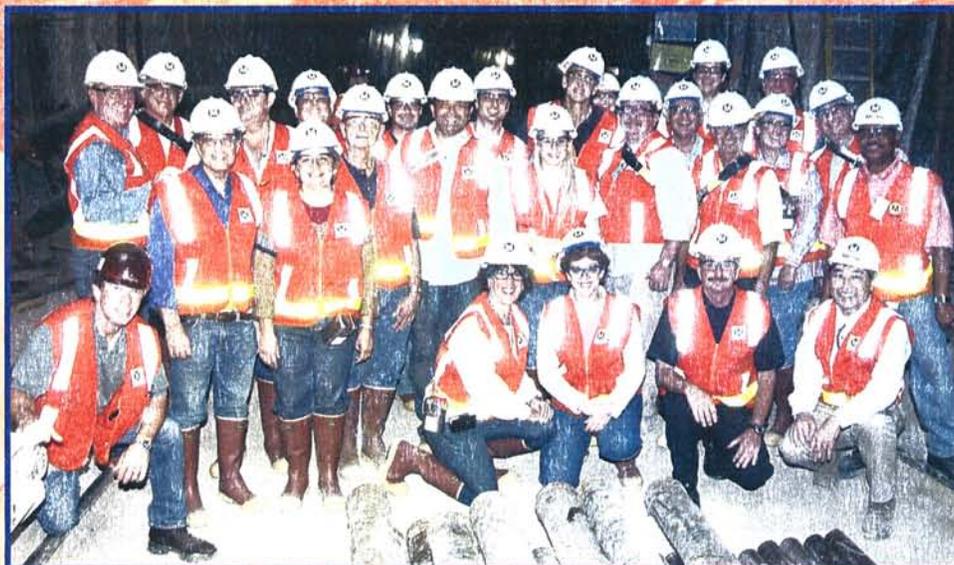


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- Appendix D: Public Transportation and Transit Committee (PTTC): 1992 Majority and Minority Reports
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- Appendix F: Redline Extension Route and Alignment Options Presentation by Kaku Associates
- Appendix G: MTC Meeting Notes and Handout Materials

- May 25, 2006: Introductions
- June 15, 2006: Local Transit History
- June 24, 2006: Redline Tour (No Notes)
- July 6, 2006: Planning Process
- August 17, 2006: Workshop Alignment and Station Locations
- September 7, 2006: Workshop Alignment and Station Locations Continued
- September 28, 2006: Local Funding and Planning and Station Acquisition
- September 30, 2006: Construction Tour of Eastside Rail and Security Discussion
- October 19, 2006: Construction Impacts
- November 2, 2006: Special "Town Hall" Community Meeting
- November 16, 2006: Construction Impact Mitigation and Finalize Recommendation
- December 7, 2007: MTC Input on Draft Final Report

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I. EXECUTIVE SUMMARY

Recognizing the growing traffic congestion issues and the growing social, economic and environmental cost of traffic congestion to the Westside of Los Angeles, the Westside Cities of Beverly Hills, Culver City, Santa Monica and West Hollywood prepared a "Westside Mobility Study" in October 2003. The study concluded, "Improvements to roadways and the existing transit systems will not solve traffic congestion problems or have enough impact to maintain the economic viability of the Westside." The Westside Mobility Study identified the Westside Subway Extension, along with the Exposition Light Rail Project and I-10/Robertson Boulevard interchange improvements, as the top three long-term transportation initiatives to address congestion.

Since that time support for a Westside Subway Extension has grown, resulting in the Los Angeles Metropolitan Transportation Authority (Metro) Board recently approving funding to begin planning studies for a subway extension. With renewed momentum for a Westside Subway Extension, Mayor Stephen P. Webb appointed former mayors Allan Alexander and Mark Egerman to chair a Beverly Hills citizen's Mass Transit Committee (MTC). The Committee was charged as follows:

Develop recommendations to the City of Beverly Hills City Council regarding route alignments and station locations for a possible Westside Subway Extension within Beverly Hills.

While the Metro Board is the decision making body regarding route alignment and station locations, a successful project involves a collaborative effort between the cities along the potential subway route and Metro Board. The Committee was formed to provide input to the Beverly Hills City Council to assist the City Council in formulating its position regarding a preferred route alignment and station locations within the City of the Westside Subway Extension before Metro begins its formal planning process. The Committee has also identified and discussed in its deliberations issues relating to subway construction and operations to help prepare the City to participate in Metro's planning process.

Over a 7-month period, the Committee met 13 times, which included two tours of the existing Metro subway and construction facilities. The Committee met with experts from Metro, City staff, and private industry to gain a comprehensive understanding of issues relating to the planning, construction and operations of a subway extension. The City retained Kaku Associates, a transportation and engineering firm, as a consultant to the City and Committee, to facilitate the development of the Committee's recommendations.

The Committee unanimously makes the following recommendations to the Beverly Hills City Council:

- The Committee unanimously acknowledges the need and benefits of a Westside Subway Extension to serve the City of Beverly Hills.
- The Committee unanimously recommends a Wilshire Boulevard alignment extending west under Wilshire Boulevard from the existing station at Wilshire Boulevard and Western Avenue in Los Angeles through Beverly Hills to Century City and beyond, preferably with the alignment at the west end of Beverly Hills continuing under Wilshire Boulevard and then veering southwest under Santa Monica Boulevard to Century City rather than under commercial and residential properties.
- The Committee unanimously recommends two stations within the City of Beverly Hills, one located at or near Beverly Drive and Wilshire Boulevard at the west end of the City and the other located at or near La Cienega Boulevard and Wilshire Boulevard at the east end of the City.
- As part of its charge, the Committee unanimously determined that the recommended station locations appear feasible as to the construction of the stations and manageable with respect to operations, security and potential disruption during the construction phase.

II. LOS ANGELES COUNTY TRANSIT

REGIONAL TRANSIT CONTEXT

Los Angeles County's 73.1 miles of Metro Rail service and 14-mile bus transit way are illustrated in Figure 1. The Metro Rail subway currently extends west to Western Avenue and Wilshire Boulevard. The Metro Rail subway provides service through downtown from the Union Station west to the Mid-Wilshire area and northwest to Hollywood and the San Fernando Valley, where it meets the Orange Line high-capacity bus transit way that operates in the San Fernando Valley.

In addition to the subway, Metro also runs "at grade" light rail service. The Blue Line runs north and south between Long Beach and Los Angeles. The Green Line crosses the Blue Line, running east and west between Norwalk and Redondo Beach, curving south near the Los Angeles International Airport. The Gold Line connects with the Red Line at Union Station and runs northeast to Pasadena. Metro is currently extending the Gold Line into East Los Angeles and has begun construction on the Exposition Line from downtown to Culver City. The planned Exposition Line will run along Exposition Boulevard and Jefferson Boulevard, over two miles south of the major activity centers along Wilshire Boulevard.

While the Exposition Line will serve residents and commuters to the south of Beverly Hills, there is an obvious lack of rail transit serving Beverly Hills and surrounding communities. Rail projects currently under construction will not serve the residents, employees, tourists and shoppers in the City of Beverly Hills, mid-Wilshire, Century City, Westwood or Santa Monica. As the population of the City of Beverly Hills expands from a resident population of approximately 35,000 to a daytime population of approximately 250,000 due to the arrival of non-resident employees, tourists and shoppers, it is critical to consider the challenges and opportunities of linking the City of Beverly Hills to the existing rail transit system, and relieving congestion along Wilshire Boulevard, one of the region's busiest arterials.

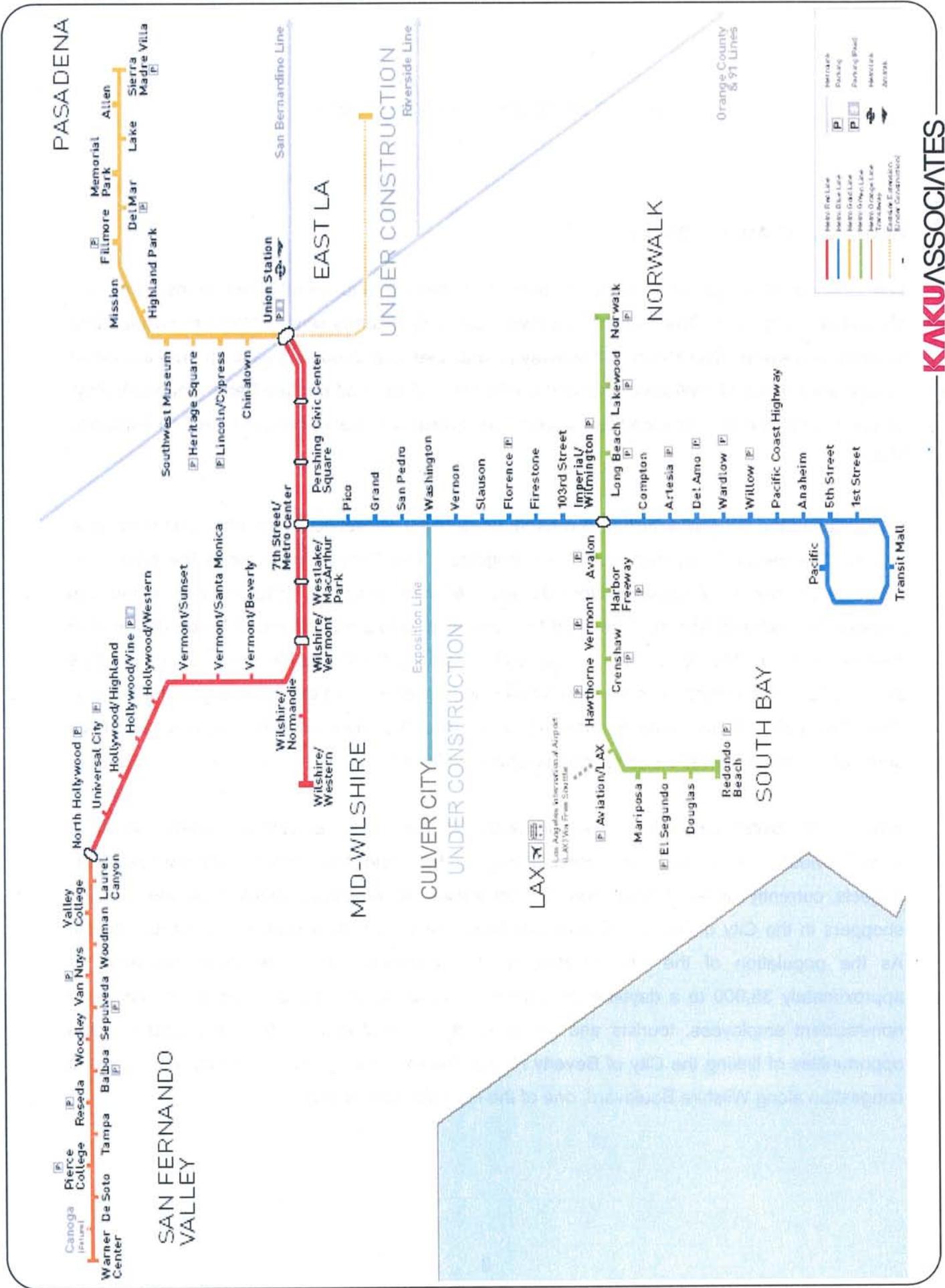


FIGURE 1
THE LOS ANGELES RAIL SYSTEM METRO TRANSIT MAP

HISTORY OF THE METRO SUBWAY

In 1980, Los Angeles County voters passed Proposition A, a half-cent sales tax dedicated for a regional transit system. Original plans for the regional transit system included a subway line to the west from downtown primarily along Wilshire Boulevard. A 1985 methane gas explosion prompted U.S. Representative Henry Waxman to introduce legislation in 1986 banning the use of federal funds for tunneling under portions of Wilshire Boulevard in the mid Wilshire area designated as a high potential methane risk zone. Because the subway extension along Wilshire Boulevard could not receive federal funding, plans for a Westside Subway Extension beyond Western Avenue were placed on hold indefinitely.

Proposition C, approved by voters in 1990, dedicated an additional half-cent sales tax to local transportation. As a reaction to the cost of subway construction, reduced federal funding, perceived mismanagement on the part of Metro and the availability of other less expensive mass transit options, Los Angeles County voters passed a measure in 1998 to prevent Metro from spending both Proposition A and Proposition C sales tax dollars on subway projects.

Due to rising environmental degradation and congestion, Los Angeles Mayor Antonio Villaraigosa and Metro have begun to reconsider the possibility of a Westside subway extension. Recent studies show that, due to technological advances, it is now safe to tunnel through the methane gas zone under Wilshire Boulevard. Congressman Waxman, convinced of the need for a westward extension of the subway line and the improvements in technology that would allow safe tunneling, introduced a federal bill that passed in the House of Representatives in 2006 and is currently under consideration in the Senate to allow the use of federal transportation funds to tunnel beneath Wilshire Boulevard.

Although the County is still prohibited from using Proposition A and C sales tax revenues for the planning, design, construction and operation of new subways, supporters of the Metro subway hope to secure state funding from California Proposition 1B, passed by voters in November 2006, for a Westside Subway Extension. Metro is beginning planning efforts for a Westside Subway Extension.

III. SUBWAY PLANNING PROCESS

The typical timeframe for the planning and construction of Metro subway lines includes three years for planning and seven years for design and construction, depending on the length of the line. The first phase of the planning process involves "systems" planning, which involves identifying and prioritizing corridors for rail transit. The Westside Subway Extension has been included in the strategic element (i.e., unfunded) of the LACMTA 2001 Long Range Transportation Plan. Metro currently anticipates beginning "systems" planning and alternatives analysis for a subway extension in early 2007.

Once a corridor for rail transit is identified as a priority, the process enters the second phase of the planning process, which involves an Alternatives Analysis and preparation of the Environmental Impact Statement/Environmental Impact Report. During this second phase, a rail alignment is selected.

Table 1 outlines the process leading to completion of a Metro subway line.

TABLE 1 TYPICAL PROJECT DEVELOPMENT TIMELINE

Phase	Year									
	1	2	3	4	5	6	7	8	9	10
1 Planning Alternatives Analysis Draft EIS/EIR-Conceptual Engineering Final EIS/EIR-Preliminary Engineering Record of Decision Full Funding Grant Agreement	X	X	X							
2 Pre-Construction Right of Way Acquisition Utility Relocation Final Engineering Design Bid/Award				X	X	X				
3 Construction Tunnel Construction Station Construction Systems/Trackwork Installation Yards/Shops/Ancillary Facilities					X	X	X	X	X	X
4 Operation Pre-Revenue Testing Revenue Operations										X

Source: Metro Planning and Programming Committee Report, February 2006.

IV. ROUTE AND STATION LOCATION ALTERNATIVES

ALIGNMENT OPTIONS WITHIN THE CITY OF BEVERLY HILLS

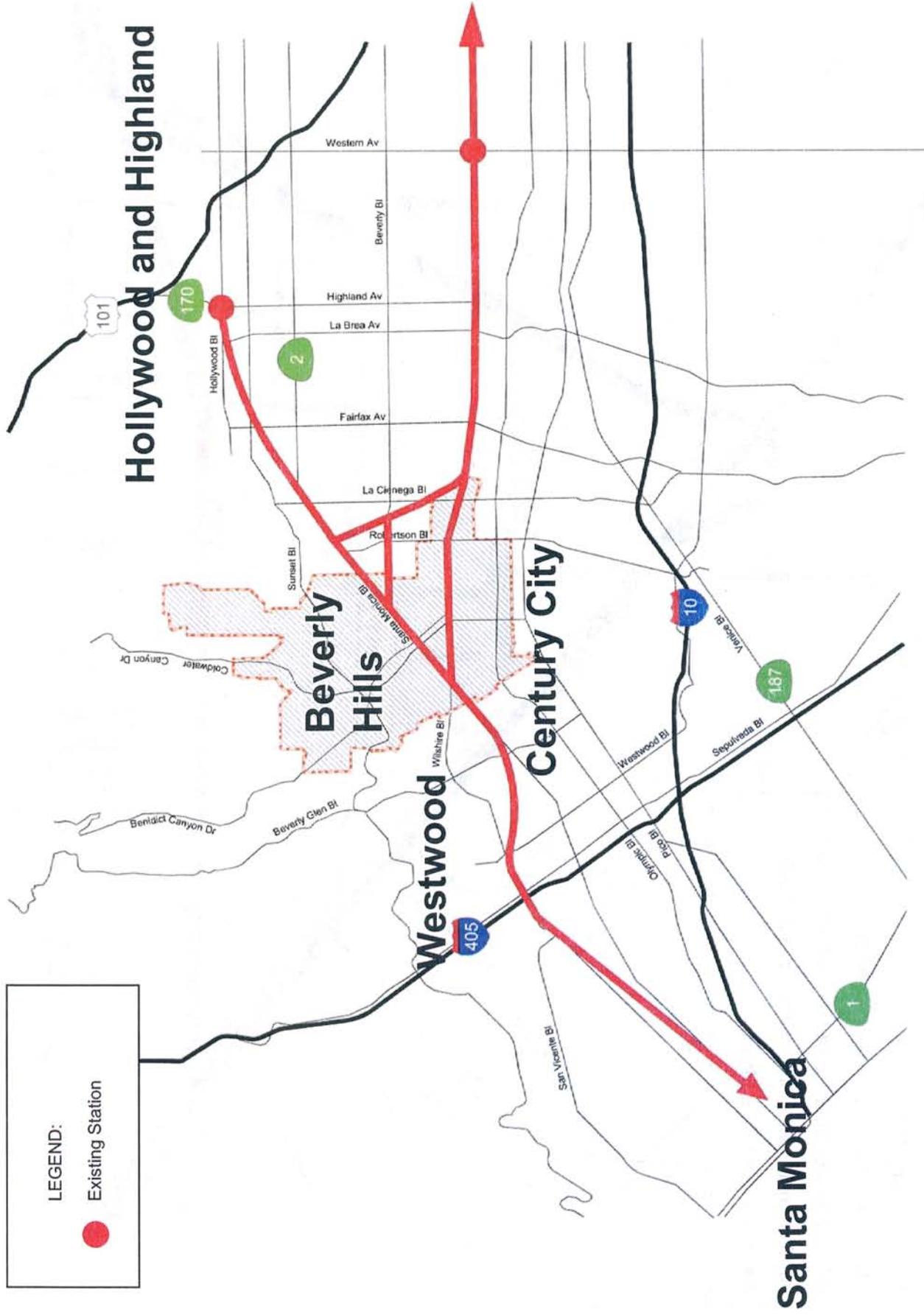
In February 2006, Metro staff presented a report on how a Westside Subway Extension could be built (Appendix E). This report identified four possible phases for the project. The report was presented to the Metro Board of Directors for information only; no action was taken. Any decisions for phases of a subway decision would be made by the Metro Board of Directors along with other project decisions and will be dependent on various project details including availability of funds. The four possible phases discussed in the February 2006 staff report are:

- Phase 1 - Fairfax Boulevard and Wilshire Boulevard
- Phase 2 - Century City (includes Beverly Hills segment)
- Phase 3 - Westwood
- Phase 4 - The City of Santa Monica

As Figure 2 illustrates, the Westside Subway Extension could travel through the City of Beverly Hills as part of Phase 2. It is anticipated that Metro's Alternatives Analysis will include study of the following potential alignments outlined below for the Westside Subway Extension. Figure 3 provides a detailed view of potential alignments of the Westside Subway Extension.

From Wilshire Boulevard and Western Avenue station (assumes a station east of Beverly Hills at Fairfax Avenue)

1. Continue west along Wilshire Boulevard through Beverly Hills and veer southwest to Century City.
2. From Wilshire Boulevard, turn north on San Vicente Boulevard to Beverly Boulevard to serve the Cedars Sinai/Beverly Center area. Continue west on Beverly Boulevard and veer west along Santa Monica Boulevard through Beverly Hills to Century City.



LEGEND:
 ● Existing Station

FIGURE 2
WESTSIDE SUBWAY EXTENSION ALTERNATIVES

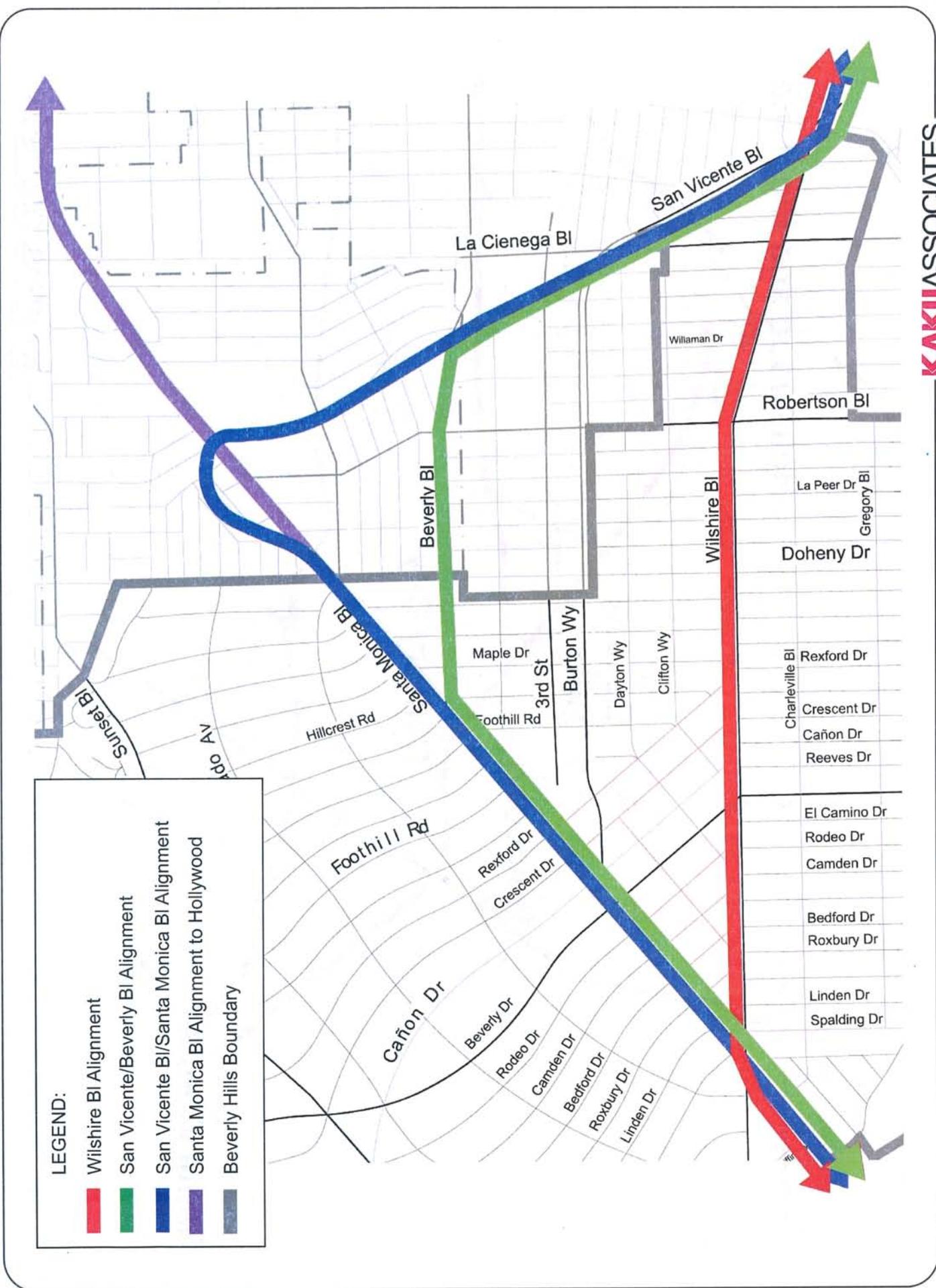


FIGURE 3
ALIGNMENT OPTIONS WITHIN BEVERLY HILLS

3. From Wilshire Boulevard, turn north on San Vicente Boulevard to Santa Monica Boulevard and veer west along Santa Monica Boulevard through Beverly Hills to Century City.

From Hollywood Boulevard and Highland Avenue station (assumes a station east of Beverly Hills at San Vicente Boulevard and Santa Monica Boulevard)

4. Veer south to Santa Monica Boulevard and continue along Santa Monica Boulevard through West Hollywood and Beverly Hills to Century City.

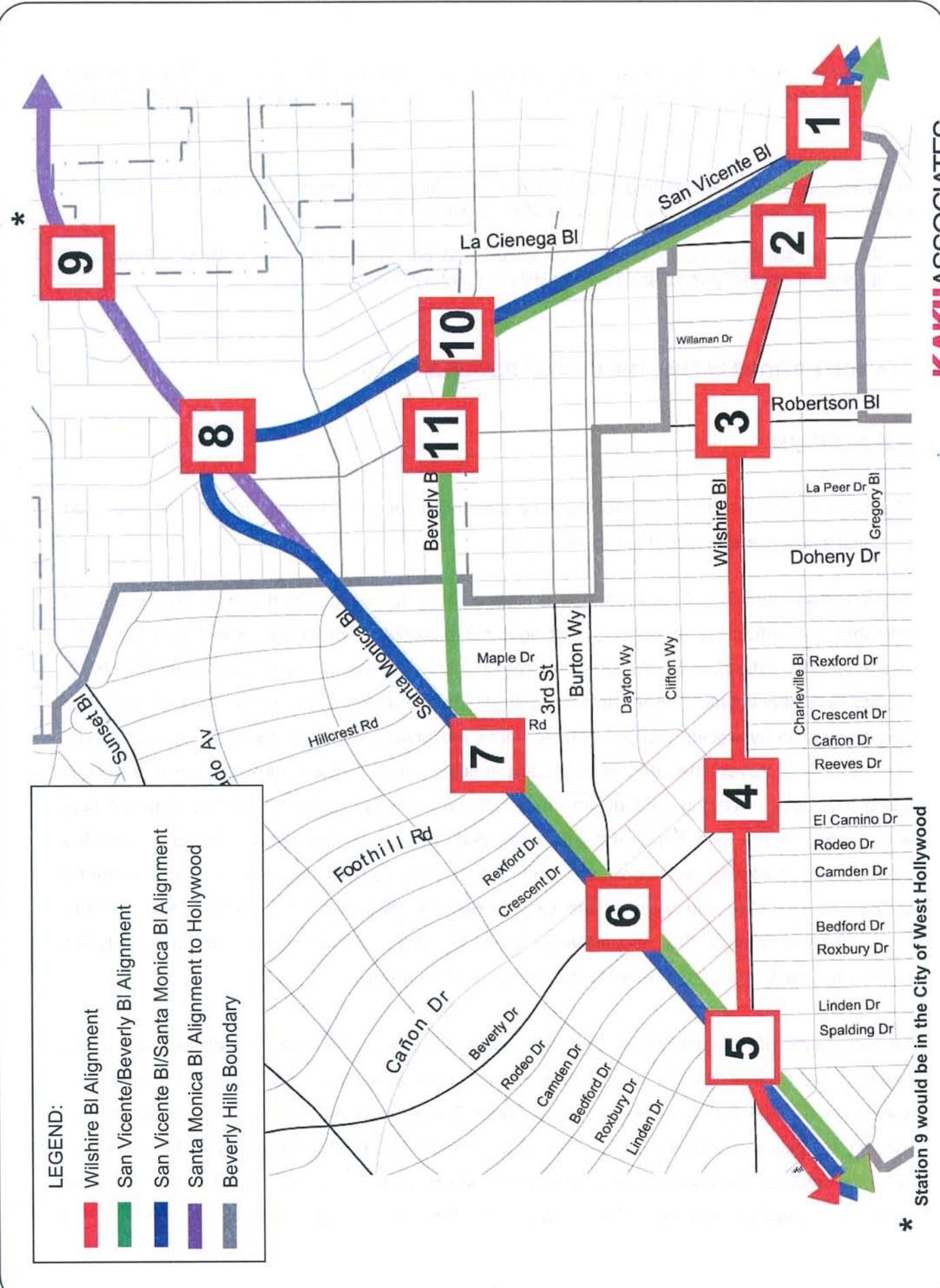
STATION OPTIONS WITHIN THE CITY OF BEVERLY HILLS

Station Criteria

The Committee identified potential subway stations in or near Beverly Hills. The identified potential stations are depicted in Figure 4.

Several characteristics of the area surrounding stations have significant effects on the level of ridership and efficiency of subway and light rail projects. The development and land use characteristics extending $\frac{1}{4}$ of a mile out from the station have the most significant effects on the station's effectiveness. For rail to be cost-effective and efficient in terms of speed, planners generally begin by placing stations approximately one mile apart because closer spacing would result in longer travel times and more distant spacing would provide a lower degree of access along the route. Spacing stations one mile apart provides the optimal balance between cost and speed on the one hand and efficiency and access on the other. Table 2 provides approximate distances between each potential station, as well as distances to envisioned stations to the east and west of the City of Beverly Hills at Fairfax Avenue and Wilshire Boulevard and Century City, respectively. Since the City of Beverly Hills is approximately 2.5 miles wide, the City can reasonably accommodate two stations.

An abundance of research shows that rail stations constructed in areas of high residential and employment density benefit from higher ridership because more patrons have convenient access to the rail line (Cervero 2004). Figure 5 illustrates the employment densities with respect to potential stations while Figure 6 provides residential densities with respect to potential stations. Heavy bus use within a short walking distance of the rail station indicates that there is existing demand for transit in the area that would be served by



LEGEND:

- █ Wilshire BI Alignment
- █ San Vicente/Beverly BI Alignment
- █ San Vicente/Santa Monica BI Alignment
- █ Santa Monica BI Alignment to Hollywood
- █ Beverly Hills Boundary

* Station 9 would be in the City of West Hollywood

FIGURE 4
STATION OPTIONS

	FAIRFAX & WILSHIRE	1. San Vicente & Wilshire	2. La Cienega & Wilshire	3. Robertson & Wilshire	4. Beverly Dr & Wilshire	5. Santa Monica & Wilshire	6. Beverly Dr & Santa Monica	7. Beverly Bl & Santa Monica	8. San Vicente & Santa Monica	9. La Cienega & Santa Monica
FAIRFAX & WILSHIRE	0	0.6	1	1.3	2.2	3	2.5	2.2	2	2
1. San Vicente & Wilshire	0.6	0	0.4	0.7	1.6	2.4	2	1.6	1.6	1.8
2. La Cienega & Wilshire	1	0.4	0	0.3	1.2	2	1.6	1.4	1.4	1.7
3. Robertson & Wilshire	1.3	0.7	0.3	0	1	1.7	1.2	1	1.2	1.6
4. Beverly Dr & Wilshire	2.2	1.6	1.2	1	0	0.6	0.4	0.7	1.5	2
5. Santa Monica & Wilshire	3	2.4	2	1.7	0.6	0	0.5	1.1	2	2.5
6. Beverly Dr & Santa Monica	2.5	2	1.6	1.2	0.4	0.5	0	0.6	1.4	2
7. Beverly Bl & Santa Monica	2.2	1.6	1.4	1	0.7	1.1	0.6	0	0.8	1.4
8. San Vicente & Santa Monica	2	1.6	1.4	1.2	1.5	2	1.4	0.8	0	0.5
9. La Cienega & Santa Monica	2	1.8	1.7	1.6	2	2.5	2	1.4	0.5	0
10. San Vicente & Beverly Bl	1.25	1	0.8	0.7	1.3	2	1.4	1	0.6	1
11. Robertson & Beverly Bl	1.6	1.1	1	0.7	1.2	1.5	1.2	0.6	0.5	1
CENTURY CITY	3.3	2.7	2.3	2	1.1	0.6	1.1	1.7	2.6	3.1

Note: Shaded areas designate distances under 1 mile, which is less than optimal spacing.

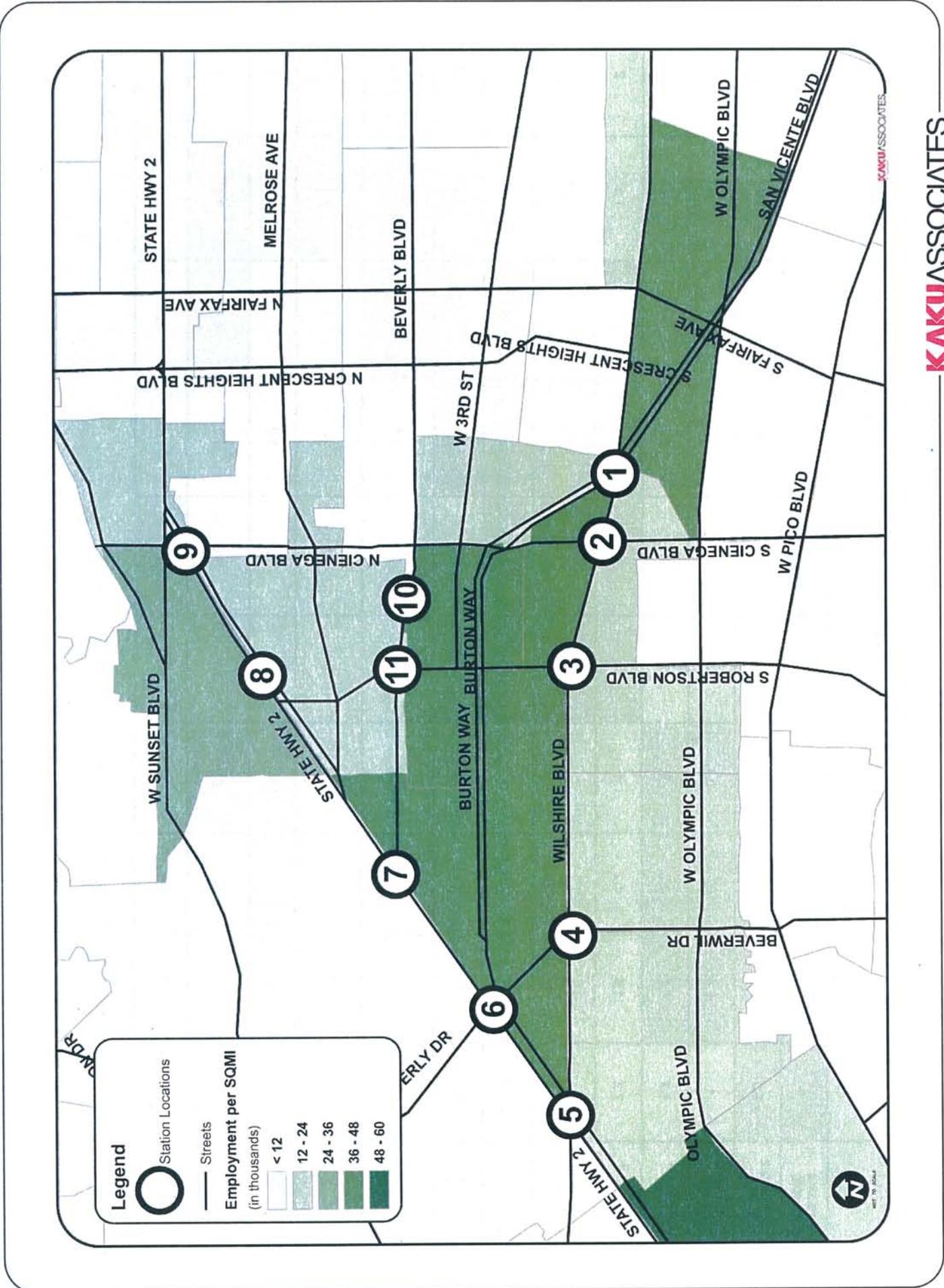


FIGURE 5
EMPLOYMENT DENSITIES NEAR POTENTIAL SUBWAY STATIONS

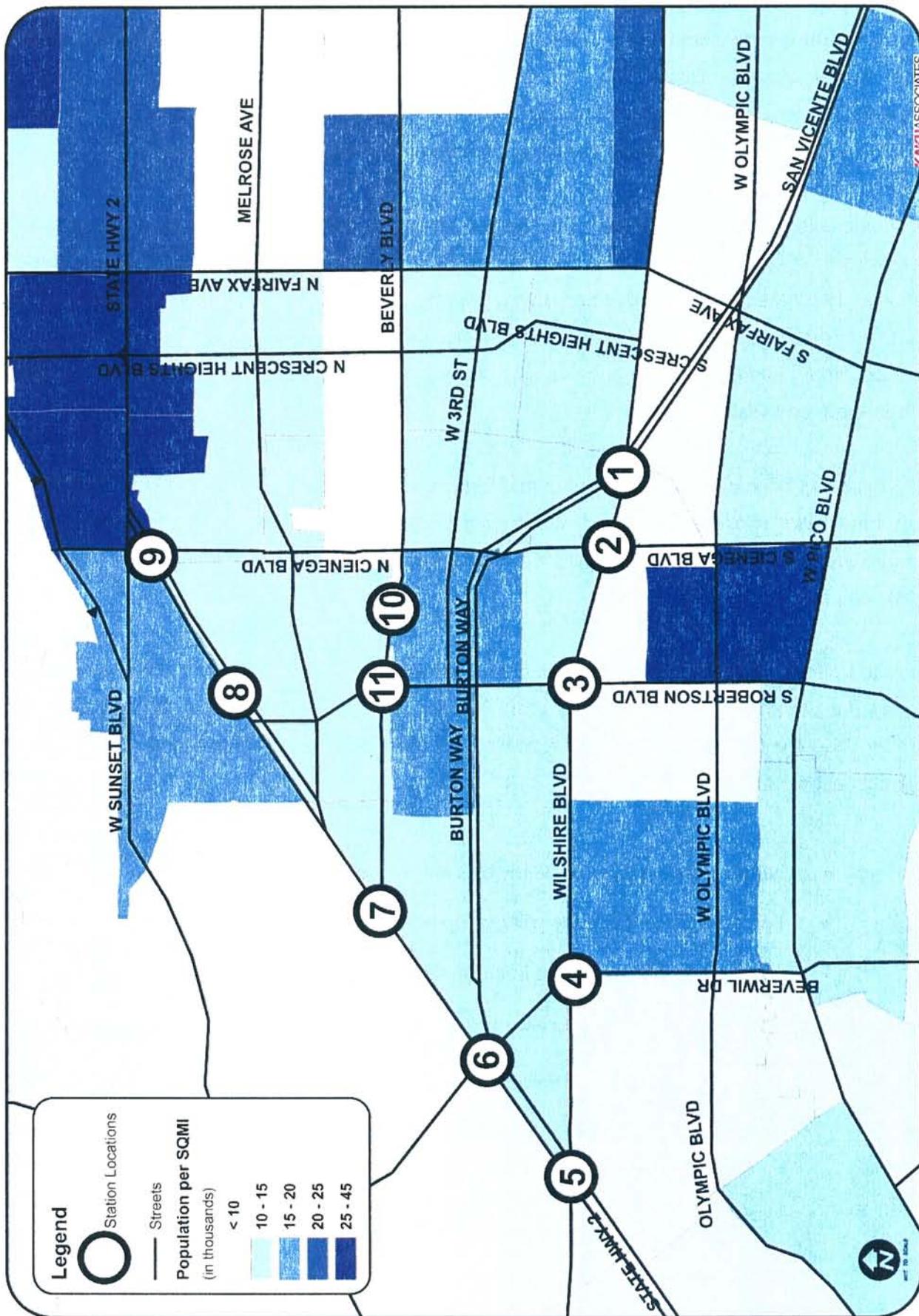


FIGURE 6
RESIDENTIAL DENSITIES NEAR POTENTIAL SUBWAY STATIONS

faster and more convenient rail service. Heavy bus activity usually suggests that there is a higher degree of feeder bus activity and, therefore, better transfer potential. Table 3 provides estimates for the existing number of passengers on board Metro transit vehicles in the a.m. and p.m. peak periods in the immediate vicinity of the potential stations.

The pedestrian environment near the station likewise influences the convenience and effectiveness of the subway line. While areas with large sidewalks, foliage, and ground-level retail help to create pleasant pedestrian environments, recent research suggests that simply the absence of major obstacles to walking—such as breaks in sidewalks, heavy vehicular traffic and few pedestrian traffic controls—goes a long way in facilitating pedestrian access to transit (Schlossberg and Weinstein 2006).

Rail transit has been shown to best serve and benefit from areas with certain types of land uses more than others. For example, areas with high activity retail and multi-family residential tend to be more compatible with rail transit than warehousing or single-family residential uses (Cervero 2004).

Given the effects of these station location characteristics on the efficiency and effectiveness of subway lines and the assumption that there will be stations at Fairfax and Wilshire and in Century City, the Committee used the following criteria to critically evaluate potential subway station locations in Beverly Hills:

- Stations spaced approximately one mile from other stations.
- High employment density within ¼ mile radius of a station.
- Heavy current bus use and bus transfer options at the potential station location.
- Heavy pedestrian activity within ¼ mile radius of a station.
- Transit-supportive land uses within ¼ mile radius of a station.

STATION LOCATIONS	AM PEAK ON-BOARDS [a]	PM PEAK ON-BOARDS [a]
1. San Vicente Boulevard & Wilshire Boulevard	836	891
2. La Cienega Boulevard & Wilshire Boulevard	5,908	5,029
3. Robertson Boulevard & Wilshire Boulevard	5,637	4,614
4. Beverly Drive & Wilshire Boulevard	10,013	8,130
5. Santa Monica Boulevard & Wilshire Boulevard	4,869	4,483
6. Beverly Drive & Santa Monica Boulevard	5,694	7,080
7. Beverly Boulevard & Santa Monica Boulevard	1,706	2,025
8. San Vicente Boulevard & Santa Monica Boulevard	4,350	5,132
9. La Cienega Boulevard & Santa Monica Boulevard	1,210	1,494
10. San Vicente Boulevard & Beverly Boulevard	3,043	2,671
11. Robertson Boulevard & Beverly Boulevard	996	1,006

[a] Data include passengers on board for all bus stops within a 1/4 mile radius of the potential station.

On-boards are counts of the number of passengers on the bus at stops along the route.

Because many passengers are double-counted, the figures here only provide relative transit use measures.

TABLE 3
EXISTING TRANSIT RIDERSHIP BY STATION LOCATIONS

Candidate Station Locations

Figures 7A through 17A provide aerial photographs of the land uses within a quarter mile radius of each potential station location. The aerial photographs are useful for depicting the general land use trends in the area and identifying major obstacles to transit use and station construction. Figures 7B through 17B provide ground-level photographs of the area near each potential station location. The ground level photographs are useful in summarizing the pedestrian environment and identifying major destinations near the potential station. The characteristics of each potential station are as follows:

Station 1: San Vicente Boulevard and Wilshire Boulevard

- Only 0.6 of a mile from the assumed Fairfax Avenue and Wilshire Boulevard station.
- High employment activity within ¼ mile radius of the station.
- Moderately light bus use at the station location.
- Heavy pedestrian activity within ¼ mile radius of a station.
- Transit-supportive land uses within ¼ mile radius of a station.
- Beverly Hills is included in less than half the ¼ mile radius.
- Wide, high-speed intersection that is ill suited for pedestrians.
- Designed for heavy vehicle use.
- Level of service (LOS) is good.
- Three-fourths of a mile south of Cedars-Sinai and the Beverly Center.

Station 2: La Cienega Boulevard and Wilshire Boulevard

- Approximately one mile from the assumed Fairfax Avenue and Wilshire Boulevard station.
- High employment density within ¼ mile radius of a station.
- Heavy bus use at the station location.



Source: 2005 Google



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FIGURE 7A
STATION 1 - SAN VICENTE BOULEVARD AND WILSHIRE BOULEVARD AERIAL



Bank of America & northwest pedestrian island



Low density to the northeast



North pedestrian crossing



Southeast pedestrian crossing



View of north corner from east



View of north



View of northeast & San Vicente



View of northwest side of intersection



Source: 2005 Google

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FIGURE 8A
STATION 2 - LA CIENEGA BOULEVARD AND WILSHIRE BOULEVARD AERIAL



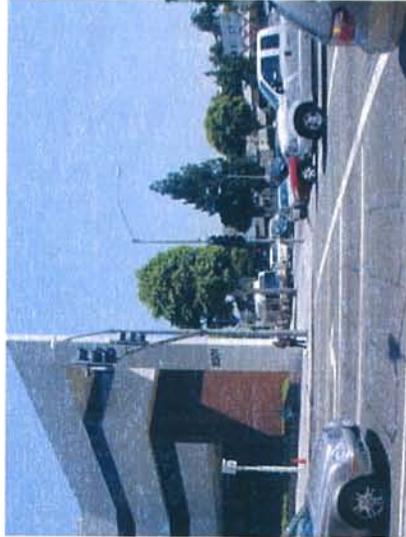
Eastern View of La Cienega



Northeast view & entrance to restaurant row



South pedestrian crossing & the Flynt publishing building



North view of intersection



Nearby residential area to west



Westerly view of Wilshire & pedestrian activity



Northeast corner office buildings



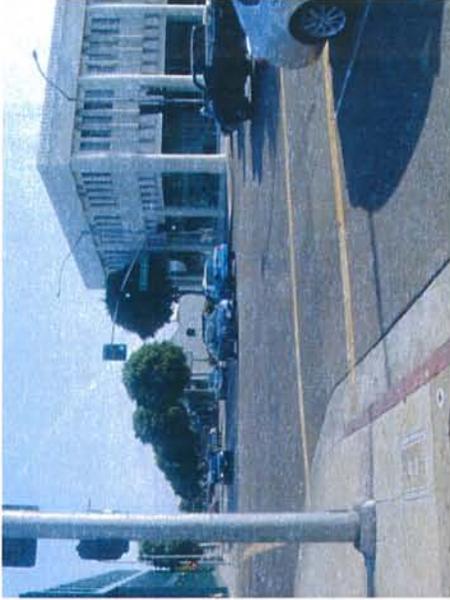
Residential area just south of Wilshire



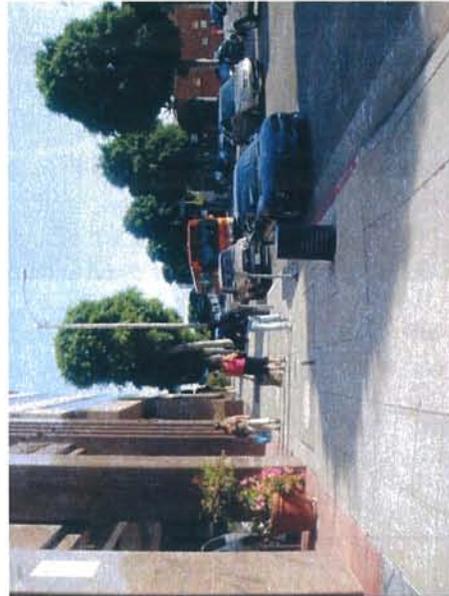
Easterly View on Wilshire Bl



Vehicle storage on NE corner



View south of intersection



View south of Robertson Bl



Westerly view on Wilshire Bl



Source: 2005 Google



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FIGURE 10A
STATION 4 - BEVERLY DRIVE AND WILSHIRE BOULEVARD AERIAL



Business Triangle at Beverly Dr & Dayton Wy



Development at Beverly Dr & Wilshire Bl



Easterly view of Wilshire Bl



Pedestrian crossings in Business Triangle at Dayton Wy



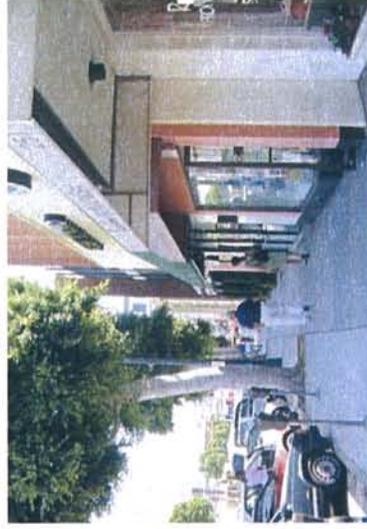
Via Rodeo just one block from Beverly Dr on Wilshire Bl



View south of Wilshire Bl



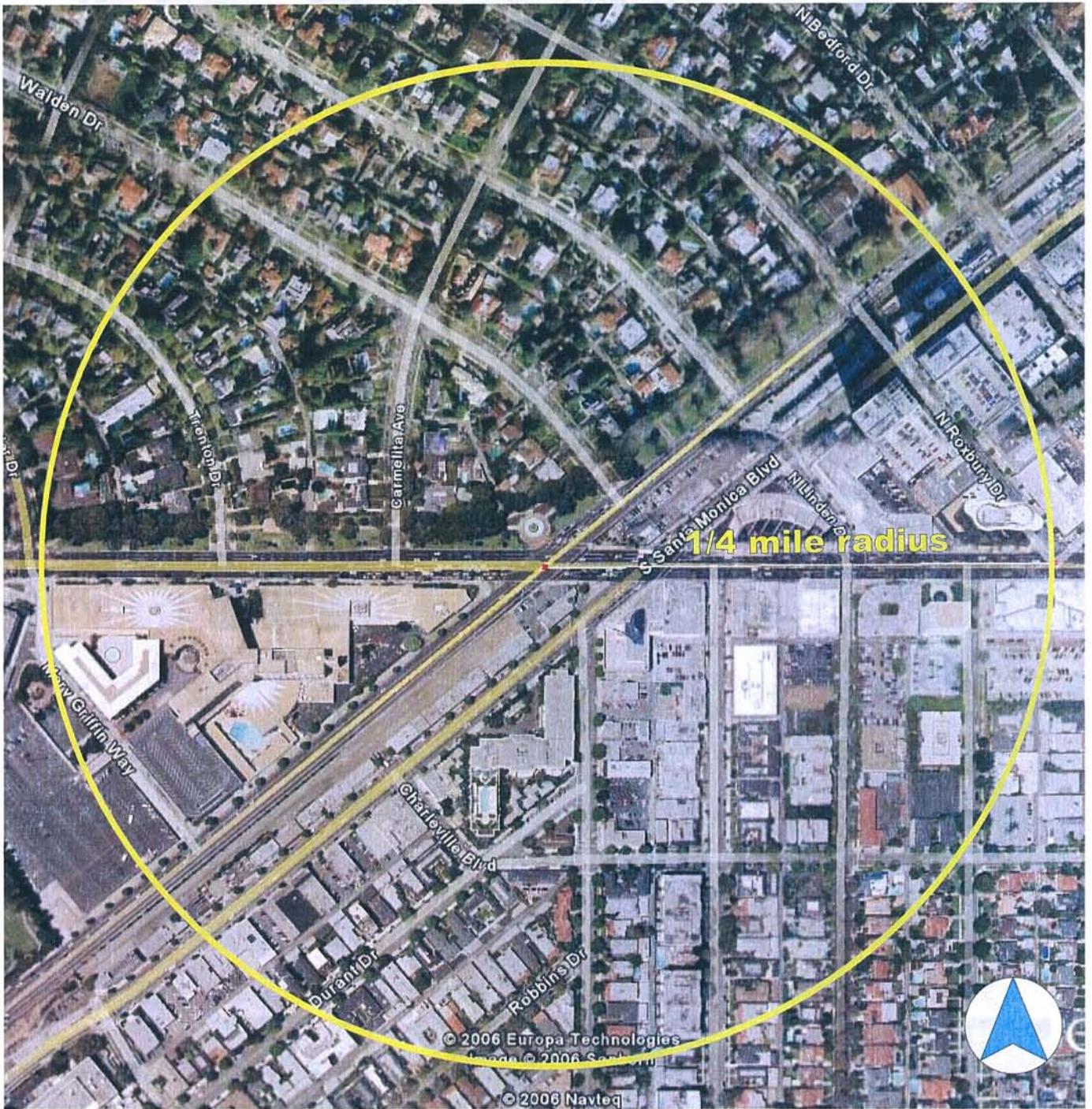
Westerly pedestrian environment along Wilshire Bl



South Beverly Dr commercial area

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FIGURE 10B
STATION 4 - BEVERLY DRIVE AND WILSHIRE BOULEVARD GROUND LEVEL PHOTOGRAPHS



Source: 2005 Google

0 330' 660'

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FIGURE 11A
STATION 5 - SANTA MONICA BOULEVARD AND WILSHIRE BOULEVARD AERIAL



Early view of N Santa Monica Bl



Robinson's-May parking structures on SW Corner



Northeast view of intersection



Northerly view of S Santa Monica Bl



Northerly view & Fountain



Northwesterly view & Trader Vic's restaurant



Southerly view on S Santa Monica Bl & Starbucks



View northeast of S Santa Monica Bl & pedestrian island



View of Wilshire extending North



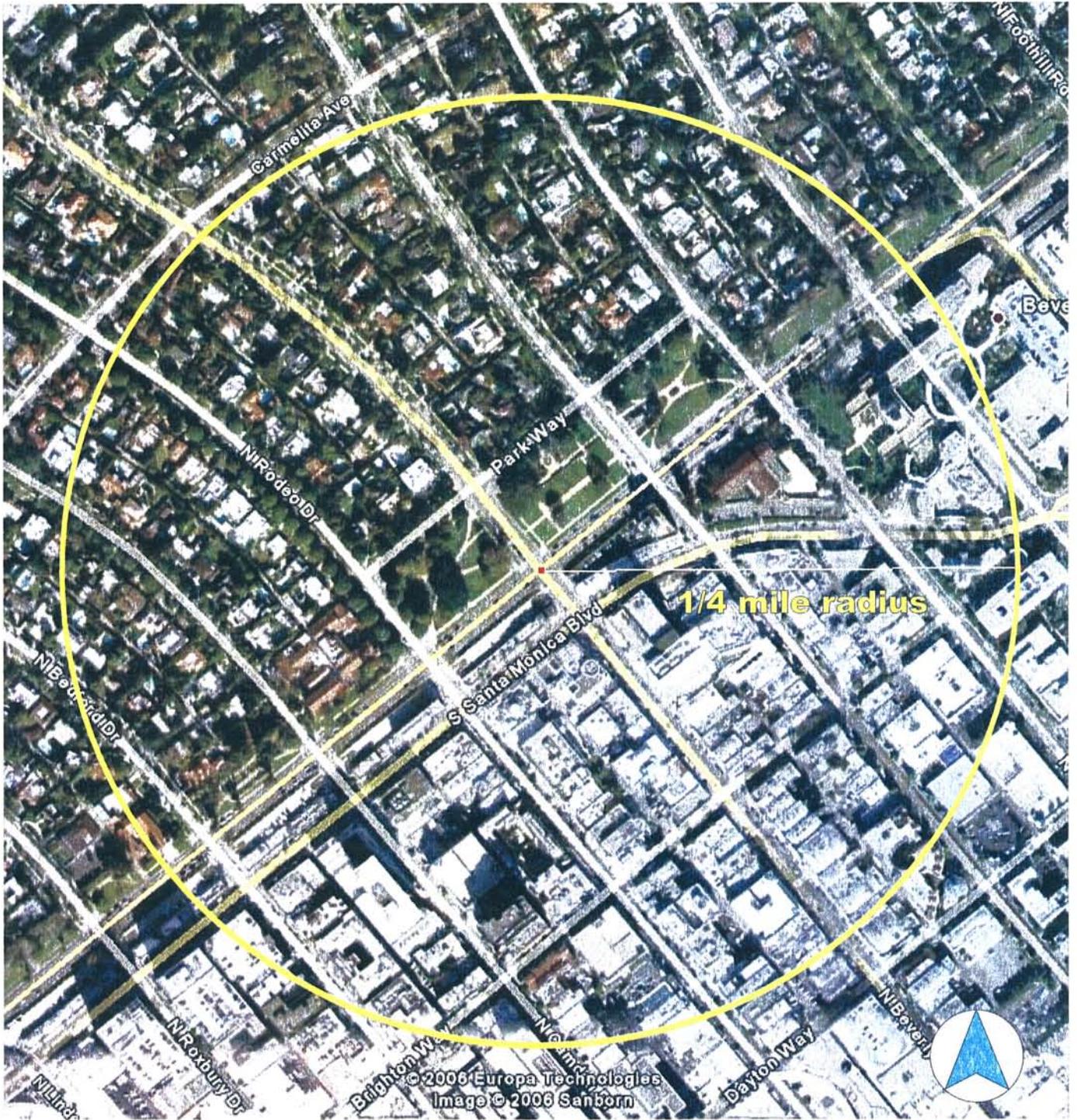
View southeast at S Santa Monica Bl



West



Robinson's -May site



Source: 2005 Google



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FIGURE 12A
STATION 6 - BEVERLY DRIVE AND SANTA MONICA BOULEVARD AERIAL



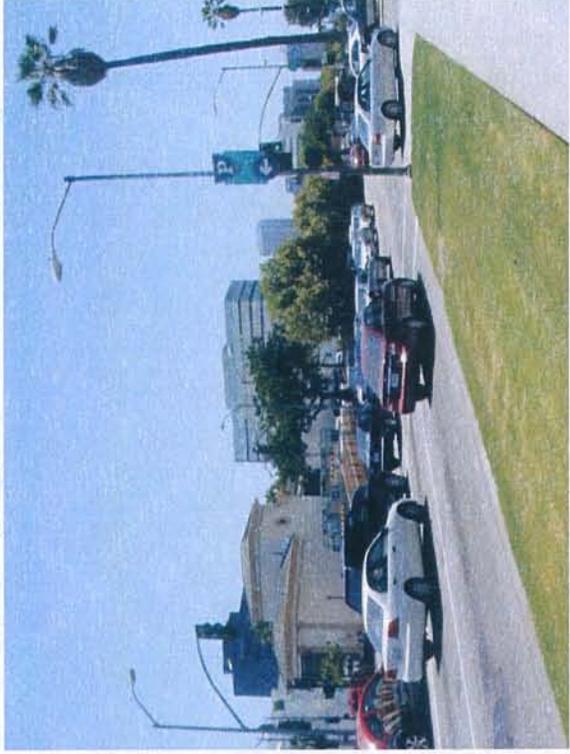
Beverly garden park



Southwesterly view of intersection



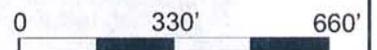
View of Business Triangle to South



View of Santa Monica Bl to southwest



Source: 2005 Google



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FIGURE 13A
STATION 7 - BEVERLY BOULEVARD AND SANTA MONICA BOULEVARD AERIAL



Northeast



South



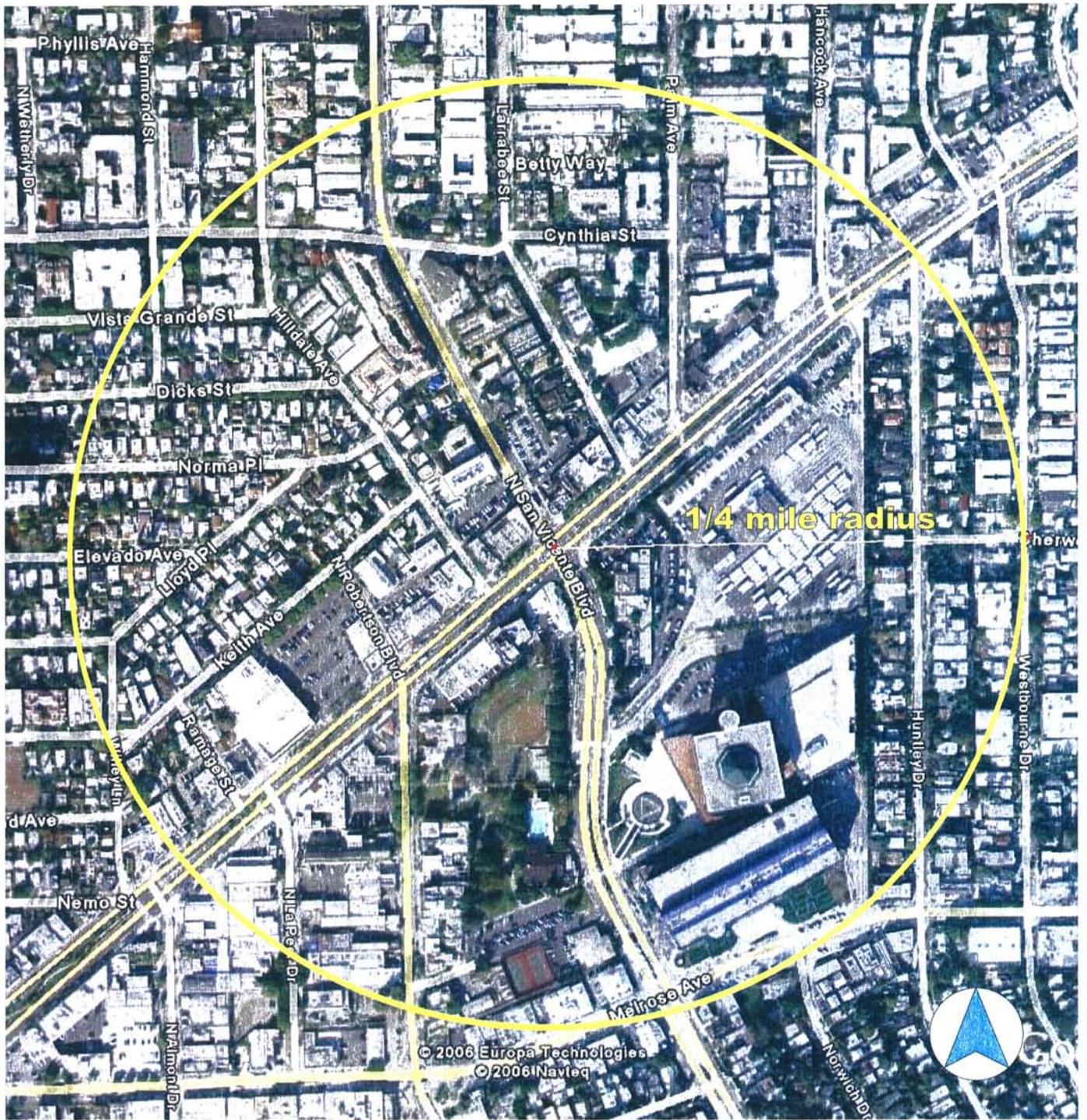
Southeast



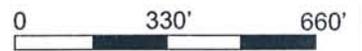
View of residential area to the north

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FIGURE 13B
STATION 7 - BEVERLY BOULEVARD AND SANTA MONICA BOULEVARD GROUND LEVEL PHOTOGRAPHS

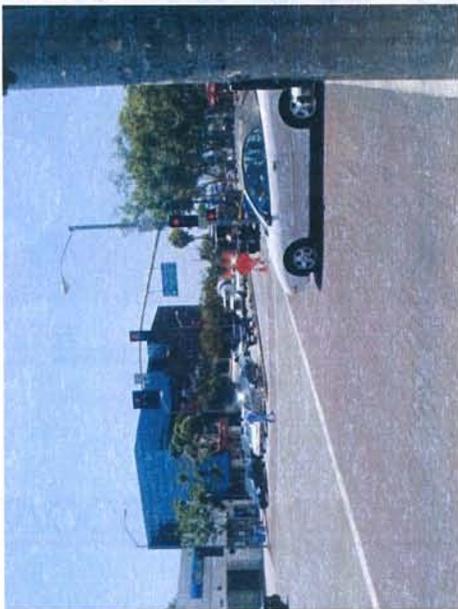


Source: 2005 Google



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FIGURE 14A
STATION 8 - SAN VICENTE BOULEVARD AND SANTA MONICA BOULEVARD AERIAL



Northeasterly view of Santa Monica Bl



Pedestrian crossing



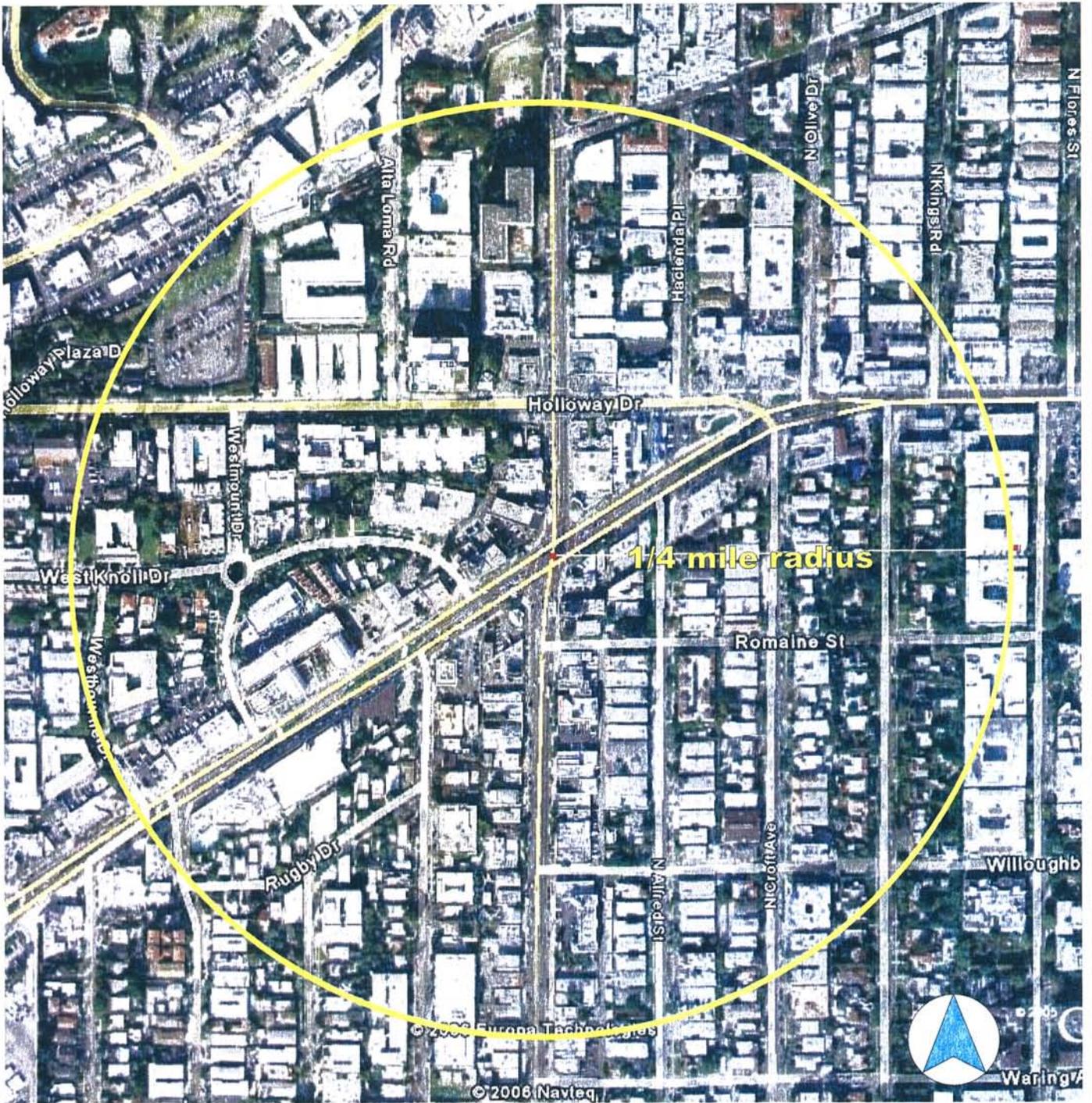
Pedestrian crossing between intersections



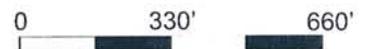
Pedestrian environment along Santa Monica Bl



View to the north



Source: 2005 Google



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FIGURE 15A
STATION 9 - SANTA MONICA BOULEVARD AND LA CIENEGA BOULEVARD AERIAL



Santa Monica Bl W of La Cienega Bl



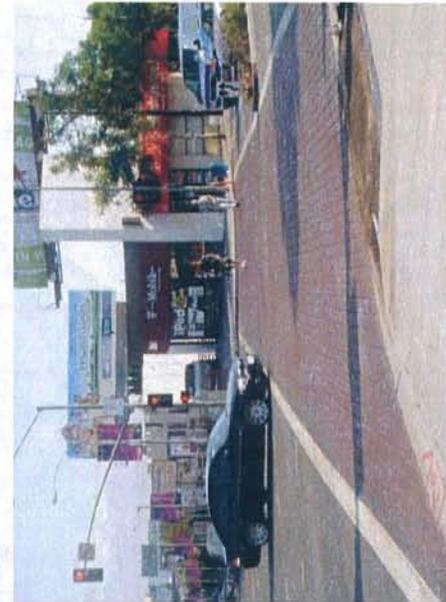
View east on Santa Monica Bl



View south of La Cienega Bl



View west on Santa Monica Bl



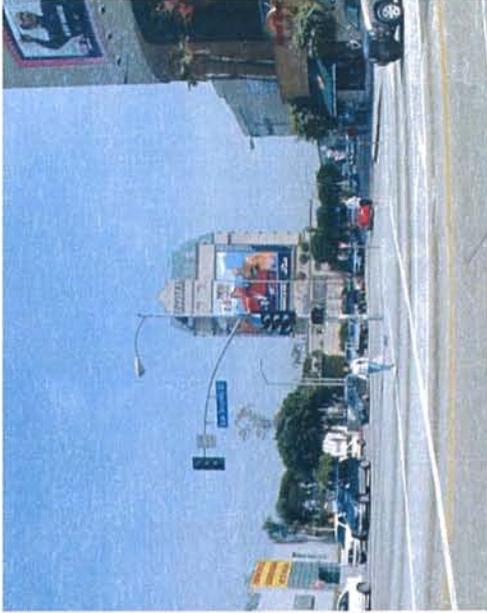
West pedestrian crossing



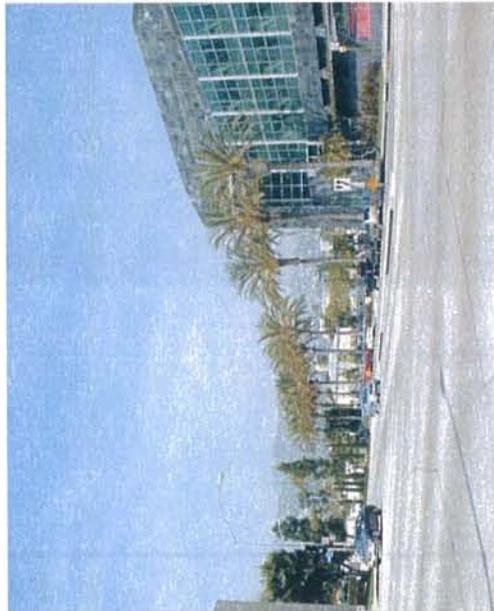
Beverly Center



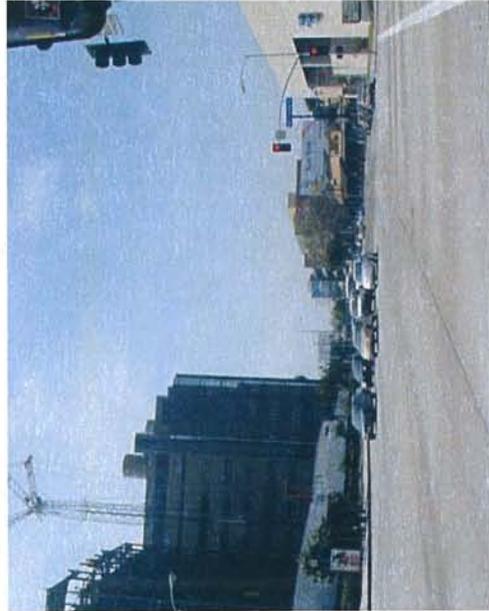
Cedars-Sinai & Beverly Center



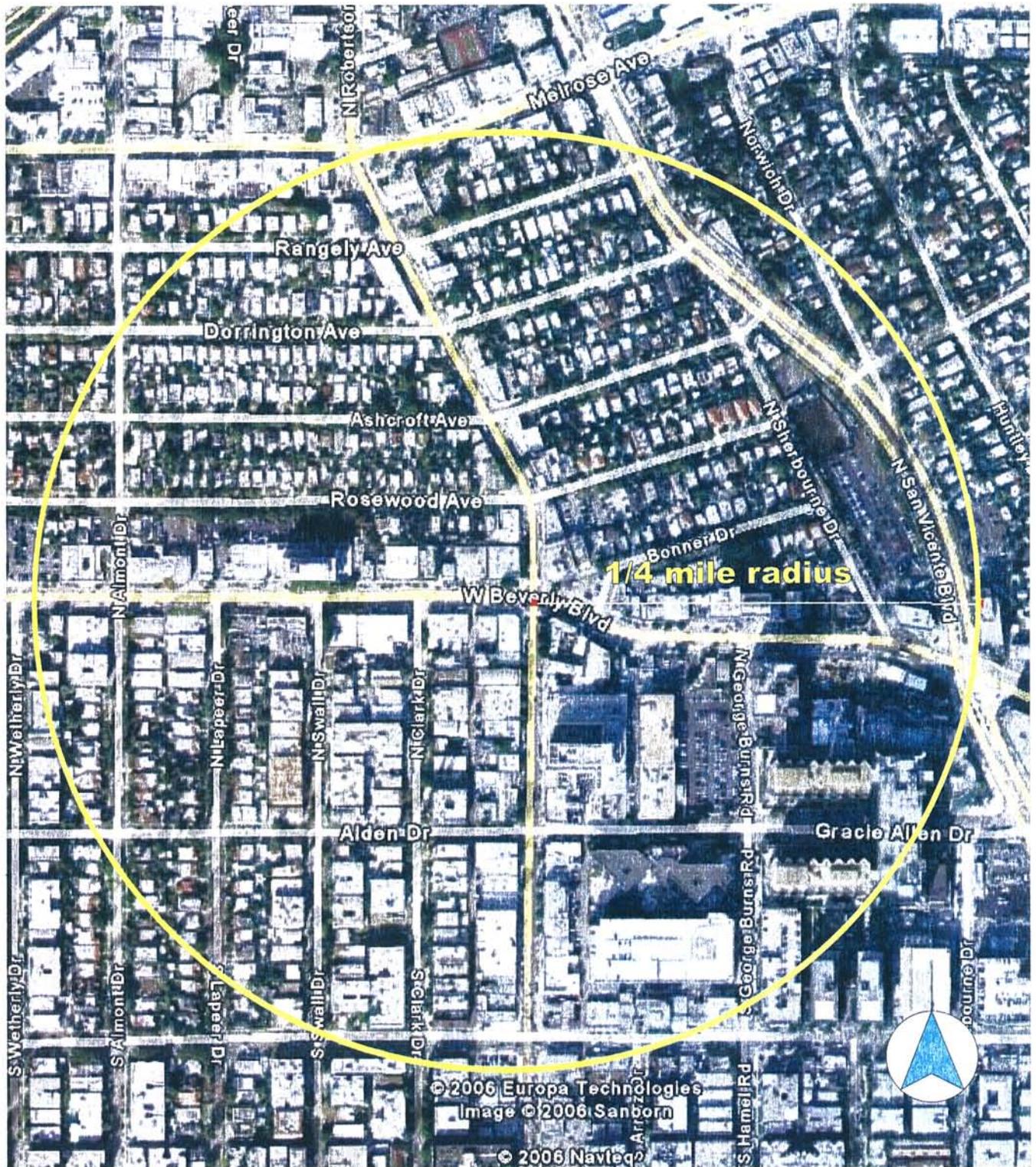
Southeast pedestrian crossing



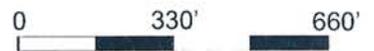
View south on San Vicente Bl



Westerly view on Beverly Bl



Source: 2005 Google

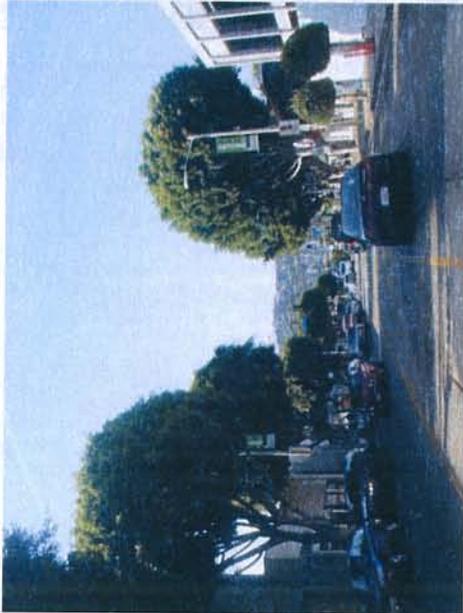


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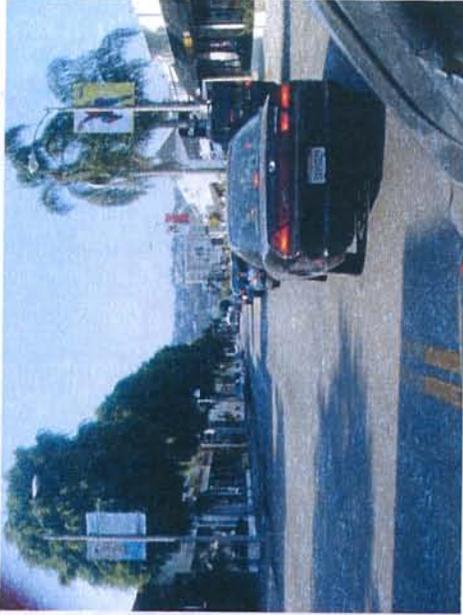
FIGURE 17A
STATION 11 - BEVERLY BOULEVARD AND ROBERTSON BOULEVARD AERIAL



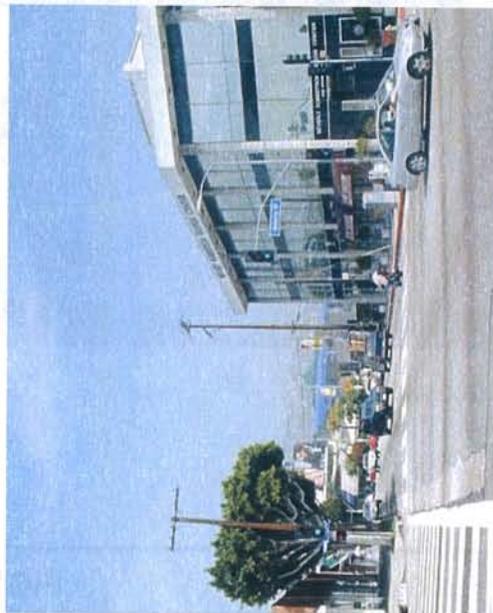
Residential neighborhood near intersection



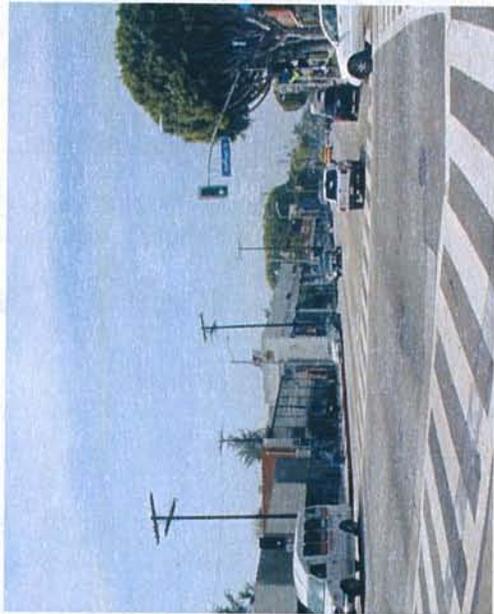
Retail between Wilshire & Beverly Bl on Robertson Bl



View north on Robertson Bl



View south on Robertson Bl



View west on Beverly Bl

- Heavy pedestrian activity within ¼ mile radius of a station.
- Transit-supportive land uses within ¼ mile radius of a station.
- Three-fourths of a mile south of Cedars-Sinai and the Beverly Center
- Multi-family dwelling units are to the south of Wilshire Boulevard, east of La Cienega Boulevard.

Station 3: Robertson Boulevard and Wilshire Boulevard

- Approximately 1.3 miles from the assumed Fairfax Avenue and Wilshire Boulevard station.
- High employment density within ¼ mile radius of a station.
- Moderate bus use at the station location. Bus service is not as good as on La Cienega Boulevard.
- Heavy pedestrian activity within ¼ mile radius of a station.
- Transit-supportive land uses within ¼ mile radius of a station.
- Three-fourths of a mile south of Cedars-Sinai and the Beverly Center.
- Small retail along Robertson Boulevard to the north.
- Horace Mann Elementary School is to the southeast on Charleville Boulevard.
- Robertson is a narrower street than La Cienega or San Vicente.

Station 4: Beverly Drive and Wilshire Boulevard

- Approximately 1.1 miles to the assumed Century City station, 1.6 miles from a San Vicente/Wilshire station, 1.2 miles from a La Cienega/Wilshire station, and 1 mile from a Robertson/Wilshire station.
- High employment density within ¼ mile radius of a station.
- Heavy bus use at the station location.
- Heavy pedestrian activity within ¼ mile radius of a station.
- Transit-supportive land uses within ¼ mile radius of a station.

- Serves the business triangle, the department stores and the south Beverly Drive business area within the ¼ mile radius of the station.
- Subway riders likely to walk beyond ¼ mile radius because of the pleasant pedestrian environment in the business district.
- Non-resident tourist, shoppers and employees can reach the center of the business district by subway from this location.

Station 5: Santa Monica Boulevard and Wilshire Boulevard

- Only 0.6 miles to the assumed Century City station.
- High employment density within ¼ mile radius of a station.
- Heavy bus use at the station location.
- Heavy pedestrian activity within ¼ mile radius of a station.
- Transit-supportive land uses within ¼ mile radius of a station.
- Only a fragment of the business district is in the ¼ mile radius of the station. As such the location misses the core of the business triangle, the department stores and the south Beverly Drive business district.
- Complex intersection.
- Vacant railroad right-of-way on the southeast corner.
- Potential link to the Hilton Hotel and Robinson's-May sites.
- El Rodeo Elementary School to the northwest.
- Less density of use than Beverly Drive and Wilshire Boulevard area.

Station 6: Beverly Drive and Santa Monica Boulevard

- 1.1 miles to the assumed Century City station, but not on the preferred Wilshire Boulevard alignment.
- High employment density within ¼ mile radius of a station.
- Heavy bus use at the station location.
- Heavy pedestrian activity within ¼ mile radius of a station.
- Transit-supportive land uses within ¼ mile radius of a station.

- Subway riders are likely to walk beyond ¼ mile radius because of the pleasant pedestrian environment in the business district.
- Over half the ¼ mile radius includes low-density single-family residences.
- Serves the Civic Center.
- Beverly Garden Park on the north.
- Non-resident transit riders may frequent park.
- Non-resident customers and employees can reach the business district by subway; however, it does not cover the core of the business triangle, the department stores or the south Beverly Drive business area within the ¼ mile radius.
- Abuts city-owned parking structures on south.
- Far from department stores and south Beverly Drive.

Station 7: Beverly Boulevard and Santa Monica Boulevard

- 2.2 miles from the assumed Fairfax Boulevard and Wilshire station and is not on the preferred Wilshire Boulevard alignment.
- High employment density within ¼ mile radius of a station.
- Light bus use at the station location.
- Minimal pedestrian activity within ¼ mile radius of a station.
- Limited transit-supportive land uses within ¼ mile radius of a station.
- Does not serve the business district.
- There is a parking strip along Civic Center Drive to Beverly Drive.
- Half the ¼ mile radius includes low-density single-family residences.
- Beverly Boulevard ends at Santa Monica Boulevard where there is single-family residential on the north side of Santa Monica Boulevard.

Station 8: San Vicente Boulevard and Santa Monica Boulevard

- Two miles from the assumed station at Fairfax Boulevard and Wilshire and is not on the preferred Wilshire Boulevard alignment.
-
- Light employment density within ¼ mile radius of a station.
- Moderate bus use at the station location.
- Moderate pedestrian activity within ¼ mile radius of a station.
- Transit-supportive land uses within ¼ mile radius of a station.
- Not located in the City of Beverly Hills.
- Low-density residential and commercial uses.
- Just northwest of the Pacific Design Center.

Station 9: La Cienega Boulevard and Santa Monica Boulevard

- Two miles from the assumed station at Fairfax Boulevard and Wilshire and is not on the preferred Wilshire Boulevard alignment.
- Light employment density within ¼ mile radius of a station.
- Moderate bus use at the station location.
- Moderate pedestrian activity within ¼ mile radius of a station.
- Transit-supportive land uses within ¼ mile radius of a station.
- Not located in the City of Beverly Hills.
- Low-density residential and commercial uses.
- Heavy vehicular traffic.

Station 10: San Vicente Boulevard and Santa Monica Boulevard

- Two miles from the assumed station at Fairfax Boulevard and Wilshire and is not on the preferred Wilshire Boulevard alignment.
- High employment density within ¼ mile radius of a station.

- Not located in the City of Beverly Hills.
- Moderate bus use at the station location.
- Moderate pedestrian activity within ¼ mile radius of a station.
- Transit-supportive land uses within ¼ mile radius of a station.

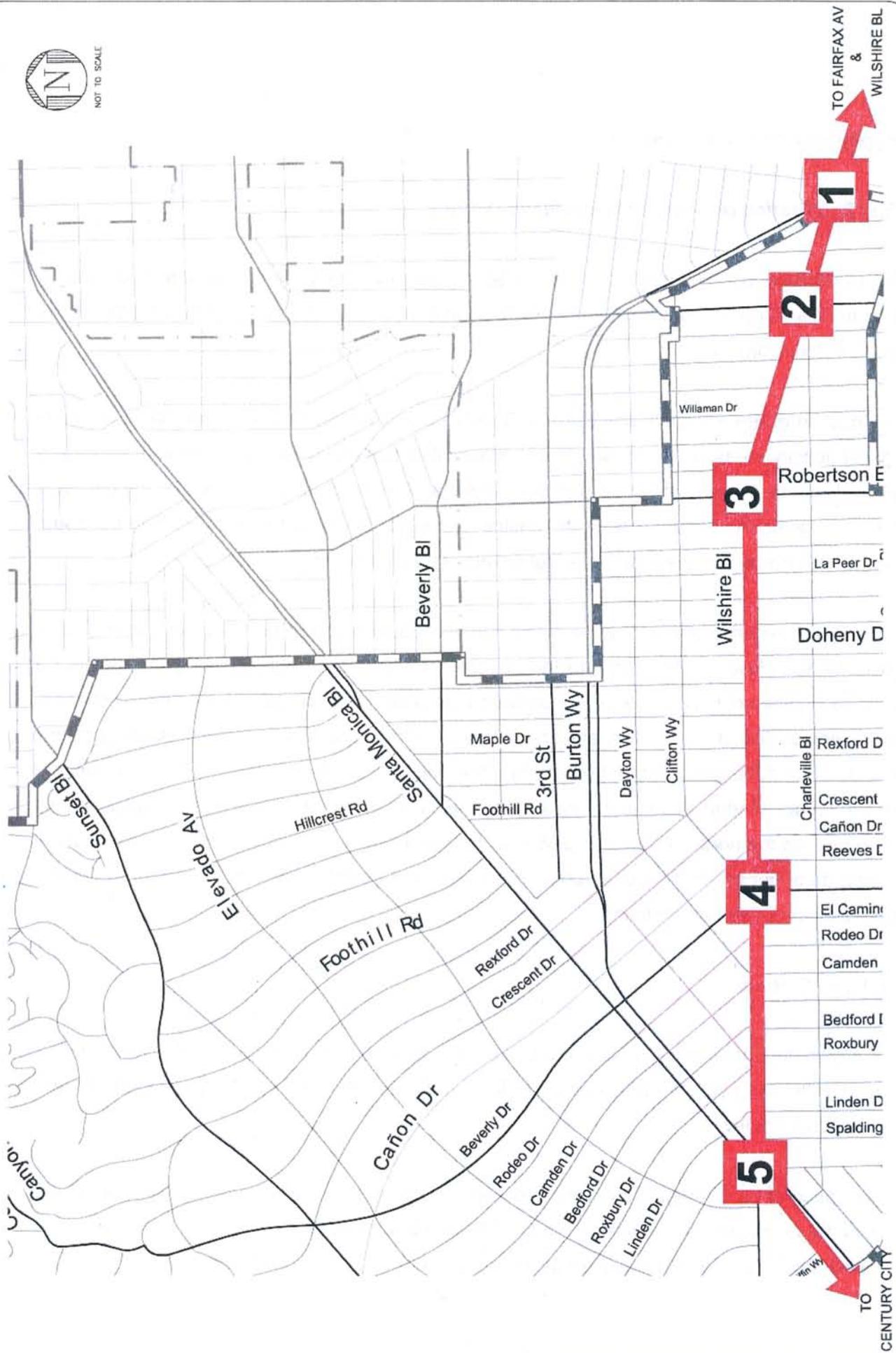
Station 11: Beverly Boulevard and Robertson Boulevard

- 1.6 miles from the assumed station at Fairfax Boulevard and Wilshire, but not on the preferred Wilshire Boulevard alignment.
- High employment density within ¼ mile radius of a station.
- Heavy bus use at the station location.
- Heavy pedestrian activity within ¼ mile radius of a station.
- Transit-supportive land uses within ¼ mile radius of a station.
- The ¼ mile radius captures Cedars-Sinai.
- Beverly Center is over one-quarter mile to the east.
- Not located in the City of Beverly Hills.
- Small retail along Robertson Boulevard.
- Low-density residential area to the northwest.

RECOMMENDED ALIGNMENT AND STATION LOCATIONS

Recommended Alignment

Given the extraordinarily high transit ridership along the Wilshire corridor and the direct access it will provide to points east, especially to downtown, and to points west, especially to Century City and Westwood, the Committee found that the Wilshire Boulevard alignment is the option that best serves the regional transportation system and the City of Beverly Hills. While stations along the Santa Monica Boulevard alignment could serve the City of Beverly Hills, the stations along Wilshire Boulevard serve the City of Beverly Hills better when applying the criteria for selecting subway stations. The Wilshire alignment also has the advantage of it being a “straight alignment” as opposed to a more complex “zig zag alignment” (see Figure 3) which would be more costly to construct and would increase the travel time for subway patrons. The Wilshire Boulevard alignment is shown in Figure 18.



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FIGURE 18
THE WILSHIRE BOULEVARD ALIGNMENT

Recommended Station Locations

West End Station (Beverly Hills Business District)

The Committee unanimously concluded that the recommended station at the west end of Beverly Hills along Wilshire Boulevard should be at or near the intersection of Beverly Drive and Wilshire Boulevard.

The location at Beverly Drive and Wilshire Boulevard is 1.1 miles from Century City, covers the highest density areas in the City within a ¼ mile radius, has heavy pedestrian activity within a ¼ mile radius, has transit-supportive land uses within a ¼ mile radius, serves most of the business district including the central core of the business triangle, the department stores and the south Beverly Drive business area, and has high levels of transit ridership.

The Committee determined that the Santa Monica Boulevard and Wilshire Boulevard station would be too close, at 0.6 miles, to the assumed Century City station, is 2.0 miles from La Cienega Boulevard, which is twice the preferred distance between stations, and does not serve the business district well. The station at Beverly Drive and Santa Monica Boulevard was considered and found inferior to the Beverly Drive and Wilshire location because it is not located on the recommended alignment, one-half of the ¼ mile radius is low density single family residential on the north side of Santa Monica Boulevard, and the half that is in the commercial district, does not reach the center core of the business triangle, the department stores or the south Beverly Drive business area.

East End Station

The Committee unanimously concluded that the recommended station at the east end of Beverly Hills along Wilshire Boulevard should be at or near the corner of La Cienega Boulevard and Wilshire Boulevard.

The location at La Cienega Boulevard and Wilshire Boulevard is approximately one mile to the east of the recommended Beverly Drive and Wilshire Boulevard station and one mile west of the planned Fairfax Boulevard and Wilshire Boulevard station. The area immediately surrounding

the intersection of La Cienega Boulevard and Wilshire Boulevard has the highest transit ridership, commercial activity, and pedestrian activity at the east end of Beverly Hills.

The Committee determined that the two other locations along Wilshire Boulevard in the east end of the City—San Vicente Boulevard and Wilshire Boulevard and Robertson Boulevard and Wilshire Boulevard—are inferior alternatives to the proposed station at La Cienega Boulevard and Wilshire Boulevard. San Vicente Boulevard and Wilshire Boulevard is a wide, vehicle-centered intersection with poor pedestrian access and has lower density immediately surrounding the station than does a station at La Cienega Boulevard. The intersection is too close to the assumed station at Fairfax Avenue and Wilshire Boulevard, at only 0.6 miles. Only half of the ¼ mile radius would be in Beverly Hills, and if the station were on the east side of San Vicente, it would not even be located in Beverly Hills.

The area in the vicinity of Robertson Boulevard and Wilshire Boulevard has lower transit ridership than that of La Cienega Boulevard and Wilshire Boulevard and contains only small-scale commercial development. Robertson Boulevard is a much narrower street than La Cienega, offering fewer opportunities for transit related commercial development.

The Committee also gave serious consideration to stations that would serve Cedar-Sinai Medical Center and the Beverly Center. The Committee found that peak period ridership was lower than a station that would serve the southeastern limits of the City along Wilshire Boulevard at the La Cienega Boulevard intersection. The Committee determined deviating from the Wilshire alignment to reach a station at Cedars-Sinai and the Beverly Center was not justified due to additional construction cost, increased travel time on the subway, the absence of an east end Beverly Hills station and the current high level of local and Rapid bus service on La Cienega Boulevard, along with a possible new “dash” service that would connect a La Cienega station to Cedars-Sinai and the Beverly Center, a distance of 0.8 miles to the north.

The two recommended station locations in the City of Beverly Hills are shown in Figure 19.

V. RELATED ISSUES

The Committee determined that, as part of its charge, the Committee must be satisfied that the station locations appear feasible. The Committee discussed possible locations where staging, excavation and portals could be located at or near the recommended station locations at La Cienega Boulevard and Wilshire Boulevard and Beverly Drive and Wilshire Boulevard. The Committee found that multiple alternatives are available at or near the recommended station locations that appear to be feasible.

The Committee also concluded that construction and ongoing operational impacts must be at acceptable levels to the community. The Committee agreed that, if feasible, it would be preferable to conduct the underground tunneling beneath the public right-of-way along Wilshire and Santa Monica Boulevards and not under residential properties. After conversations with an expert on vibration and noise impacts, the Committee concluded that with mitigation measures the vibration and noise impacts of a subway system would be acceptable whether constructed under public rights of way or under commercial or residential properties.

FEASIBILITY OF RECOMMENDED STATION LOCATIONS

After comprehensive discussion with staff and transit experts the Committee learned the following regarding the feasibility of a station at the two sites of La Cienega and Wilshire Boulevard and Beverly Drive and Wilshire Boulevard:

- For both stations, Wilshire Boulevard would need to be closed for eight to ten weekends for station construction. For any station the Committee reviewed, either on Wilshire Boulevard or Santa Monica Boulevard, the roadway would need to be closed for this time period. This is the same for all of the stations along Wilshire Boulevard east of Beverly Hills. For example, the stations at Crenshaw Boulevard, La Brea Avenue and Fairfax Avenue would undergo similar construction-related impacts.
- During the phase of the construction when dirt is being removed, a construction portal of 60 by 60 feet is needed. Thereafter, a construction portal of 30 by 60 feet is required until the completion of the construction.

- For operations, a station portal of 15 feet wide and 10 feet long is needed for a two-way escalator and stair entrance and exit. An area for an elevator is also required.

Based on observations of the two sites, it appears that stations could be constructed and operated at both recommended locations. A detailed analysis of the relevant factors will be conducted as part of the Metro's environmental review process to confirm feasibility at these locations. Possible portal locations were identified:

- At Beverly Drive and Wilshire Boulevard, sufficient space exists at the following locations: in the front of the Bank of America Building at the northwest corner of Wilshire Boulevard and Beverly Drive, as part of any new building to be constructed immediately north of the Bank of America building, the Sterling Building on the north side of Wilshire Boulevard between Beverly Drive and Canon, the property at the southwest corner of Wilshire Boulevard and Reeves Drive where a one story building now exists or the property at the southwest corner of Wilshire Boulevard and Canon Drive which currently is an empty lot.
- At La Cienega Boulevard and Wilshire Boulevard sufficient space for a station portal exists at the following locations: in the front of the Flynt Building (Washington Mutual) at the southeast corner of Wilshire and La Cienega and the property at the northeast corner of the intersection where a 1-story bank building currently is located.

A construction staging area of 40,000 to 60,000 square feet (sf) is also needed for subway construction for a period of approximately three years. The staging area would not need to be immediately adjacent to the construction site. Examples of locations that could serve as staging locations include: the "T-zone" property adjacent to Santa Monica Boulevard west of Wilshire Boulevard (approximately 90,000 sf), and the former railroad right-of-way adjacent to Santa Monica Boulevard between City Hall and Doheny Drive (the parcel west of Beverly Boulevard is approximately 96,000 sf and the parcel east of Beverly Boulevard is approximately 106,000 sf). Another possible location, in particular for the La Cienega and Wilshire station, would be a portion of the eastside of La Cienega Park, which is several acres in size. If the staging area were to be located several blocks away (such as at the T-zone on Little Santa Monica west of Wilshire or the T-zone area north of the Industrial Area), parts, equipment and soil would have to be transported through the City, causing potential disruption. These impacts could be mitigated by conducting hauling operations at night.

For soil excavation, a construction entrance of 60 by 60 feet would be needed for a period of 1.5 years. A smaller area may be used combined with vertical lifts to extract the dirt. Possible construction entrances were identified:

- For Beverly Drive and Wilshire Boulevard, options include closing one lane of the following streets: Beverly Drive, the alley north of Wilshire between Rodeo Drive and Beverly Drive or Reeves Drive. Also, if portals were located at the Reeves Drive or Canon Drive sites referenced above, these properties could be used for the dirt extraction.
- For La Cienega/Wilshire, a variety of options exist in the immediate vicinity. The front of the Flynt Building or the closure of a portion of Hamilton Drive just south of Wilshire Boulevard next to the east side of the Flynt building would likely provide sufficient space. The acquisition of the property at the northeast corner of Wilshire and La Cienega Boulevards would provide sufficient space.

Another possibility for both stations is to transport soil “through the tunnels” and excavate at another location. Although this is a more expensive option, it may be worth advocating.

CONSTRUCTION AND OPERATIONAL IMPACTS

During the Alternatives Analysis portion of the Major Investment Study, Metro will determine the route alignment and if the tunnel will be constructed under arterials or commercial/residential buildings. If a Wilshire alignment is chosen with a station at or near Beverly Drive and Wilshire Boulevard, two options exist for the alignment between this station and the station to the west in Century City:

1. Tunnel under Wilshire and Santa Monica Boulevards.
2. Tunnel under some commercial and residential properties.

Metro would chose between the two above options based on the location of the station in Century City west of Beverly Hills, the results of their geo-technical studies and the location of the staging areas. At this time, Metro does not know which option would be preferable and/or most cost effective; however, the agency has indicated that tunneling only under the public right-of-way along Wilshire and Santa Monica Boulevards appears feasible.

With regard to tunneling under existing buildings, the Committees learned the following facts:

- The earth pressure balance machine using closed-face shield tunneling technology used on the Eastside light rail project has resulted in no measurable soil erosion or settlement.

- During construction some minor noise may be heard within above grade buildings for a few days as the tunnel boring machine passes underneath.
- Noise and vibration from train operations is identified as part of the environmental documentation required by Federal Law. Any noise or vibration that may be perceived by humans can be fully mitigated with concrete liners and other mitigation measures.
- Other subways in Los Angeles have been constructed by tunneling under commercial and residential buildings, and Metro has not received any complaints in this regard from subway train operations.

The Committee participated in conversations with Stephen Wolf, a noise and vibration specialist employed by Parsons Brinckerhoff, Inc. who has worked on several subway projects for Metro and elsewhere. Mr. Wolf explained that during subway construction, residences and businesses could experience very slight noise and vibration for a period of about a week. In tangible terms, the vibration from construction is typically so low that movement of water in a clear glass would hardly be visible.

The Committee considered two matters regarding subway operations: 1) ground-borne vibration and 2) ground-borne noise. The Committee was told that vibration impacts from the operation of all the current Los Angeles subway lines are not perceptible by humans. The only true concern is the impact of ground-borne noise, which may be detectible by the human ear. A natural factor that helps to reduce the potential for ground-borne noise is softer soil conditions.

Physical mitigation measures to reduce ground-borne noise include:

- Providing greater distance from the tunneling to the above ground surface
- Using resilient rail fasteners for rail and tunnel isolation
- Placing the rails on a floating slab of concrete that is isolated by rubber pads.

The floating slab mitigation measure is normally used only in cases where there is a high expectation of noise impacts, such as in places where the tunnel is shallow and under a residential area.

All the experts consulted by the Committee agreed that with the current state of engineering and construction, the effects of soils settlement, vibration and noise on surface buildings can be fully mitigated. The Committee noted that the conclusions on noise and vibration are based on over 15 years of subway operation in Los Angeles County. The conclusion on soil settlement using the latest tunneling technology is based on 1.5 years during the construction of the Eastside rail extension, not the 15 years of general operations. While issues relating to soil

settlement could develop as the subway continues to operate in future years even if none are now known, this possibility appears unlikely.

If the subway were to run underneath either business or residential buildings, the Committee is satisfied that, based on information received from the experts consulted, there is little likelihood of surface damages. At the Committee's request, Metro reviewed its records regarding complaints and damage claims during the construction of the most recent Eastside rail extension and concluded there were no reported complaints or damage claims relating to the tunneling construction. If any surface damage were to occur the property owner would have the burden to prove causation. The Committee noted that it is within the jurisdiction of Metro, not the City, to determine whether the subway route would be under existing rights-of-way or partially under commercial and/or residential buildings. This determination shall be subject to public hearings at which the City of Beverly Hills and residents and businesses of Beverly Hills may participate.

The Committee concluded that the construction and operation of subway stations and tunnels at the recommended locations appear feasible as to construction and manageable with respect to the operations of the subway. The Committee also concluded that, given the option, the Committee prefers that Metro tunnel beneath the public right-of-way rather than beneath residential and commercial properties to link the proposed Beverly Drive and Wilshire Boulevard station to the assumed station in Century City.

SUBWAY STATION SECURITY

Introduction

The issue of crime and terrorism related to the proposed subway was of significant importance to the Committee. The Committee had the opportunity to review past findings of the 1992 Beverly Hills Public Transportation and Transit Committee (PTTC) Majority and Minority Reports, the most recent study of crime relating to the Metro Green Line and met with Metro's Director of Intelligence and Emergency Preparedness. The Committee rode the Red Line into downtown Los Angeles and was favorably impressed with the design and security of the subway trains and stations. The Committee also met with Paul Lennon, then Metro's Director of

Intelligence and Emergency Preparedness. The Committee concluded that with adequate resources dedicated to subway security, subway and surface-related crime would be manageable and not be a deterrent to recommending a subway line and stations within the City of Beverly Hills.

City of Beverly Hills Public Transportation and Transit Committee Findings of Subway Related Crimes, 1992

In 1992 the City Council of Beverly Hills appointed the seven-member PTTC with a similar charge of the Committee. The PPTC unanimously supported a Wilshire Boulevard subway alignment and, accordingly rejected a "Pico/San Vicente - Midtown" alignment then under consideration. By a vote of 5 to 2 the PTTC recommended that Beverly Hills be part of the proposed subway system. As a result, the PPTC had two separate recommendations termed the "Majority Report," which supported including Beverly Hills in the plans for a regional subway system and a "Minority Report" which opposed including Beverly Hills.

The conclusion of the Majority Report stated that, "subway related crime is of concern but, due to security-oriented station design, system-wide electronic surveillance and transit policing, seems to be controllable in modern subway systems. Patrolling is easier on rail lines which have controlled access at stations compared with non-patrolled buses which make numerous stops (6000 daily bus stops within Beverly Hills)." The Majority stated the PTTC also found that studies of that time of the New York subway system concluded that transit crime does not travel with subway systems.

The Minority Report echoed the conclusion of the Majority Report that crime on transit was not a reason to oppose a subway system. The Minority Report stated that subway crime "...is not a fear founded in facts. We have checked with many other cities that have a subway. We even had a former New York subway policeman address us. The basic conclusion is that criminals do not use the subway as their form of transportation when committing a crime. The information we have shows that crime around a subway station mirrors the crime in the area in general. Crime around a subway station in high crime areas will be high; crime around a subway station in a low crime area will be low. In fact there was almost unanimous opinion that crime moving into

Beverly Hills on the subway will not be a problem. Fear of increased crime is not a good reason to oppose a subway."

UCLA Metro Green Line Study, 2003

In 2003, UCLA published a study of crime related to the Green Line that serves areas with some of the highest crime rates in Los Angeles County. It runs in an east-west direction from Norwalk to El Segundo near LAX, largely in the median of the Century/105 Freeway. The study found that the station neighborhoods have seen either no change in crime or even a reduction in crime. The reported crimes were generally not violent crimes, but crimes considered less serious in nature such as graffiti/vandalism and vagrancy in the trains and stations themselves.

The UCLA Study of Crime relating to the Green Line concluded:

"At the end, the study establishes that the transit line has not had significant impacts on crime trends or crime dislocation in the station neighborhoods, and has not transported crime from the inner city to the suburbs. We found no evidence that this transit line has opened up new and outlying territories for exploitation by potential criminals. Overall, most station neighborhoods have either experienced no change or have witnessed a reduction in crime after the introduction of the Green Line. Transit has certainly not brought more crime to the affluent suburban areas, which have continued to enjoy relatively higher levels of safety and prosperity than the county average. Some crime increase was witnessed in the inner city, where limited spillover effects of crime from more high-crime to less crime-ridden areas were observed. However, major shifts and dislocation of crime have not occurred within the municipalities that surround the Green Line. We were also unable to notice a relationship between hot spots of crime and proximity to a transit station. Rather the existence of hot spots could be better explained by the presence of certain land uses (e.g., concentration of retail along a busy commercial street, existence of a high school or a public housing development). It seems clear that criminals have not used the Green Line to access potential targets, miles away. The journey to crime has not become easier because of the Green Line."

Committee Transit Security Meeting

On September 30, 2006, the Committee met with Paul Lennon, Director of Intelligence and Emergency Preparedness for Metro, Captain Pat Jordan of the Los Angeles Sheriff's Department Transit Services Bureau and Beverly Hills Police Department Captain Bob Curtis to

discuss matters of crime and terrorism related to subway systems. Mr. Lennon stated that in his several years of experience subway transit facilities are most safe when they are kept clean and free of graffiti, well lit and security is well trained. He stated that the Los Angeles Metro rail system is one of the safest in the country.

The Committee was advised that the Los Angeles Sheriffs under contract by Metro, along with uniformed fare inspectors, are primarily responsible for law enforcement in the stations and enhance the City of Los Angeles Police Department's law enforcement efforts. Existing stations are designed to be continuously monitored by video surveillance and foot patrol. Sheriffs, officers and fare inspectors have the right to approach any individual to ask for proof of transit fare. This is a useful method to stop suspicious persons and ask questions. Beverly Hills Police would have the same abilities in a Metro station. In the case of an emergency situation, the rail station, line or entire system may be immediately shut down. In the experience of the Metro police, the surrounding neighborhood dictates the crime levels. For example, a low crime neighborhood would remain low crime after a subway station was built; likewise, a high crime neighborhood would remain high crime. The subway systems seem to have little effect on changing crime levels.

The Committee had a specific concern of whether or not there were any reported transit crimes involving child abductions. Metro security staff responded negatively, stating that most reported crimes were related to petty theft or vandalism. Of the reported transit crimes, there were no reports of kidnapping, molestation or other violent crimes such as rape, assault or murder.

The Committee expressed a specific concern of whether a subway could aid criminals in fleeing a crime scene. It is the Metro police's opinion that the subway system is a very poor method to flee a crime. In most cases the station acts as a "trap" as it takes up to 15 minutes for the next train to arrive and thus slows down a quick escape. Metro police have cameras that can spot suspects, they have the ability to stop any train, and in most cases, can have officers at the next stop ready to make an arrest. Beverly Hills Police officers, in accordance with California State law, have full authority to pursue or make arrests in neighboring cities.

Beverly Hills Chief of Police David Snowden was asked if subway stations at La Cienega and Wilshire and Beverly Drive and Wilshire would create security or public safety problems for the

City. He stated that with modern technology, such as video surveillance, the policing of the stations was well within the capacity of the Police Department.

Beverly Hills Fire Chief Dale Geldert commented that the construction and operation of two subway stations in Beverly Hills would not cause any unmanageable problems for his department.

The Committee was impressed by the cleanliness of the Los Angeles Metro stations and subway cars and by the findings of low crime rates in the subway facilities. Metro security personnel gave Boston as an example where cleanliness and security suffered due to lack of funding and stated that maintaining existing levels of cleanliness and security in the Los Angeles Metro system is dependent upon continuing funding availability. The Committee noted that the City of Beverly Hills would not have direct control over future levels of funding. If Metro fails to provide a level of funding that is acceptable to the City of Beverly Hills for cleanliness and security, the City would have to provide additional resources to maintain cleanliness and acceptable security levels, or accept lower service levels.

The Committee expressed support for a security sub-station to be located in at least one station in Beverly Hills. Mr. Lennon stated he would be very supportive of a sub-station, but the current Metro stations in LA County are not designed with them. The Committee expressed the view that the stations should be designed with the portals positioned as far as possible from residential uses.

The Committee questioned what is done to address acts of terrorism. Mr. Lennon stated Metro works with the FBI and Homeland Security to ensure proper safety procedures are followed. They also have video surveillance capability. The Committee was advised that subway systems in and of themselves do not increase the risk of terrorist attacks.

Conclusion

After the Committee's review of crime related to subways, the Committee concluded that subway-related crime should not be considered a deterrent to recommending a subway alignment and stations within the City of Beverly Hills. If a subway system with stations were to operate within Beverly Hills, the Committee recommends that the City and Metro commit to dedicate the necessary ongoing resources for maintaining security. The Committee is supportive of a subway station design that would incorporate a security sub-station in at least one station and have portals positioned as far away as possible from residential uses. The Committee was advised that subway systems in and of themselves do not increase the risk of a terrorist attack.

DEVELOPMENT NEAR SUBWAY STATIONS

The Committee was aware that development would intensify near the subway stations. While experience has shown that development tends to intensify in the vicinity of certain subway stations, both land and improvements at the ground level would be subject solely to the zoning regulations of the City of Beverly Hills. In other words, the City is able to determine the level of development around subway stations. The Beverly Hills City Council should anticipate requests to add height and density to future development projects in close proximity to the proposed stations.

SUBWAY FUNDING

The Committee met with David Yale, Metro Director of Regional Planning and Development, and other representatives of Metro to discuss issues related to funding a Westside Subway Extension. The representatives explained that limited funds have already been set aside for the 2006-2007 fiscal year to begin preliminary planning and analysis on the subway extension and that Metro may seek expedited funding with the recent passage of California Proposition 1B. At this stage in the planning process, reliable cost estimates for the planning and construction of the subway extension are unavailable.

The Committee was also interested in learning the extent of financial resources that the City of Beverly Hills would be expected to contribute. In other Los Angeles County municipalities, cities have contributed a small percentage of the construction costs of regional transit projects. The same would likely be true for the City of Beverly Hills if a Westside Subway Extension is built.

VI. CONCLUSIONS

The City of Beverly Hills Mass Transit Committee prepared this Report in order to document the assumptions, methodologies and findings that support the Committee's recommendations to the City Council. The following summarizes the findings of the Committee:

- The Committee was assigned a charge to develop recommendations to the City of Beverly Hills City Council regarding route alignments and stations locations for a possible Westside Subway Extension within Beverly Hills.
- The Committee unanimously acknowledges the need and benefits of a Westside Subway Extension serving the City of Beverly Hills.
- The Committee unanimously recommends a Wilshire Boulevard alignment extending west under Wilshire Boulevard from the existing station at Wilshire Boulevard and Western Avenue in Los Angeles through Beverly Hills to Century City and beyond, preferably with the alignment at the west end of Beverly Hills continuing under Wilshire Boulevard and then veering southwest under Santa Monica Boulevard to Century City rather than under commercial and residential properties.
- The Committee unanimously recommends two stations within the City of Beverly Hills, one located at or near Beverly Drive and Wilshire Boulevard at the west end of the City and the other located at or near La Cienega Boulevard and Wilshire Boulevard at the east end of the City.
- As part of its charge, the Committee also unanimously determines that the recommended station locations appear feasible as to the construction of the stations and manageable with respect to operations, security and potential disruption during the construction phase.

REFERENCES

Pedestrian Preference to Transit: A Spatial Analysis of Route Choice, Schlossberg, Marc A. and Asha Weinstein, presented at the ACSP Conference, 2006.

Peer Review Report on the Wilshire Corridor Tunneling Project to the Los Angeles County Metropolitan Transportation Authority, American Public Transportation Association, 2005.

Planning and Programming Committee Report, Los Angeles County Metropolitan Transportation Authority, February 15, 2006. Available at:
www.mta.net/board/Items/2006/02_February/20060215Item8P&P.pdf

Profile, Los Angeles County Metropolitan Transportation Authority, 2006. Available at:
http://www.mta.net/about_us/about/about_metro.htm

TCRP Report 102, Cervero, Robert, Transportation Research Board, 2004.